



Report - DT2300 - 2020-05-26

The original course evaluation made by 10 students is attached at the end of this course analysis starting at page 5.

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):

Roberto Bresin, roberto@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.

The course evaluation has been conducted with the online KTH Learning Experience Questionnaire v3.1.4 (LEQ).

The course responsible (Roberto Bresin) has encouraged the students in several occasions to take the course evaluation seriously since it is one of the important instruments for helping improving the quality of the course and provide a better course for future students attending the course.

Student have been automatically contacted and reminded via the course evaluation system.

The course evaluation was done before the project final presentation.

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.)

Continuous discussion with the students have been conducted during the entire course both at lectures and laborations.

During the first introductory lecture students were invited to first briefly present expectations they had from the course.

During two online meetings with all students after the final project presentations, the course responsible (Roberto Bresin) asked students about comments/suggestions for improving the course quality.

COURSE DESIGN

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

The 2020 edition of the course has followed basically the same structure of the previous edition: 11 lectures (given by 6 different researchers), 1 study visit at Europa Foley and Adr (this year in the form of a video-recorded keynote by Ulf Olausson), 3 laboratory sessions, 1 project, and 5 assignments.

However we have introduced a new activity: a sound walk. During the sound walk students were walking blind folded across the KTH campus by actively listening to sounds in the environment and recording them with a professional portable recorded. The same sounds were later recorded in laboratory session 1.

Another change in the design of the course has been to decide a general theme for the course project: "soundscape of the future". This has been proved to help students in their project design and implementation.



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 is usually about 11 weeks long, that means that the expected workload should have been about 18 hours/week. This year the course was a couple of weeks longer because of the covid-19 situation and the need to postpone the date of project presentations. Students reported an average workload of 13.7 hours/week (with a minimum of 8 hours/week for 2 students and a maximum of 23 hours/week for one student).

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?

There were 22 students registered to the course. 19 have completed the course in the scheduled time. Because of personal family problems, two more students have completed it during August 2020. Therefore 22 out of 21 students have successfully completed the course

2020:

There were 22 students registered to the course. 21 completed the course. 1 student did not perform the final project work. Overall the students succeeded very well on the course. Final results were the best in the history of the course: 16 As, 5 Bs.

Results from previous editions of the course were:

2019: 8 students: 5 Bs, 2 Cs, and 1 E

2018: 14 students: 3 As, 8 Bs and 3 Cs

2017: 14 students: 4 As, 6 Bs, 4 Cs

HT16/VT17: 19 students: 6 As, 8 Bs, 2 Cs, 3Ds



STUDENTS' ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

What was the best aspect of the course?

The proposed ideas for the project, punctual and all stimulating, in different ways.

I really enjoyed the whole course so i am not sure what to comment! The labs were very fun, the lectures were very interesting and engaging and the project was fun!

The understanding of the importance of sounds in interaction compared to silent interaction, how to use sounds to give your own idea of perception based on sounds and how to evaluate this kind of interaction.

It's a fun and interesting area with possible cool applications

Hearing about different topics within sound in interaction

Being exposed to different new and exciting technologies to create different sounds was really interesting and exciting! And for me was the best

aspect of the course.

Interesting material!

The lectures held a really high quality.

What would you suggest to improve?

I am actually not sure that something should be improved... perhaps a little more tutorial about Pure Data, which appears to be tremendously interesting, nevertheless tremendously unknown - in the Media Technology path some students faced it in the Multimodal Interaction course, but it appears to be still pretty unexplored by the majority, which is pitiful, as it is very versatile and usable.

More focus on evaluation.

Some of the lectures were quite boring. I think showing videos and other types of interactive content (as it is in fact a course in interaction) would make it easier to understand and enjoy the information that is given.

Perhaps a little more focus on Foley Sounds would've been nice, maybe this is my personal interest but I would have loved to experience more

of that side of Sound Interaction!

Organization/management. It was sometimes a bit unclear.

Perhaps more discussions/seminars around literature?

The labs felt a bit iterative and were not very well related to the projects we did.

What advice would you like to give to future participants?

Try to get some previous info about Pure Data and, generally, sound oriented coding/editing environments

Maybe try to think outside the box when it comes to doing the project as well as have regular communication with the supervisor.

Start as soon as possible with finding a project idea that fits your interest and mostly your skills.

Do a project in an area that you find interesting, makes it more fun and easy to work on :)

The best advice I can give is to enjoy the course to the fullest and take it seriously because there were a lot of interesting things to be learned in this course!

Attend lectures. Read course literature

Have fun and enjoy this course! The more time you put into it the more value and enjoyment you get.

Is there anything else you would like to add?

I understand that it was equally difficult for the lecturers and professors regarding COVID-19 and I would like to commemorate you guys and say you did a great job working around it!

