

# Course Analysis EI2452 VT2020

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## 1. 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.**

Two questionnaires has been sent out during the course to support formative assessment. The system with an early exam (mid course) further supports this process.

We strive towards a gender and cultural neutral discourse, no major improvements found, but some minor.

This year's close to 100% e-learning might have served students with varying learning abilities well. Students report on the benefit of being able to go back and re-watch recorded lectures.

## 2. 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.)**

All students have had meetings with one teacher/TA during the course, giving room for feedback.

One finishing course evaluation meeting held, see notes from that.

## 3. Course design

**Describe briefly the course design, the constructive alignment (intended learning objectives, learning activities, assessment, and how they interact), and the development that has been implemented since last course offering.**

The course consist of 3+3+3+1 day, three parts and a final seminar day.

Part 1: Theory and formulate project task (Conceive).

Part 2: Starts with exam of theory continues with lab and more applied methods. Present project idea and how to solve it (Design).

Part 3: Applied methods and lab, guest lectures. By now the student got tools to solve and test project solution (Implement and to some extent Operate).

After part 3 there is a home exam, covering topics of part 2 and 3.

Finally students present their project work. They also “oppose” on one of their peers, offering constructive criticism.

Last step is updates of project work based on feedback from teacher team and opponent(s).

Learning outcomes are tested in the mid-exam, home exam, lab as well as at the project presentation and in the report. Since these tests start early it gives the teacher team opportunities to adjust and add parts showing less than targeted learning.

#### **4. Students' workload**

**Are the students working to the expected extent in relation to the course credits? If there is a significant difference from the expected, what can be the reason?**

Workload might be a bit high, but we strive towards an even distribution over the period, no major complaints on the workload. The course is constructed to motivate the students to learn more and go into the topic (via a point system for the grades). Since the system is fairly transparent many students strive towards a high grade, likely resulting in a higher workload. Main example of this is that the home exam is designed to take approximately two work days. The impression is that most students put in significantly more in order to get a better grade.

We also employ a system where the students can improve failed parts already within the course, resulting in a high through put, but also in a higher average workload.

#### **5. Students' results on the course**

**How have the students succeeded in the course? If there is a significant difference compared to previous course offerings, what can be the reason?**

20 of 20 students passed, inline with previous years. This year included one student that failed the course last year.

#### **6. Students' answers to open questions**

**What does students say in response to the open questions?**

See attached notes from course evaluation meeting.

#### **7. Summary of students' opinions**

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

The student seems to like the course.

Some stress might occur from: Design your own project. (But that is also something good to learn.)

## **8. 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.**

In general very good.

E-learning support needs improvements. This is directed towards IT-support:

- More storage for online content
- Tested and working remote control.

## **9. 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 weakest part this year was the IT-support, it basically couldn't support one and a half lab. I am surprised that we didn't get more negative feedback on this. Why we "got away" with it is most likely due to efforts from Sanja and understanding students (that got a bit lessened burden, impacting learning to some degree).

No significant difference in experience detected.

## **10. Prioritized course development.**

**What aspects of the course should be developed primarily? How can these aspects be developed in short and long term?**

The course needs to be adjusted to the pandemic situation of 2021.

If we are back to normal we should utilize already developed online material. At a minimum as backup for lectures/exercises. But it is a good opportunity to move more towards a "flipped classroom".

If we continue online:

Can the course be offered to a wider audience?

What parts should be live and what does work with prerecorded material?

From course analysis meeting:

- Check schedule, basically distribution of lectures.
- IT-support: We need more storage for videos/online content. We need remote access, tested.
- Check course-PM so that it is clear with respect to what is happening when (lecture/exercise).

**11. Other information you want to share.**

It seems like we will get one or two conference papers that will be developed from the student projects.