

## Course analysis: DD2413, Social Robotics, HT24

Course analysis carried out by Iolanda Leite, iolanda@kth.se

This analysis is based on the 20 student survey responses attached to this report. The survey included a questionnaire and open-text responses. Only the questionnaire items are attached below, not the free-text answers, due to a limitation in extracting these responses from the KTH course evaluation system. Some quotes from these open-ended questions are cited in the report.

#### Changes made since previous course offering

In response to previous feedback, several changes were implemented this year. The project timeline was adjusted to have the pitch presentation earlier, and Lab B was redesigned as a project milestone to help students focus on technical implementation before the Christmas break. The teaching team also set up regular, fixed consultation times with mentors to provide consistent feedback.

#### Compilation of course evaluation results (required)

The course evaluation received a total of 20 responses from 47 students. The feedback on the course was very positive:

- <u>Course information</u>: 95% of students either "Strongly agree" or "Somewhat agree" that the course information was well organized with clear learning objectives and expectations. The mean score was 4.5/5.
- <u>Course design</u>: 90% of students agreed that the course design supported their learning. The mean score was 4.4/5.
- Workload: 95% of students agreed that the course had a reasonable scope and workload. The mean score was 4.8/5.
- Inclusion: 95% of students felt included and respected in class. The mean score was 4.8.
- Overall impression: 100% of students agreed that their overall impression of the course implementation and content was good. The mean score was 4.7/5.

## Course coordinator's reflections on what has worked well and what can be developed in the course

#### What worked well:

• <u>The project</u>: students appreciated the opportunity to choose their own topics and work with real robots. They also appreciated the balance between labs and the final project:

"What has worked well in the course was that it felt pretty open as far as project ideas and creativity goes. My impression is that this course encouraged interest and creativity by letting us choose between technical project and user study. And even in those two i thought we had the freedom to explore what was most interesting within the field of social robotics. It was rather unusual for me to read up on so many research papers and do my own research. To present our findings in a similar way to



researchers was very new and interesting to me. Definetly a positive addition to my competencies. I also liked that there were so many different fields, such as design, and psychology in the lectures aside from the technical things. There were some things there that i wouldn't have thought of otherwise."

• <u>Teacher and peer support</u>: students mentioned the supportive and proactive nature of the teachers and classmates. The feedback and support from mentors were quite valued:

"I loved being able to work with the robots freely and all the support provided by the teachers to set up the robots and solve problems when they arise."

• Relevance: students felt the project was relevant to social robotics and that they developed several skills, including conducting user studies. The lectures covering various fields like design, psychology, and technical aspects were also appreciated:

"It has a project including not only developed functions of robots but also do the user test studies. I believe during this process, multiple skills are trained."

#### What can be developed:

- <u>Lab A (Statistics)</u>: some students felt that Lab A, which is focused on statistics, was somewhat disconnected from the rest of the course. One student suggested making it a pass/fail prerequisite rather than a graded component.
- <u>Project organization</u>: some students noted a few organizational issues, such as late scheduling of project presentations. One student also raised a concern about unequal contribution within their group.
- <u>Technical content</u>: a few students from technical backgrounds felt there was a need for more material and lectures on the technical track of the project. They found the content to be geared more towards user studies and experiment design.

#### Summary of changes to be introduced for the next course (required)

- Revise Lab A: the role and content of Lab A will be re-evaluated with the HT25 teaching team to either better connect it to the learning outcomes or consider restructuring it as a prerequisite or non-graded assignment.
- <u>Increase technical content</u>: the course material, including lectures, will be updated to provide more specific guidance and material for students following the technical project track.
- Improve project organization: the scheduling of project milestones and presentations will be streamlined to provide clearer timelines. Additionally, to address issues of the teaching team's availability during the Christmas break for feedback and to accommodate exchange students who may not be physically present for final presentations in January, we will move the project deadline and presentation to before the break, leaving January for re-examination if needed.
- Address (unbalanced) project group contributions: we will consider implementing additional methods to ensure all group members contribute equally to the project.



