Report - ML1504 - 2022-02-09

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.

The course was evaluated using an LEQ survey with a response rate of 3/31 representing 9,68% of respondents. The LEQ was available to students on January 3, 2022 with a deadline on January 17, 2022

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 presented information about the course including its evaluation and the need for participating in the LEQ on October 11, 2021. Additionally, I indicated the need for receiving student feedback with the LEQ on December 15, 2021 in the final lecture of the course.

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

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Efter avslutad kurs ska studenten kunna:

ILO 1 - Förklara olika logistikfunktioner och sätta dessa i sina sammanhang

ILO 2 - Känna till och beskriva referensmodeller som kan användas för att beskriva logistikprocesser på ett standardiserat sätt

ILO 3 - Förklara hur grader av kundorderstyrning och produktens struktur inverkar på materialförsörjningens planläggning

ILO 4 - Förklara hur teknologier för material- och informationshantering är uppbyggda och hur de kan bidra till att effektivisera produktionslogistiken

ILO 5 - Tillämpa metoder och beräkningssätt för styrning av produktions-, lager-, och beställningslogistik, inbegripande prognoser, beställningspunkt säkerhetslager och orderkvantitet

ILO 6 - Kartlägga, analysera och välja metod för att effektivisera ett producerande företags verksamhet eller en försörjningskedja utifrån ett logistikperspektiv

Kursen innehåller fyra examinationsmoment: TEN 1 (1,5 hp), PRO 1 (2,0 hp), INL 1 (1,0 hp) och ÖVN 1 (1,5).

Betygskala för TEN 1 och PRO 1 inkluderar A, B, C, D, E, F och Fx. Betygskala för INL 1 och ÖVN 1 är P (pass) of F (fail). Genomförande av alla lärandemål för samtliga examinationsmoment är obligatoriskt för att bli godkänd på kursen.

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 extent of students work are estimated to correspond to the course's points (40 hours / 1.5 credits). The results of the LEQ show that one student worked 18 to 20 hours / week, one student worked 15 to 17 hours / week, two students worked 21 to 23 hours / week, and one student worked 6 to 8 hours / week. Students stated that lectures were not time consuming but that project work was.

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 students improved in the delivery of PRO 1 compared to last year even though the project of this year required more time and involved two more ILOs. The reasons contributing to improved grades could include several opportunities for practicing in the lab together with our researchers, continuous non-graded peer review of project milestones, peer review feedback based on ILOs, and presentation of results prior to the final delivery of the project report.

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

What was the best aspect of the course?
•The students liked working in the lab, doing experiments, and applying technologies that can improve industrial work

What would you suggest to improve?
•The students have a hard time understanding and reading our Swedish and suggest that all of our material is written in English
•The students would like to easily identify the sections of the book related to the lectures in our class
•INL 1 was difficult to understand and relate to the topic of the course

What advice would you like to give to future participants?
•Study for the exam and prepare well during project work
•Understand the SCOR model and read course literature

Is there anything else you would like to add?
•The students considered it took the lecturers more time than usual to respond to their emails
•The students would like more opportunities for exercises involving calculations in class. In particular, the students would like to have a seminar focused on the use of the SCOR model including in class feedback from the teachers.

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

Students seem satisfied with the practical aspects of our course including simulation laboratories, presentations from industrial experts, work in the lab, and performing experiments with robots. An area of opportunity includes lectures involving three aspects. First, presenting all information in English as this would make information clear and easier reading for students. Second, increasing time in class for calculations and key concepts including the SCOR model. Third, identifying the chapter of the book related to a lecture at its start.

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 students had an overall good impression of the course and thought they worked with interesting topics. In agreement with the students, the lectures require improvement in particular with the language of the course including its written and oral material. This has been a comment voiced by students of earlier years.

The changes to the course included three aspects. First, eliminating a problem-based project together with the industry. Instead, we implement a laboratory project including the use of robots. This seems to have been more interesting for students and the quality of work was much higher than when working with companies from a distance. Second, we modified the supervision moments and helped students develop their skills for writing an academic report. This increased the quality of PRO 1 compared to last year. Third, we increased the participation of guest lecturers from the industry with an additional lecture focused on the use of simulation, and an additional hour for simulation exercises together with industrial expects.

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 LEQ survey reveals the following strong and weak areas for ML1504.

Strong areas included
15. I was able to practice and receive feedback without being graded⬜5
•⬜A change implemented in the course was the continuous practice of writing and assessing fulfillment of ILOs based on rubrics for PRO 1. This version of the course included four supervisions each with activities including non-graded peer review.

1. I worked with interesting issues⬜4,7
•⬜Students liked the practical aspects of our course including simulation and laboratory work with the robots

17. My background knowledge was sufficient to follow the course⬜4,7
•⬜Students followed discussions in class. The quantitative analysis required only grade school math.

Weak areas comprehended
4. The course was challenging in a stimulating way⬜1,7
•⬜The students liked the project work and laboratories, but did not like our lectures because it was difficult to understand our Swedish.

10. I was able to learn from concrete examples that I could to relate to⬜2,7
•⬜The students do not remember any example given in class. While examples were given in class, this grad might be explained by difficulties understanding what is said in class.

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

The most important aspect of the course requiring work are the lectures. The focus of the lecture could change from presenting information to students to doing activities supporting the ILOs in class, and providing students with practice prior to examination moments. Additionally, the next edition of the course could include reading material from the book prior to the start of the lecture, and a short presentation about the content of each lecture. Finally, we could make a test on change the material from Swedish to English with the purpose of improving understanding.