Report - IL2233 - 2023-11-16

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.

To get timely feedback, the course evaluation was continuous throughout the execution of the course. All my students (regardless of gender and disability) had equal possibility to give their opinions on the course.

The course evaluation survey was sent out to all students on 2023-06-16 and finished on 2023-06-30. Students got plenty of time to answer. I also sent multiple reminders in order to increase the answer ratio. The answer rate is 12/22, i.e., 54.5%.

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.)

I usually met students right after my lectures, asking for opinions about all aspects of the course. One course meeting was held during the course execution with student representatives and TAs. Student representatives include both male and female students.

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

This is the second edition of a completely new course which I developed mainly for our embedded systems master program. This edition has the same pattern of activities: 10 lectures, 3 labs, 2 seminars, and 1 project. The labs and seminars were performed in small groups while the project was an individual assignment. The changes followed the previous year's course analysis: strengthen course materials (lecture slides) and update the reading paper list. We also arranged a one-hour pre-lab Q&A session before each lab to allow students to ask questions and clear doubts about the lab assignments.

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 course was offered in Period 4, Spring term (VT 2023). The learning period spans over 10 weeks, with 50% of the learning pace. The nominal workload is 20 study hours per week. In total, it is 200 study hours, worth of 7.5 ECTS credits.

According to the student survey, the average number of study hours (estimated workload) is about 19 hours per week. Some students spent more time and some less the average. Overall, the course workload can be considered reasonable.

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 examination has 3 moments: Lab, Seminar, Project. The grading is Pass or Fail. Students need to pass all three moments in order to pass the course. Overall the students performed well in labs and seminars. Most of the students completed on time. A few students had problems with the project assignment, especially the oral presentation. It seems that more training is needed to improve the quality of the presentations. The pass ratio is 19/22.

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

+ What was the best aspect of the course?
* Cool area, very relevant now too.
* I believe the course layout was the best aspect. Thanks to three labs and a project I was able to implement what I learned from the material.
* All four events were varied to a satisfying degree, but still contained a red thread throughout the course. All in all, the labs and project were formed in a great way that supported learning the material.
* rich learning materials and practice sessions
* Labs
* Seminars and lab sessions. Lot of different ways to think about the same problems and discuss how the subject will develop in the future.

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

Students were generally very positive about the course. They found the course very interesting and challenging. It is an exciting area to study, too. They liked the variety of course activities in lab, seminar, and project, which allowed different means of learning knowledge and developing skills.

They gave comments about clarifying and even tightening the link between the course content and embedded systems. They also wanted to have the quality of paper presentations in seminars leveraged.

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 was the second offering of the newly developed course. Again, it was a very successful one. The course activities were well-designed. The revision of course materials further strengthened the course content. Students were enthusiastic about the course content and activities.

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 course evaluation survey has 12 statements, a core subset of the entire 22 statements from the full version of LEQ (Learning Experience Questionaire). The statements are listed below. The score for each statement is listed in [ ].

The responses to each statement are scored from -3, -2, -1, 0 (neutral), 1, 2, 3, X (no standing), corresponding to scores 1 (-3) to 7 (+3). There are no big variations across the answers. The highest score is 6.4, while the lowest is 5.2. The average score is 5.9.

Stimulating tasks
1. I worked with interesting issues (a) [6.1]
Challenge 4.
The course was challenging in a stimulating way (c) [5.9]

Comprehensibility - cognitive level
Clear goals and organization
7. The intended learning outcomes helped me to understand what I was expected to achieve (e) [5.9]

Understanding of subject matter
10. I was able to learn from concrete examples that I could relate to (g) [5.2]
11. Understanding of key concepts had high priority (h) [5.9]
Constructive alignment
12. The course activities helped me to achieve the intended learning outcomes efficiently (i) [5.9]

Feedback and security
15. I could practice and receive feedback without being graded (j) [5.8]
16. The assessment on the course was fair and honest (k) [5.8]

Manageability - instrumental level Sufficient background knowledge
17. My background knowledge was sufficient to follow the course (f) [5.5]
Variation and participation
19. The course activities enabled me to learn in different ways (m) [5.7]

Collaboration
21. I was able to learn by collaborating and discussing with others (n) [6.4]
Support
22. I was able to get support if I needed it (c) [6.2]

There are no significant differences in the learning experience between male/female students, international/national students, and students with/without disabilities. Only one comment about 'per gender': "Did not affect the course".

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

In the next offering, the following specific points are to be addressed.

(1) The course content will be strengthened according to the latest developments in the field. In particular, related AI applications to embedded systems will be incorporated.
(2) The reading paper list will be updated. More relevant papers will be added.
(3) The seminar and project presentation should be improved. In seminars, some students found it difficult to maintain focus. Some students need to spend more effort in their project presentations (in making slides and delivering the oral presentations). Maybe we can communicate higher expectations to students.

OTHER INFORMATION
Is there anything else you would like to add?

I have spent tremendous efforts in developing and continuously enhancing the course. I am happy to see the successful execution of the course in the second offering. It is a pleasure to know that the students enjoyed studying the course and developed their capability and competence towards embedded AI.