Report - IS2202 - 2024-05-25

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.

This was the first time I was fully giving the course. We have used the standard course evaluation form for students to voice their opinions and feedback about the course. A reminder was sent to all students, encouraging them to participate in the evaluation. A total of 8 students (out of 44) students took the course evaluation, yielding ~18% participation. Furthermore, I have encouraged all students to send me mail with feedback at any time during the course, which some students have opted to do.

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.)

Aside from the scheduled activities in the course, we have only met with students after the course completion when students having FX at the exam chose to complement it.

In the future, we are considering having an anonymous feedback form that is given half-ways into the course, with the opportunity for students to express opinions early and with a chance for teachers to remedy some of the students' concerns.

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

The overall objective of the course is to give knowledge and insights into the design of modern computers, particularly the processor design, which includes parallel computational pipelines and advanced memory hierarchies.

The learning space of the course is distributed across (online) lectures, laboratory exercises, exercises, and Q&A sessions. We have adopted a flipped classroom approach where students watch prerecorded videos and prepare questions that are discussed during the Q&A sessions. Furthermore, we have exercise sessions where we solve problems as well as laboratory exercises that are prepared offline and submitted through a report.

The Ladok moments include a written examination, TEN1 (4 credits), and a laboratory work, LAB1 (3.5 credits). The final grade of the course is a weighted average of the TEN1 and LAB1 grades.

The main change since last time the course was given is that we remade the laboratory work, since the old was defunct. The new lab made use of two well-known and popular simulators, GEM5 and GPGPU-sim, which the students would work with.

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 batch size for the responses is small (8), and there is a great variety in the amount of time spent. One student spent 30-32 hours/week, while a majority spent between 12-20 hours/week. One person spent 0-2 hours/week and the final two persons spent 3-5 hours/week.

There were not too many comments, but one student felt that the labs took too much time while another felt that the workload was "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 following are the statistics for the course:

LAB1 grades (68% pass ratio)
- Not completed (30%)
- E (45%)
- C (9%)
- A (14%)

TEN1 grades (72% pass ratio):
- F (26%)
- E (41%)
- D (20%)
- C (8%)
- B (0%)
- A (3%)

Since there are no previous course analysis to compare with, I could not position these numbers to those of the past.

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

There were no open questions.

SUMMARY OF STUDENTS' OPINIONS
Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.

Overall, the strongest comments of the students concerned the flipped classroom-style that we adopted this year in the course, as well as the examination format, where opinions differed. Some students felt that flipped classroom approach worked well, as they could chose their learning space and watch pre-recorded videos online, and then come with questions during the physical meet-ups. One student also wrote that it saved him a lot of time. One student wrote: "I really loved the flipped classroom model. It is good to listen to the lectures at your base and use the professor time only to ask about things you don't get. I really would encourage this way.". Other students were not as satisfied with flipped classroom, where one students writes that the content "…is not straightforward to be recorded fully" and that it makes it harder to understand. Overall, it seems that the flipped classroom approach was experienced more on the negative side.

Other comments related to the exam, where labs and the written exam are weighted to produce the final grade. One student felt the exam was harshly corrected.

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.

This is the first time I give the course, but I found it hard to relate it to prior giving's since there has not been any such course analysis prior to this one. Overall, the passing rate of the course is inline with other courses, and it seems that the students appreciated the new labs. Furthermore, despite the new (and harder) laboratory works, a majority of the students complete them, many with a higher-than-E grade. However, it is not clear whether to continue with a flipped classroom approach (and try to improve that) or revert back to a physical lectures.

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?

Unfortunately, there was no information regarding gender differences, international/national students, or students with disabilities. The labs seems to have received overall positive reception, while the flipped classroom lean more towards the negative side.

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

The main question is whether to continue with a flipped classroom or not. There is a separation in opinions here, where some students liked it and other disliked it. Our hope with the flipped classroom was to encourage more discussion about the content of the lectures, rather than to spend the time given them, but it seems we have still more to improve.

Furthermore, this was the first time with the new labs, which seem to have been well received by the students, which is a good sign.
So all in all, we have to decide whether to continue and improve on the flipped classroom lectures, or if we abandon them and revert back to a physically held lecture and try to activate students that way. We also hope to make a digital exam for the next time.