



Report - SK2772 (HT22) – 2022-10-25

Course analysis carried out by (name, e-mail):

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COURSE DESIGN

Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

No changes since HT2021.

THE STUDENT'S WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?

Not too heavy, not too light; 85% of the students answer between 6 and 23 hrs per week. Depending on their background students have experienced different workload in the course.

THE STUDENTS' RESULTS

How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

All the active students completed the course with pass grades (in the range A-E).

OVERALL IMPRESSION OF THE LEARNING ENVIRONMENT

What is your overall impression of the learning environment in the polar diagrams, for example in terms of the students' experience of meaningfulness, comprehensibility and manageability? If there are significant differences between different groups of students, what can be the reason?

Students' response are very positive in the polar diagram. Responses in the polar diagram range between 5.6 and 7. The students find the course and the info given in the classroom meaningful and comprehensible.

(13 out of 28 active students (46.4%) responded the questionnaire and their response are used to answer the following part in details)



ANALYSIS OF THE LEARNING ENVIRONMENT

Can you identify some stronger or weaker areas of the learning environment in the polar diagram - or in the response to each statement - respectively? Do they have an explanation?

Students are content about the teaching environment based on their responses given to specific questions. All the respondents feel that they worked with interesting issues and that the course was challenging in a stimulating way (Q1, Q4); All respondents feel the ILOs helped them to improve their learning (Q7); they were able to learn from concrete examples (Q10); All the respondents feel that understanding the key concepts had higher priority (Q11);); Majority (92%) of the respondents think that the course activities helped them to achieve ILOs effectively (Q12); All were able to practice and receive feedback without being graded (Q16); they found the assessment fair and honest (Q16); Majority (85%) feel that their background was sufficient to follow the course (Q17) and that the course activities enabled them learn in different ways (Q19); and they (93%) were able to learn by collaborating and discussing with others (Q21). Besides all identify that the support was available whenever they needed (Q22).

ANSWERS TO OPEN QUESTIONS

What emerges in the students' answers to the open questions? Is there any good advice to future course participants that you want to pass on?

The open questions and some of the answers are given below:

What was the best aspect of the course?

- The professor was a really good instructor and all the concepts were taught very well.
- All important basic chemistry concepts that could be related to nanotechnology was covered. Also, each and every presentation topic was unknown to me at the beginning, but Muhammet Toprak had chosen novel techniques of chemical/ physical synthesis of nanomaterials, I now felt like i have read 30 crazy nanomaterial synthesis articles and understood them all by heart.
- Gives a good base for understanding some chemistry that is sometimes required in the nanomaterial production line.
- good communication with professor, clear, informative info about organisational things, many problems examples
- Forms a good understanding about basic chemistry
- The feedback and support from the lecturer.
- Recent innovation study
- The quality of the lectures.
- Interesting concepts, the project work was very rewarding. Lecture broadcasts over zoom was highly appreciated

What would you suggest to improve?

- Nothing really, maybe a couple more examples on titration questions which was fairly difficult for me to grasp :)
- Introduce more key concepts of chemistry instead of focusing on only a few
- tutorials to practice computational problems
- Some hands on activities
- Add more home assignments or quizzes
- There were not a lot of calculation examples with answers available... Some questions with included answers, even if they aren't full solutionw and just the answer, would have been very helpful.

What advice would you like to give to future participants?

- Take this course if you dont know chemistry because you are scared or avoiding it somehow. Its all in one kind of course, and of course when one studies the exam, one should study it overall, so you cannot pass this course with half knowledge. By the end of it you know the chemistry basics, which is AT LEAST a necessary general knowledge in the field of nanotechnology.
- Attend classes, take notes of presentations and practice numerical problems well
- Go through the basics
- Do excersices of every subjects
- Try to find resources with worked examples of similar topics discussed in the course, such as acid-base equilibria.

PRIORITY COURSE DEVELOPMENT

What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term?

No immediate action is needed. More examples with answers will be provided to the students to practice more on the concepts.

OTHER INFORMATION

Is there anything else you would like to add?

No.
