

CHEM-E1130 Catalysis (2019-01-14 - 2019-04-10) anonymous written feedback, with recognizable comments removed

Riikka Puurunen, 24.4.2019

Identifiable comments removed by hand <edits marked like this>

Teacher's reactions after reading through the comments:

- General comments: Many positive comments and constructive suggestions - thank you to all who answered! Especially I note the request to tune the timing to be earlier, so that students could take the exam already after the third period.
- Lectures: overall, positive comments. Details of lecture order and contents could still be thought of.
- Adsorption exercise (individual work): overall ok. Improved from last year, evaluation & assistance has been ok. Details can still be improved.
- Catalysis Glossary group work: Many seemed to appreciate, but not all. Next year, no need to have the same kind of exercise.
- MyCourses Quizzes: overall have helped to learn. A technical aspect needs to be solved next year to avoid missed submissions (sorry to learn from the feedback that this has happened!)
- Panopto recordings: appreciated
- Lightboard teaching trial: nice try, has not been used much though
- Presemo during lecture: positive feedback, could be used more (teacher agrees on this)
- Evaluation: no particular issues this year
- Other feedback - "I like": many positive comments, especially the habit to collect (non-anonymous) feedback continuously via MyCourses gets mentioned
- Other feedback - "I wish": Nice suggestions, thank you.

9. General comments and suggestions (on such matters as course material, teaching methods, course arrangements, ways of completing the course/examinations and unnecessary overlaps with other course contents, or other matters).

Number of respondents: 12

Homogeenisen katalyyysin luento keskittyi orgaanisiin reaktioihin. Varmasti tärkeä osa, mutta olisin toivonut muuta.

The course is well organized and we had enough time to do the different assignments.

Everything seemed to be working well for me. It was good that during the course the idea was to learn constantly.

The catalysis for biomass course doesn't have an exam and I think it could be done similarly on this course as well.

I would give an overall grade of 5 to catalysis course. In my opinion, it was well executed, and there was no overlapping with other courses. The panopto -videos have proven out to be very useful while studying for the exam and ensured that no one misses the classes.

The only improvement I would give is to guide students more with the catalysis glossary. I feel like the number of terms got a little over the board.

It would have been nicer if the course exam would have been earlier. Now there was over a month between the last lecture which wasn't so nice even though there was quite much time to read for the exam.

Course materials and methods was better than any other course in the university so far. It might be better to have all the lectures in the third period, and the exam right after. Now we only had a few lectures on the first weeks of period 4, leaving a really long time before the exam. The fourth period is typically really busy for the students anyway, and this would esse the burden.

For the contents: especially XRD, but also the electron microscopies have been covered on Bachelor level courses before. It might be better to have the characterization II lecture on temperature programmed methods instead.

I can tell that the professor, lecturers and other staff members have put a lot of effort to making this course as good as it is. Personally, I feel that this is one of the best organized course I have had in aalto. Keep up the good work!

Big thanks to <name removed> for amazing effort towards the course! It really felt like she wanted the students to learn and she cared of our feedback during the course. Good job! Lectures and videos were nice and everything were well arranged.

Best organized course ever, only sad part is the relevancy of this course in pulping :-(

10. General feedback on the lectures

Number of respondents: 13

Taliointi hyvä asia

I understand that the lecture about the first characterization must be early in order to start the adsorption exercise but I think the order of the lectures can still be improve. I found the lecture about catalysis and renewable fuels in marine industry hader to understand.

Pretty good.

Lectures were well executed, I liked the fact that they did not turn out to be a so-called "kalvosulkeiset" rather <name removed> did go through the material with her own words.

Good that they are captured on Panopto, as I had some overlapping of lectures.

The lectures were interesting and good.

Lectures recorded was excellent thing since it made distant learning possible

Good pace, clear slides, right amount of information. It was nice to have the 5 min breaks. I really appreciated the extra material, as they easily allowed me to read further. The climate change lecture was really important, please keep that in upcoming years.

They were really good, and help was always gotten when needed.

