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Sammanställning för KEMB21 "Organisk kemi" HT 2019

Kursansvarig: Daniel Strand

Övriga lärare: Karl-Erik Bergquist

Antal studenter: 29 registrerade studenter

Resultat efter ordinarie tentamen och en omtentamen:

Förstagångsregistrerade: 23 studenter. Betyg U: 10(43%); G: 8(35%); VG 5(22%)

Omregistrerade: 6 studenter. Betyg U: 4(66%); G: 2(34%); VG: 0(0%)

Utvärdering

I. Sammanfattning av kursvärderingen

Totalt antal svar: 14 (29) – 48%

Kort sammanfattning av resultatet: Kursen gavs för andra gången i nuvarande format. Generellt fungerar kursen mycket bra. Mindre ändringar från förra året har gett goda resultat – framförallt upplever nu en majoritet av studenterna att arbetsbelastningen på teori-delen är rimlig. Genomströmningen kunde vara bättre men tentamensutfallet förefaller reflektera kunskaps- och färdighetsnivån väl.

II. Lärarlagets kommentarer

Lärarlaget upplever att kursen överlag fungerar mycket bra. Kursen upplevs av studenterna som mycket relevant och undervisningen som av god kvalitet vilket reflekteras i både utvärderingsfrågor och fritextsvar. Den nya modellen med reguljära övningar där studenter arbetar självständigt eller i grupp med en lärare tillgänglig för att svara på frågor har brister i att aktivera för självstudier, men dessa uppvägs till del av en klart ökad aktivitet på övningstillfällena bland vissa studentgrupper.

III. Utvärdering av förändringar sedan förra kursen

- Mindre ändringar på föreläsningarna i teoridelen med fokus på repetition av grundkursen verkar ha delvis löst problemet med den stora spridningen i nivån på förkunskaper.
- Att ta bort en av reaktionerna ur lab-kursen har frigjort tid som lags på demonstrationer. Detta har klart minskat stress och förbättrat lärandesituationen vilket tydligt märks i fritextsvaren.



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- Det nya labrapportformatet som infördes under förra kursomgången med minskad fokus på iterativ rättning har klart reducerat studenternas arbetsinsats med i stort bibehållen måluppfyllelse vad gäller lärandemål.

IV. Kommentar från studentrepresentanter

Ett kursutvärderingsmöte med kursrepresentanterna hölls. Två synpunkter som framfördes var att spektroskopiundervisningen bör förbättras genom en tydligare röd tråd genom föreläsningar och övningar och att introducera förklaringsmodeller mer stegvis på ett sätt som är lättare att följa. En önskan om fler övningsfrågor av mer sammansatt karaktär på teoridelen framfördes.

V. Förslag till förbättringar

- Problemlösning kommer att integreras mer i föreläsningarna i organisk kemi för att dels understryka relevansen i materialet, och dels träna studenterna i problemlösningsmetodik. En modell med att lösa en tentamensuppgift som relaterar till föreläsningens innehåll på varje föreläsning har slagit mycket väl ut på en grundnivåkurs i organisk kemi.
- Efter önskemål från studenter kommer fler frågor att läggas till övningsamlingen i teoridelen.
- Laborationsutrustningen ska ses över och läckande/utslitet glas skall kasseras.
- Problem med diskstationerna på lab ska ses över.
- En målsättning är att införa en inspirationsföreläsning i slutet av kursen för att stärka ämnets relevans och höja motivationen.

2020-05-05, sammanställning är gjord av Daniel Strand



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VI. Appendix

<i>General questions: 1 (fully disagree) to 6 (fully agree)</i>	Average (std. dev.)
Overall this is an excellent course	5.3 (0,6)
This course is relevant for my education	5.9 (0,5)
This course has increased my appreciation for the subject	5.6 (0,6)
I was well prepared at the beginning of this course	3.4 (1,5)

<i>Course and teaching related questions 1 (fully disagree) to 6 (fully agree)</i>	<i>Organic chemistry</i>	<i>Spectroscopy</i>
The course was well organized	5.3 (0,7)	3.6 (1,7)
The instructor presented the material clearly	5.2 (1,4)	3.3 (1,9)
The workload in this course was reasonable and appropriate	4.6 (1,7)	4.4 (1,0)
The instructor in this course showed a genuine concern for students	4.2 (1,9)	4.6 (1,2)
My interest in the subject has been stimulated by this course	5.8 (0,4)	4.6 (1,4)
The instructor was available for discussion outside the class	4.7 (1,5)	5.1 (1,9)
Overall, this instructor is an effective teacher	5.3 (1,5)	3.3 (1,9)
Overall, I learned a great deal from this instructor	5.4 (1,3)	3.5 (2,0)

Representative free text answers:

Organic chemistry theory (DS)

What do you appreciate most in the organic chemistry part?