#### Brief comment on result of examinations

All 47 students received a reported grade for the three examination modules, showing a high engagement. The distribution of grades was positive, with no students failing any of the modules (no FX or F grades):

- LAB A: Most students (70.21%) received an A.
- LAB B: Grades were distributed across A (48.94%), B (23.4%), and C (27.66%).
- PROA: Most students received an A (57.45%) or B (19.15%).



### Course Analysis - DD2413 Social Robotics 7.5 HP

## Course analysis part 1

#### 1.1 Course overview

Course name: Social Robotics Course code: DD2413 Course instance code: 50276

School: EECS SKOLAN

Department: IS INTELLIGENTA SYSTEM

Term: HT24
Examiners: lolanda Leite
Course coordinator: lolanda Leite

Teachers: Joseph La Delfa, Rebecca Stower, Sarah Gillet, Iolanda Leite, Ermanno Bartoli

Number of registered

students:

Part of program: TCSCM, TIMTM, TIEMM, TSCRM, BARCELO03, TIVNM, ESPOO12, CINTE,

GRENOB-22, MUNCHEN02, TRONDHE01, KAOHSHI02, URBANAC01, TTMAM,

BANGKOK01, MONTERR01

Examination modules: LABA, LABB, PROA

Intended learning On completion of the course, students should be able to

outcomes:

- apply different concepts within social robotics

- choose and justify efficient calculation methods for the ability of social robots to

perceive, make decisions and move

- use suitable software design and tools to develop applications for social robotics

- design, analyse and document experiments in human-robot-interaction (HRI)

- demonstrate understanding of the social and ethical aspects of the design, the

development and the use of social robots.

## 1.2 Reported examination modules and overall result of the course

#### 1.2.1 LABA

47 students with reported result

Α	В	С	D	E	FX	F
33 (70.21%)	9 (19.15%)	3 (6.38%)	2 (4.26%)	0 (0%)	0 (0%)	0 (0%)

#### 1.2.2 LABB

47 students with reported result

Α	В	С	D	E	FX	F
23 (48.94%)	11 (23.4%)	13 (27.66%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

#### 1.2.3 PROA

47 students with reported result

Α	В	С	D	E	FX	F
27 (57.45%)	9 (19.15%)	7 (14.89%)	4 (8.51%)	0 (0%)	0 (0%)	0 (0%)

#### 1.2.4 Course result

0 students with reported result

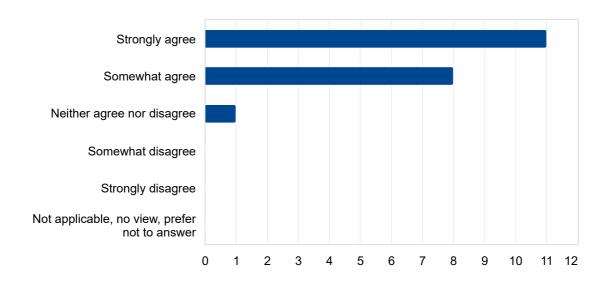
### 1.3 Course evaluation results

Number of Respondents: 47

Answer Count: 20

Answer Frequency: 42.55%

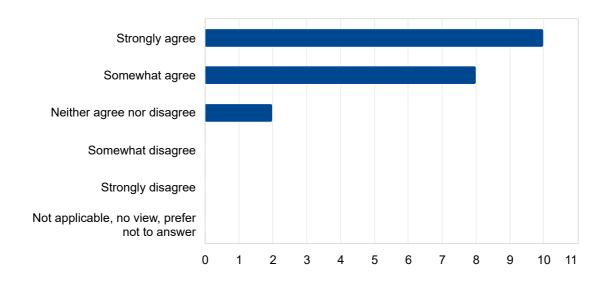
## 1. The course information was well organised, with clear learning objectives and expectations.



