

# Report - CM2000 - 2020-08-12

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): Jonas Willén, jwi@kth.se

## 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.

As this was the first year for this course there were informal meetings with the students. After the course, an LEQ was sent out. As the LEQ is anonymous it takes in to account diversity.

## COURSE DESIGN

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

The course consisted of 7 laboratories covering electronic circuits for temperature measurement, blood pressure, EKG, and pulse oximeter. Two labs covering IMU, digital filters, and wireless communication. And a final lab covering measurement using video. For every Laboratory there were lectures and additional four lectures about sports technology from external teachers.

There were three seminars for after witch the individual should deliver there one reflection and expand on topic covered. And a final poster session that was peer-reviewed.

### 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?

According to the LEQ, the workload was smaller than expected. It average was 8 hours a week for 20 weeks => 160 / 40h => 4 \* 1.5 => 6hp witch is less then 8hp

The main reason is the use of tutorials in the laboratories so that the students seldom need to submit.

#### 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?

Hade three dropouts during the course rest passed.

#### STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

What was the best aspect of the course?

Sensors and sports related signals. Interesting electrical labs

Interesting topics and external lecturers easy-going flair of the teacher

The labs and sports related lectures.

Able to play around with in the lab and makerspace

What would you suggest to improve?

I would prefer the course to finish without the poster presentation. Not because is not interesting, but I believe it was out of the concept of the course.

-clearer instructions regarding the seminar questions and grading

-more theoretical background on the labs (if one has no understanding of electronics it's kind of hard to make use of the labs) It makes more sense to grade the lab performance than the seminar reflection.

What advice would you like to give to future participants?

Participate if you like sports related signals. You will learn how to build the respective circuits on breadboard and how to check the performance on oscilloscope.

### SUMMARY OF STUDENTS' OPINIONS

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

Even thou it a lab-intensive course that part is not graded as is perhaps should be.

A clear picture on the grading.

More theory connected to the laboratories.



## **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.

Running it for the first time I think that "the easy-going flair of the teacher" the best we could acive. Clerly there are rome in the course to dive deeper into the theoretical part of 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?

They like the content by should dive deeper into the theoretical part of 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? The laboratories should be part of the grading.

Dive deeper into the theoretical part of the course related to the laboratories.

One solution could be to add a reflective summary after every laboratory to folow up the learing outcome.