- Instructor, is really very precise and using effective teaching techniques and tools to deliver best knowledge to the students. He is great chemist. One of the best teachers in organic chemistry course.
- That I learn a lot of things.
- I mostly enjoyed the lectures and the handouts, they were very neat and informative. The exercises as well, they covered what had been said on the lecture. I wish we had more retrosynthesis exercises as I, personally, thought they were great fun!
- It encourages you to be creative.
- The lector seemed enthusiastic and happy to be there, a lot of useful tips were passed on during the lecture that made me feel inspired.
- I liked the lecture hand outs because they contained a lot of useful information.
- The guideline of the instructor
- The way of learning.
- Daniel's structured note templates and clear thinking pattern clear and precise in the lecture makes very little to be confused about

Do you have any suggestions for improvement?

- It is already very structured and have very nice course outline.
- That you should be able to ask more questions



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- Daniel is a great instructor but sometimes he went a little too fast during the lectures. This resulted in a few of us not being able to note everything down correctly.
- The stereochemistry part should be improved.
- Not really.. Great job!

What did the instructor do that most helped your learning?

- The instructor was very structural in the lectures and presented the learning material in a understanding way
- He draw everything on board. Sometime I just got surprised why he is not getting tired after hectic board writing but he is great. He teaches the students according to their mental level. During the course, he just understood by looking the faces of students where they have problem and cleared everything even how much time I student took, he didn't mind. I start loving this course because of his good teaching style, otherwise I always took this course just to get credit but now I want to read it during my whole life because I know everything concept now. I don't need to learn organic chemistry now as I used to before.
- Have clear classes and papers that you could print out beforehand
- Clear lessons and notes on the board
- Prepared handouts and told us which pages to read and was very clear on how one should study in order to pass. Also that we were welcome to come and ask questions
- I did like being asked to draw on the board, and I think that was a way for the lector to point out that we are more capable than we think.
- Explained everything very carefully.
- He made very good note templates
- by giving tip on how to manage studies and pther small tips that might help.

Spectroscopy (KEB)

What do you appreciate most in the spectroscopy part?

- Spectroscopy notes were very precisely written and delived by instructor.
- It was fun to the exercises
- All the examples, so you could practice
- It was interesting once you learned it.
- I enjoy logical problems and solving puzzles, so I had a lot of fun.
- I think NMR is very cool and I enjoyed learning about the huge instrumental setups.
- I think the teacher explained multiplet patterns very well.
- The teacher always responded the question from students.
- Good lectures material
- My instructor was very friendly to teach and also 3D nmr was interesting for me.
- It's very easy to see the use in learning this!



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Do you have any suggestions for improvement?

- There should be more lectures on 2-dimensional NMR.
- That the classes were more organized and that the teacher shouldn't bring up things that are not relevant
- Less paper! There were way too much paper. The lectures should have been in november (all of them) och not distributed over the last week of december.
- Maybe prepare more for the walkthrough of the problems, so that the explanation is clear and easy to follow.

What did your teacher do that most helped your learning?

- He gave me his time whenever I needed.
- Give many exercises
- Good with the paper handouts
- Q&A time at his office
- Was happy to help. It made me feel motivated to ask for help.
- He gave us very useful materials and explained clearly.
- He gave us old exams..
- he was available after his lectures

Lab course

What do you appreciate most in the lab part?

- To actually learn how to make new molecules
- That you learned a lot
- It was very associated to the course, and the laborations was very fun with good lab assistents
- That we had the opportunity to work on our own.
- To work alone.
- It was connected to what was currently happening in the theoretical part of the course and gave the complementary knowledge necessary to understand the material.
- TA was very good. I asked a lot questions and NN explained clearly.
- Everything! They were great, especially the TA showed genuine concern for student's success.
- The lab part where i have a very fun and instructive TA. NN gave so many helpful tips that i started to wonder why we didn't get thos a bit earlier in our program I.e he showed that scraping the glas created a nucleation site which sped up the crystalisation process, a truly master in his teaching.

Do you have any suggestions for improvement?

- My lab assistant was NN And he was really nice and well behaved.



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- The lab equipment should be looked over and changed because most of the addition funnels were bad.
- Example be prepared to know how the IR machine works.
- Yes, please discard of you addition funnels. When handling bromine nearly all of the addition funnels leaked.
- Actually, no!

What did your teacher do that most helped your learning?

- He always appreciates even on little things and encouraged me alot.
- She explained everything very well.
- Always answered the questions I had and had a very informative small lesson on the board.
- Discussions before the lab work commenced, the demonstrations as well.
- The questions for the laboration were fun to do.
- Theoretical discussion and its relationship with practical work.
- NN was there to answer questions, help us structure the reports and was very pleasant to be around.
- giving small tips of improvment in the labb