	Mean
The course information was well organised, with clear learning objectives and expectations.	4.5

The course information was well organised, with clear learning objectives and expectations.	Number of responses
Strongly agree	11 (55.0%)
Somewhat agree	8 (40.0%)
Neither agree nor disagree	1 (5.0%)
Somewhat disagree	0 (0.0%)
Strongly disagree	0 (0.0%)
Not applicable, no view, prefer not to answer	0 (0.0%)
Total	20 (100.0%)

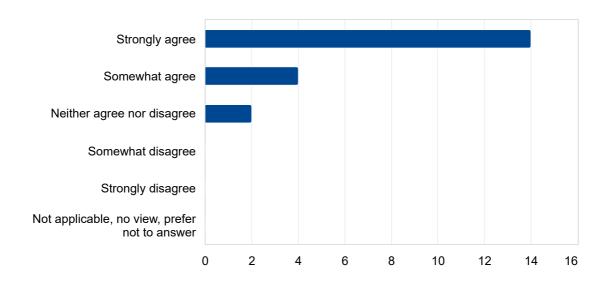
## 2. The course design provided good support for my learning.



	Mean
The course design provided good support for my learning.	4.4

The course design provided good support for my learning.	Number of responses
Strongly agree	10 (50.0%)
Somewhat agree	8 (40.0%)
Neither agree nor disagree	2 (10.0%)
Somewhat disagree	0 (0.0%)
Strongly disagree	0 (0.0%)
Not applicable, no view, prefer not to answer	0 (0.0%)
Total	20 (100.0%)

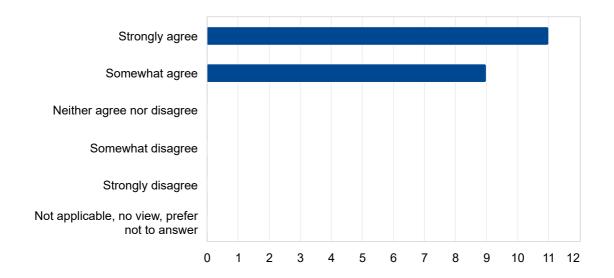
# 3. The course gave opportunities for monitoring my own progress and understand what I needed to do in order to succeed with the course.



	Mean
The course gave opportunities for monitoring my own progress and understand what I needed to do in order to succeed with the course.	4.6

The course gave opportunities for monitoring my own progress and understand what I needed to do in order to succeed with the course.	Number of responses
Strongly agree	14 (70.0%)
Somewhat agree	4 (20.0%)
Neither agree nor disagree	2 (10.0%)
Somewhat disagree	0 (0.0%)
Strongly disagree	0 (0.0%)
Not applicable, no view, prefer not to answer	0 (0.0%)
Total	20 (100.0%)

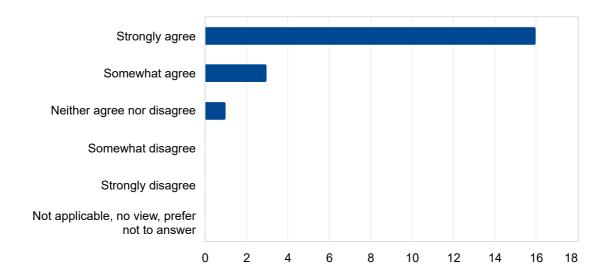
## 4. I participated actively in the different parts of the course and studied continuously.



	Mean
I participated actively in the different parts of the course and studied continuously.	4.6

I participated actively in the different parts of the course and studied continuously.	Number of responses
Strongly agree	11 (55.0%)
Somewhat agree	9 (45.0%)
Neither agree nor disagree	0 (0.0%)
Somewhat disagree	0 (0.0%)
Strongly disagree	0 (0.0%)
Not applicable, no view, prefer not to answer	0 (0.0%)
Total	20 (100.0%)

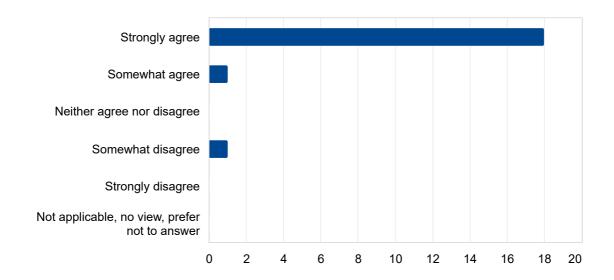
### 5. I felt included and respected in this class.



