



Report - SK2770 (HT21) – 2021-10-29

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.

The course examiner has changed to Prof. M. Toprak, and in turn the content of the course was changed to allow students understand the scope of their program along with potential research areas as well as industrial job options. Several modules introducing nanomaterials, nanotechnology and their applications are introduced. Four guest lecturers from KTH and four alumni were invited to present about their discipline vs. work/science domain. A final oral exam was implemented. (The course was offered as hybrid due to the situation with the ongoing pandemic)

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. Students answer changes between 5 and 11 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?

Twenty students out of (21 active, or 25 registered) completed the course with pass (A-E) grades. Pass rate is higher than earlier years, as the exam is only from the course content.

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 generally positive in the polar diagram. Responses in the polar diagram range between 4.4 and 6.6. There is slight difference between the responses of male and female students. They find the course and the info given in the classroom meaningful and comprehensible.

(9 out of 25 students (36%) 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?

The time students have spent on the course can be increased. 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 (Q1) majority find that the course was challenging in a stimulating way (Q4); All respondents feel the ILOs helped them to improve their learning (Q7); majority (90%) thinks that they were able to learn from concrete examples (Q10); All the respondents feel that understanding the key concepts had higher priority (Q11); Majority (90%) of the respondents think that the course activities helped them to achieve ILOs effectively (Q12); Majority finds the feedback mechanism useful (Q14/55%, Q15/63%); majority (80%) found the assessment fair and honest (Q16); All the respondents feel that their background was sufficient to follow the course (Q17); they (89%) regularly spent time to reflect what they have learnt (Q18); that the course activities enabled them (89%) learn in different ways (Q19); and they (89%) were able to learn by collaborating and discussing with others (Q21). Besides, majority of the respondents (80%) 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?

- To know and understand about Nanotechnology. Different fabrications methods and other things.
- The professor invited guest professors and alumni to give us lecture so that we can learn a whole prospect about this program and the state of art technology in industry.
- The guest lectures especially by the allumini gave great inside into the industry related to the field of technology the course is aiming at. For me this was highly interesting and I really enjoyed all of them.
- To learn from a variety of speakers from multiple fields.
- The course overall is very interesting.
- The variety of content topics relating to nanotechnology, inclusion of professional guest lecturers
- Guest lectures from Professors

What would you suggest to improve?

- In my opinion the handling of course materials (lecture slides and recordings) could improved. ...
- More discussions would be nice.
- More examples and more explanation to the concept.
- More variety in activities e.g. assignments related to discussed topics
- More assessment

What advice would you like to give to future participants?

- The lecture form guest professors and alumni are important.
- Ask a lot of question when it comes to the guest lectures because you can really get in touch with people from the industry and they can Show you future perspectives for yourself. This is on of the best Motivation boosts I can imagine.
- Focusing on the lessons and explanation and practicing.
- Follow lectures actively

PRIORITY COURSE DEVELOPMENT

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

Few quizzes as assessment tools will be introduced in the next course offering to motivate students to recap the discussed topics. Additional time may be allocated for more classroom discussions.

OTHER INFORMATION

Is there anything else you would like to add?

No.