Lectures were quite good. Some of the visiting lectures <recognizable detail removed> were quite hard to follow and the slides were quite bad. I also didn't like the fact that we used many lectures to cover the catalyst characterization methods. Put more emphasize on how what properties can be studied rather than explaining how the equipment work, because in my opinion it is really hard to learn "from the books".

Other than that I feel like the lectures were interesting and easy to follow to. Big thanks also for videoing the lectures.

Really good!

Also one of the best lectured course ever

It was nice to have visiting lecturers!

11. Feedback on the Adsorption exercise (individual work)

Number of respondents: 12

Simppele osa kurssia

I liked the exercise and the help session was useful to ask questions.

It was an interesting task, and helped revise the isotherms and associated theory. However the instructions for the chemisorption part was a bit unclear (especially the determination of irreversible adsorbed volume) This could probably have been solved if I had the time to attend the assistant session reserved for it

I would have liked knowing the sources from where the formulas were taken. Now, they were just handed to us and this is not the problem but I personally would have liked to go through the related literature.

The instructions were good and the assistant session was helpful.

The physisorption part of the exercise was really clear and good. However, the chemisorption part wasn't as clear and easy to follow.

Nice exercise with help well provided and difficulty level optimal. Not too easy but not totally overwhelming either

Quite easy, but the contents were very relevant to the course. The instructions were clear and the deadline was appropriate.

The exercise could have been more challenging. The equations were just given.

I felt like it really helped me to understand the adsorption well.

This was nice and teaching. More challenging if equations were not given.

Kind of challenging, but made some of the concepts presented in the course much clearer

12. Feedback on the Catalysis Glossary group work

Number of respondents: 12

Kiva idea, mutta jäi loppupeleissä melko kevyeksi tehtäväksi. Tuntuu ettei kovin moni käyttänyt liikaa aikaa siihen. Ehkä ensi vuonna jokin toinen tehtävä.

It was the first time that I did this kind of work and I think it is useful to understand the most important words.

The assignment didn't require much group work. We did meet up with our group but it didn't contribute to the progress of the task.

Google Docs was not the ideal way to do this in my opinion. The citation style was not uniform at all and in my opinion better guidelines would have made the project easier and clearer.

Maybe consider using a bibliography tool such as bibtex to collect the references?

My overall opinion is that whilst doing the glossary you had the best opportunity to learn the words and phrases rather than just reading them from the given dictionary.

It was useful to learn the different terms but in my opinion this didn't work as a group work as everyone made all the things quite individually and there wasn't much to do as a group.

Nice variation for normal group works. Helped studying for exam also.

Nice novel concept. In my opinion, there could have been another round of students checking and proposing improvements, to reduce the teacher workload.

The glossary group work was a good idea, and everyone participated well in my team. Also, preparing the glossary made studying for the exam easier.

Kind of good, but learning words by only their definition feels weird, because I don't really have any real world examples to connect the words to. Not the best way of learning in my opinion.

This was not that motivating part of the course. Maybe this could be replaced with some more challenging group assignment.

Felt kind of unnecessary task, as it took considerably more time to coordinate the group work itself than doing the actual working part, however it did teach some new words

13. Feedback on the MyCourses Quizzes

Number of respondents: 13

Hyvä tapa kerrata luentomateriaali

Sometimes the questions were not very clear but the quizzes helped to understand the lectures better.

Unclear questions. The quizzes were not automatically returned for some reason (I "lost" one round of answers due to this, even though I had filled them but forgot to press submit) On other courses I have attended the submission is automatically sent on deadline even if it has been a draft.

Quiz questions were sometimes a bit confusing or at least, in my opinion, they could have been clearer.

They should be automatically submitted by MC when the deadline arrives. I completed a quiz but the submitting didn't go through and I lost the points :(

They weren't too challenging and they were a nice part of the course.

Nice, but little more time to do this would be appreciated. Also it would be nice if one didn't had to submit answers separately, e.g. I made but forgot to submit two of my quizzes.

