Report - DD2452 - 2019-12-03

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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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, tutorial sessions, homework exercises, labs and a written exam. The lectures present the main concepts and techniques that underlie the verification and theorem proving tools that are considered in the course. The tutorial sessions consist of tool tutorials, theoretical exercises, and peer reviews of the homework exercises. The two labs let students model and specify software properties and verify these with tools. A take-home written exam consists of problems that require a deeper theoretical understanding of the techniques behind the tools.

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?

The estimated workload reported by the students in the questionnaire suggests an average of about 10 hours (min 4, max 16) per week. This suggests a lower workload than the expected 200 hours of overall workload for a 7.5hp course, and allows us potentially to increase the workload in the future.

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 statistics from the final grades are: A:4, B:3, C:2, D:1 (4 more students have written the final exam, but have no final grade yet). This indicates a high level of achieving the intended learning outcomes.

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?

The learning environment seems to have been perceived well by the students.

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 highest evaluation was given to question 4 ("The course was challenging in a stimulating way") and question 16 ("The assessment on the course was fair and honest"). The evaluation of the other questions was also rather high, except question 21 ("I was able to learn by collaborating and discussing with others"), which was the only question in the questionnaire with more than one negative response. On the latter the teacher team needs to reflect on and gather further feedback.

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 responses to the open questions are largely positive and appreciative. The main criticism concerns the design of the lab assignments (especially the second one), which were perceived somewhat routine at places, and not sufficiently well-guided in the lab instructions. A question was raised concerning the "take-home message" from the lab assignments. The main advice to future students is to start on the labs early.

PRIORITY COURSE DEVELOPMENT

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

The second lab assignment has been improved since last year, but will need further improvement. We plan to partially restructure the labs and tutorials to reduce the amount of routine work and to clarify their purpose and learning outcomes. We also plan to potentially either add a third lab (on theorem proving with Z3 for instance), or enlarge the first one. We also plan to add an invited lecture by a formal methods practitioner in industry.