Report - MJ2515 - 2024-08-01

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.

Students are encouraged to contact the course leader or other teachers if there are questions or concerns. Some input had been obtained this way. Feedback was also channeled via the involved MSc programs. No specific actions were taken in addressing issues related to gender or accessibility for students with special needs. However, the course leader completed a course on gender aspects during HT19 and has received continuous training since then, e.g. in his role as head of faculty renewal at ITM.

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.)

Meetings were arranged via the SEE Program during the course.

COURSE DESIGN

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

This course was offered for the first time during VT23. It is one of three elective courses (3 hp each) mapped to the three profiles within the SEE Program. Contents were taken from the theoretical and programming parts of MJ2424 and MJ2480 (both defunct), which had been developed continuously since the course leader took responsibility in VT20. Additional programming support was offered for VT24 and students were encouraged to use generative AI in coding. Also, students were given the option of Python as a programming language in addition to Matlab.

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?

A 3 hp course corresponds to a weekly workload of approximately 11 hours (assuming 7 weeks active study throughout P4). The majority of respondees (10 of 13 respondees, with 34 enrolled students) reported efforts in this range. Three students who completed the survey reported a workload well beyond this level. This appears to be linked to difficulties in programming, which varied among the responding students.

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?

As in the last round (MJ2515 VT23) students performed satisfactorily on the home assignments and exam. The oral confirmation following the exam allowed for a one-on-one check on student performance. During these 15 minute sessions it was possible obtain a reasonable idea on student engagement in the course, most notably on programming of calculations. Here it was found that a majority students had made solid attempts at programming, with many excelling in this task. A few students did not manage the programming part well and had to submit an Fx assignment to pass the course.

Nonetheless, around 1/3 of the students had not completed the two home assignments and exam within the course round. This observation is similar to last year's situation. One explanation can be high workloads in other parallel-running courses. (Measures are being taken to address this by moving the course from P4 to P3.) There is also a need to consider streamlining some of the content.

STUDENTS´ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

Responses point to the need for some additional support in programming. General positive responses to how the course is organized pedagogically. Improved overall satisfaction as compared to VT23.

SUMMARY OF STUDENTS' OPINIONS

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

Overall the responses were quite positive with levels much higher than in previous editions. The two main strengths of the course (scores 6.3 or higher): the assessment was fair and honest; I was able to get support if I needed it. The two areas scoring somewhat lower (scores 5.3-5.5): I was able to learn from concrete examples that I could relate to; I was able to learn by collaborating and discussing with others.

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.

The course is now well established and the majority of students are able to achieve the learning outcomes. Generative AI was helpful for many students, and several opted to program in Python. Still, there are challenges related to the programming demands as a sizable group of students have not yet completed 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?

The number of respondees was low so it is not possible to distinguish any meaningful data on these aspects.

PRIORITIZED COURSE DEVELOPMENT

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

As mentioned above, rescheduling to P3 is expected to contribute positively to student workload. Home assignments will be reviewed and modified for additional streamlining.

OTHER INFORMATION

Is there anything else you would like to add?

No.