Very well done! The emission catalyst quiz was slightly too hard in my opinion.

The quizzes worked well, and I can tell that the organizer put in effort in making good quizzes.

Quizzes are good way of recapping the lectures. Some of the quizzes were quite trivial and did not support the learning outcomes of the course.

Good, help reflecting lecture material.

Nice

They were really nice to have

14. Feedback on the Panopto lecture recordings

Number of respondents: 12

Plussaa tästä

I could not come to one lecture and this tool is very useful because it is always better to listen to the teacher and not only read the slide.

Really good. These should definitely be continued
Very nice recordings for recapping lecture topics.
They were probably quite useful to students who learn by listening.
Thumbs up for these! They have proven out to be very handy while studying for exams.
Really good thing.
(Attended the lectures so didn't turn to these, but I appreciate that they were there)
Excellent idea and I very much encourage this system for the next time the course is organized!
BIG+!
Really good
Really nice

15. Feedback on the Lightboard teaching video (Langmuir adsorption isotherm derivation)
Number of respondents: 9
This video was interesting but I think the video was too dark.
This was really good idea as well although I did not watch it. Hence, I cannot really say much about it
It was quite nice, but I am not sure if it was worth the effort. (Personally I prefer reading material on my own)
I did not watch that because I have already seen a similar one.
I liked it, it was good and clear.
Personally, I didn't see the video.
Didn't watch that
Nicely done
Also nice

16. Feedback on the use Presemo questionnaires during lectures
Number of respondents: 11
It is helpful to resume the main points.
These were really good. They helped me in learning
It is very good that the audience is kept active during the lecture.
An excellent way to interact with students during the lecture, and to prevent them from falling into their own thoughts, so to speak.
Liked this, helps to concentrate on the lecture
Nice way to activate the students.
Good pedagogy tool, and improves participation of students.
Good way of keeping students awake
Even more could have been used
Nice

17. Feedback on the course evaluation so far. For example, were the points given for the various parts fair?
Number of respondents: 8
I think the evaluation is fair. We still have to wait for the exam.

The evaluation was good!

The group work evaluation could have depended on the quality of the work. (In my opinion the quality of work varied largely)

The course evaluation is very clear and it is nice to see straight how much each thing affects the evaluation.

The evaluation has been very fair so far. But hard to comment before the exam has been corrected, as everyone basically got full points from the glossary.

It was fair.

Haven't delved that deep in the evaluation, but with quick glance looks about fair

18. Other feedback - I like

Number of respondents: 7

I am glad that I took this course. I learned a lot. I liked that the teacher took the feedbacks into account to improve the lecture.

I liked the course greatly – especially the visitor lectures and the lectures given by professors/researchers of our school specializing in something specific in the field of catalysis. I liked that students were given the opportunity to give feedback after every lecture by Quizzes. Absolutely loved this course, and I am really happy I took it. Together with the reaction engineering course from the fall, it really painted a good picture about the significance and beauty of the field. The course left me hungry for more information (and taught me a great deal), and I don't think there is anything else one can ask for. Except for more courses in catalysis and reaction engineering, of course :)

The exam was of appropriate length and level, and covered the core content quite nicely in my opinion. The last question (characterization) was especially well designed.

I really like how feedback was collected during this course, and wish more courses did that.

I enjoyed the course. Thanks for making the catalysis experience a remarkable one!

Liked the overall arrangement and <name removed>'s great effort on the course.

This course

19. Other feedback - I wish

Number of respondents: 5

I wish some of these open boxes could have been combined. (10 extra ones can be a bit unmotivating to fill)

I wish the Experimental Assignments in Chemical Engineering-course had a lab related to catalysis!

It would have been nice to learn about TPD and other temperature programmed-methods.

I wish the course would be a bit more "engineering" oriented. Now it was rather research based course. That it is of course just my own opinion. More lectures like "Deactivation", which provided knowledge which can be used in the big scale processes.

More courses would be this well done, most of all I wish all other teachers would accept feedback this well