

# Report - SI2371 - 2022-03-17

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): Jack Lidmar, jlidmar@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 LEQ was used after the course. More informally, during the course I have on several occasions asked for feedback and things to improve.

#### 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.)

Since the group of students were rather small only informal discussions and requests for feedback with students between lectures were carried out.

#### COURSE DESIGN

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

The course consists of lectures which goes through the theory and exercise classes which train problem solving.

A test exam with two parts that the students work with at home was given during the course.

The course is examined with a written exam consisting of 6 problems, each targeting a separate learning outcome or problem area. Each problem (on the test and final exam) is graded A-F. Two problems from the test exam may replace the corresponding problem on the final exam.

A minimum grade E on each problem is needed to pass the course. The final course grade is calculated as an average.

The lectures and exercises were given on campus. As before also all lecture notes were available online.

The added content that was introduced last year by a change in course plan was further developed and expanded.

#### 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?

From the LEQ the workload is manageable around 10 h/week in most cases, although most students answering felt they were putting too little time on 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?

The results on the exam and homework were in line with previous years. The students in this course are usually highly motivated and most performed very well.

#### STUDENTS ANSWERS TO OPEN QUESTIONS What does students say in response to the open questions?

Best aspects: Got to know very different parts of physics Lecture notes The practice sessions The theory. The lectures were nice. Fascinating subject Test exam

#### Things to improve:

Better connection with exercise sessions and exam problems and use consistent notation. Peer reviewed correction on problems. More focus on the fundamentals, like Lorentz transformations and space-time diagrams. Less focus on the fundamentals, and more on the harder advanced later chapters. Live streaming of lectures.

Advice for future students: Do the homework, solve problems.

Watch Susskind's online lectures!

#### SUMMARY OF STUDENTS' OPINIONS

Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students. Most aspects of the course seem to work well.



### **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.

Overall, the students response was positive in the LEQ. The course activities seem to work well to help the students reach the learning outcomes

#### 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?

No area in the learning environment stands out as being particularly weak or strong.

No significant differences could be found in the different categories, although the statistics is very low.

#### PRIORITIZED COURSE DEVELOPMENT

What aspects of the course should be developed primaily? How can these aspects be developed in short and long term?

I think the bonus system might be a little too generous. Although it is a strong motivation for the students to be rewarded by doing the homework.

More examples on relativistic analytical mechanics should be developed. The coordination between exercise classes and lectures could be slightly improved, e.g., more careful selection of what problems to go through.