# Report - DM1135 - 2025-08-13

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):

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#### **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.

Course evaluation is based on the evaluation form sent out through the KTH platform, the feedback obtained during the evaluation meeting, feedback from the Proint course, feedback from student representatives (with whom a dedicated meeting has been conducted). Students were repeatedly encouraged to provide feedback in all channels, and gender aspects and

disabled student-related aspects were considered in the survey as much as possible, given the population size

#### **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.)

The course had lectures, tutorials, and labs. Meetings were conducted online in the context of the former two, and on-site meetings were strongly encouraged in the latter. For evaluation, the course responsible closely connected with the two student representatives.

# **COURSE DESIGN**

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

The course contains 10 lectures, 5 tutorials, and 5 labs. Both tutorials and lectures were online, whereas the labs were hybrid, with on-campus participation and discussion encouraged. The labs contribute the practical examination element (60% of the total course grade), and the final exam focuses on theory prepared in lectures and tutorials (40% of the overall grade). The exam was conducted as an individual oral online exam, in which previously conducted homeworks were examined individually.

Changes conducted compared to the previous course round:

- 1) Improved Python examples, which are meant to bridge between lectures and labs. 2) Improved application examples, most of them as video links provided on Canvas.
- 3) Lab tasks were clarified in their structure.

#### 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 seems similar to the last course round (about 12 hrs per week in average)

# 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 grade distribution is A:43, B: 25, C:4, D:4, E:1, F:3. Overall results are very similar

# STUDENTS'ANSWERS TO OPEN QUESTIONS

# What does students say in response to the open questions?

Only lectures are - once more - mentioned as too difficult and hard to relate to other course aspects. This is astonishing as most lectures are accompanied with python examples that directly relate to labs. The labs have been criticized as inconsistent in their structure

# **SUMMARY OF STUDENTS' OPINIONS**

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

According to student opinions, lectures have to be changed. We will address this by moving to on-site teaching, as this was the main negative critique. As also many students emphasize the lectures as positive, we will try with on-site lectures.

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.

The course was generally successful, and a well connected structure was again confirmed. For a large group the course seems to work because I clearly see an improvement in how students explain results in the oral exam in the last years. Problems with the lectures may be related to a general problem with hand writing especially of maths notation. In general, I observe a problem that some elements of the course (especially complex numbers) are not well-known to the students, which is a huge burden for the students to get into the material.

# **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 differences between groups can be determined.

# PRIORITIZED COURSE DEVELOPMENT

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

The labs will be consolidated to be consistent. All lectures will be held on-site (as far as teachers are available), in order to be better able to clarify aspects, as no further improvements in the content seem obvious