

Report - SI2410 - 2020-11-28

Respondents: 1 Answer Count: 1 Answer Frequency: 100,00 %

Please note that there is only one respondent to this form: the person that performs the course analysis.

Course analysis carried out by (name, e-mail): Sandhya Choubey, choubey@kth.se

DESCRIPTION OF THE COURSE EVALUATION PROCESS

Describe the course evaluation process. Describe how all students have been given the possibility to give their opinions on the course. Describe how aspects regarding gender, and disabled students are investigated.

The course evaluation questionnaire for the students was created soon after the completion of the course using the KTH template. Aspects of gender, disabled students etc were included as per the template and full opportunity was provided to the students to get their opinion. The students were informed about the LEQ via the KTH portal and thereafter it was taken over by the web portal. We received the response via the portal on which this analysis is based.

DESCRIPTION OF MEETINGS WITH STUDENTS

Describe which meetings that has been arranged with students during the course and after its completion. (The outcomes of these meetings should be reported under 7, below.)

Following the KTH guidelines, the course was given totally online. Hence, personal meeting with the students were not allowed. There were 14 lectures. These lectures were given on zoom, the ipad was used as a virtual blackboard for the lectures and the ipad screen was shared with the students. The students could see the ipad live, listen to the lecture live and ask questions. Students also regularly asked questions via email. These were answered through email.

COURSE DESIGN

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

There were 14 lectures during the course. These lectures were given via zoom, as per KTH guidelines. The lectures helped explain to the students the key concepts of the course as well as the rigorous mathematical derivations and calculations which are integral part to the understanding of this subject. During the lectures, the students asked questions and even during the breaks there were discussions. Lecture notes and study material was uploaded on the canvas page for the benefit of the students.

The examination comprised of two sets of homework problems as a part of INL1. The homeworks were graded according to grades A,B.C,D,E,F,Fx. In order to get passing grade (E or higher), students had to obtain at least 40% on each of the problem sets. There was also an oral exam as TEN1. The oral exam was held on campus. The possible grades for the oral exam was pass or fail. The final grade for students who passed both INL1 and TEN1 was the overall grade obtained by the student in INL1.

The format of the course was changed a bit compared to last year. In particular, while there were only 8 seminars last year, this year we did 14 lectures instead. The examination process was essentially the same with some subtle changes in the grading of the oral exam.

THE STUDENTS' WORKLOAD

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

The workload on the students corresponded to the expected level. From the feedback received from the students on number of hours spent per week, combined with total duration of the course, one can see that the students have spent about 36 hours/ 1.5 credits.



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?

The students have done well on the course. No significant difference was noted compared to previous course offerings.

STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

The students' response to the open questions are very positive. They were happy with the course and the lectures. They found the course interesting and fun. They also say very positively about the lecture notes provided to them by the lecturer as well as the lectures themselves.

SUMMARY OF STUDENTS' OPINIONS

Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.

From the response received from the students it appears that the students have a very good opinion of the course. They praise the lectures and the lecture notes and the way the course was conducted. They go on to praise the lecture notes and say that the notes were even better than the books prescribed. They also appreciated that they could stop the lecturer and ask questions during the lectures. They found the course interesting and fun. They do suggest some improvements which we will surely try to implement. They suggest to have a few more lectures and at least one additional homework set.

OVERALL IMPRESSION

Summarize the teachers' overall impressions of the course offering in relation to students' results and their evaluation of the course, as well as in relation to the changes implemented since last course offering.

Giving this course online was a big challenge. The course is extremely difficult and very mathematical. Understanding the concepts and the details of the course is never easy. Hence doing this online on zoom was certainly difficult, both for the teacher and the students. Big equations had to written and many concepts had to be grasped. However, the response received in the LEQ suggests that the course was successful and the overall impression of the students is very positive. The students would like to have more lectures and more homework and we will implement these in the next offering of the course.

ANALYSIS

Is it possible to identify stronger and weaker areas in the learning environment based on the information you have gathered during the evaluation and analysis process? What can the reason for these be? Are there significant difference in experience between: - students identifying as female and male?

- international and national students?

- students with or without disabilities?

From the responses received, it is difficult to figure out any significant differences based on the learning environment of the students.

PRIORITIZED COURSE DEVELOPMENT

What aspects of the course should be developed primaily? How can these aspects be developed in short and long term? One of the background knowledge needed for the course is a very good understanding of Lie groups and Lie algebras. The students on average need a good understanding of group theory in general and Lie groups and Lie algebras in particular. Students will benefit from a dedicated course on group theory. The number of lectures also need to be increased as the course material is vast and difficult. Increasing number of lectures to 18 should be good.