	Mean
I felt included and respected in this class.	4.8

I felt included and respected in this class.	Number of responses
Strongly agree	16 (80.0%)
Somewhat agree	3 (15.0%)
Neither agree nor disagree	1 (5.0%)
Somewhat disagree	0 (0.0%)
Strongly disagree	0 (0.0%)
Not applicable, no view, prefer not to answer	0 (0.0%)
Total	20 (100.0%)

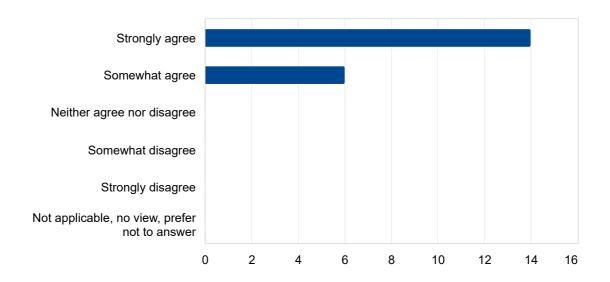
## 6. The course had reasonable scope and workload.



	Mean
The course had reasonable scope and workload.	4.8

The course had reasonable scope and workload.	Number of responses
Strongly agree	18 (90.0%)
Somewhat agree	1 (5.0%)
Neither agree nor disagree	0 (0.0%)
Somewhat disagree	1 (5.0%)
Strongly disagree	0 (0.0%)
Not applicable, no view, prefer not to answer	0 (0.0%)
Total	20 (100.0%)

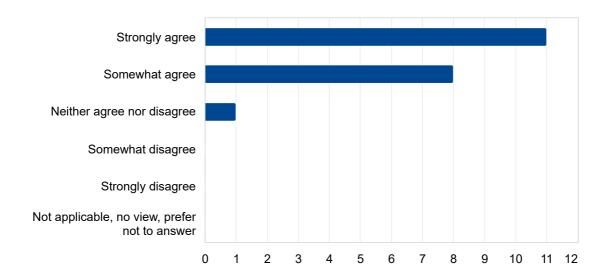
## 7. The assessment was meaningful.



	Mean
The assessment was meaningful.	4.7

The assessment was meaningful.	Number of responses
Strongly agree	14 (70.0%)
Somewhat agree	6 (30.0%)
Neither agree nor disagree	0 (0.0%)
Somewhat disagree	0 (0.0%)
Strongly disagree	0 (0.0%)
Not applicable, no view, prefer not to answer	0 (0.0%)
Total	20 (100.0%)

### 8. The course feels relevant and I have developed my competence.



	Mean
The course feels relevant and I have developed my competence.	4.5

The course feels relevant and I have developed my competence.	Number of responses
Strongly agree	11 (55.0%)
Somewhat agree	8 (40.0%)
Neither agree nor disagree	1 (5.0%)
Somewhat disagree	0 (0.0%)
Strongly disagree	0 (0.0%)
Not applicable, no view, prefer not to answer	0 (0.0%)
Total	20 (100.0%)

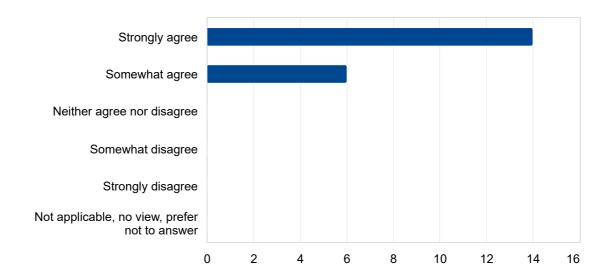
#### 9. What has worked well in the course?

Free-text responses are not available in this report.

#### 10. What can be developed in the course?

Free-text responses are not available in this report.

## 11. My overall impression of the course regarding both implementation and content is that it is good.



	Mean
My overall impression of the course regarding both implementation and content is that it is good.	4.7

My overall impression of the course regarding both implementation and content is that it is good.	Number of responses
Strongly agree	14 (70.0%)
Somewhat agree	6 (30.0%)
Neither agree nor disagree	0 (0.0%)
Somewhat disagree	0 (0.0%)
Strongly disagree	0 (0.0%)
Not applicable, no view, prefer not to answer	0 (0.0%)
Total	20 (100.0%)

- 2.1 Comments by the course coordinator
- 2 Comments by the course coordinator