Soundwalk was great! More lab time, with more guiding and introduction to using the different software

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 overall impression is that students appreciated the course content and its organization.

The introduction of sound walk and its relation to Lab sessions was also appreciated. We have seen that this has also increased the overall quality of the projects since students became more aware of the importance of sound qualities in general.

The introduction of a general theme for the course project ("soundscape of the future") has proved to positively help students in their project design and implementation.

Our positive impression is also validated by the course results which were the best recorded in the whole history of the course: 16 As, 5 Bs.



PRIORITIZED COURSE DEVELOPMENT

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

We will make lab sessions 1 hour longer: from 3 hours to 4 hours so that students feel less stress to finish in time (This can be necessary for some of the students. Anyway, in the 2020 edition of the course most of the students finished the labs within 3 hours.)

We will have some of the content in the lectures more clearly related to the theme of the projects, "soundscape of the future". We will introduce more video examples. Several lecture have them already but there is room for more examples in other lectures.

We will add some non-compulsory modules about software tools that are used in laboratory sessions and project (Max 8, superCollider, Pure Data, Audacity, VCV, etc.). This is for students who are not familiar with these tools. Students who would like to, will have the possibility to take these modules.



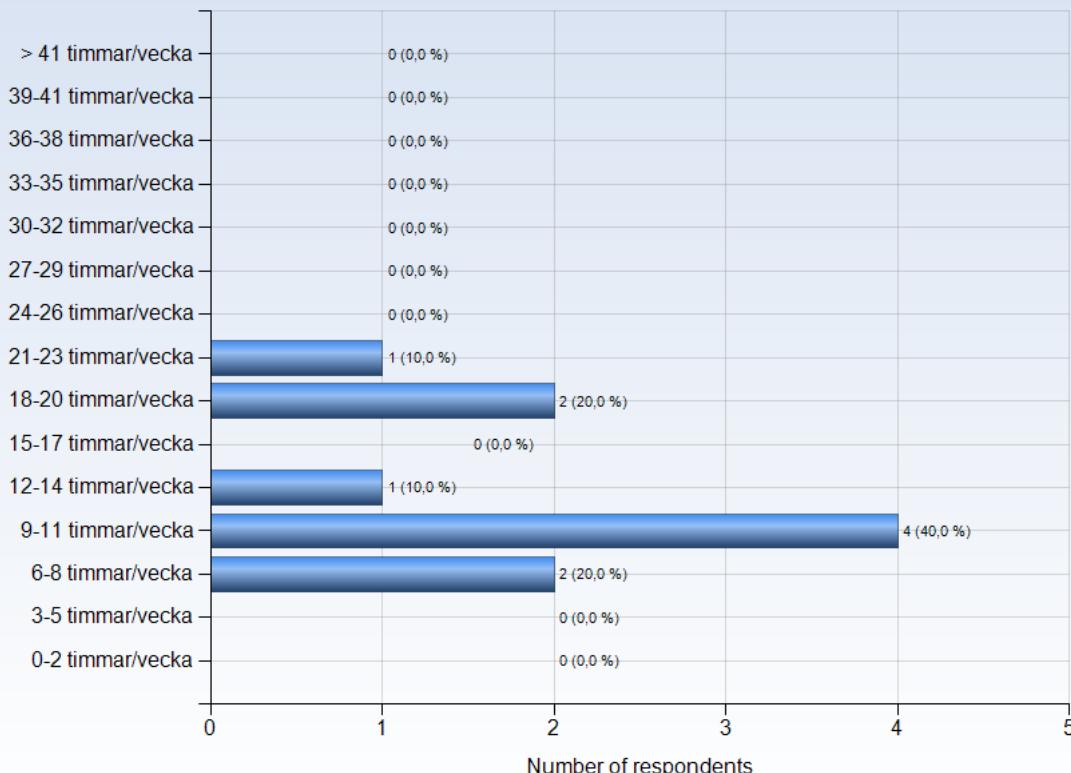
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Antal respondenter: 22
Antal svar: 10
Svarsfrekvens: 45,45 %



ESTIMATED WORKLOAD

On average, how many hours/week did you work with the course (including scheduled hours)?



Comments

Comments (I worked: 6-8 timmar/vecka)

The workload was well distributed and not heavy at all. Perhaps the student with more courses in the same period might have difficulties in managing the time, but that is not strictly course-related. In general, the course was challenging at the right point, neither too heavy, nor too light. Simply, swedishly, lagom.

Comments (I worked: 9-11 timmar/vecka)

I think it was a reasonable amount of work

Comments (I worked: 18-20 timmar/vecka)

I think the course workload was decent and not really a burden for the students, at least not for me!

Comments (I worked: 21-23 timmar/vecka)

It was reasonably time consuming



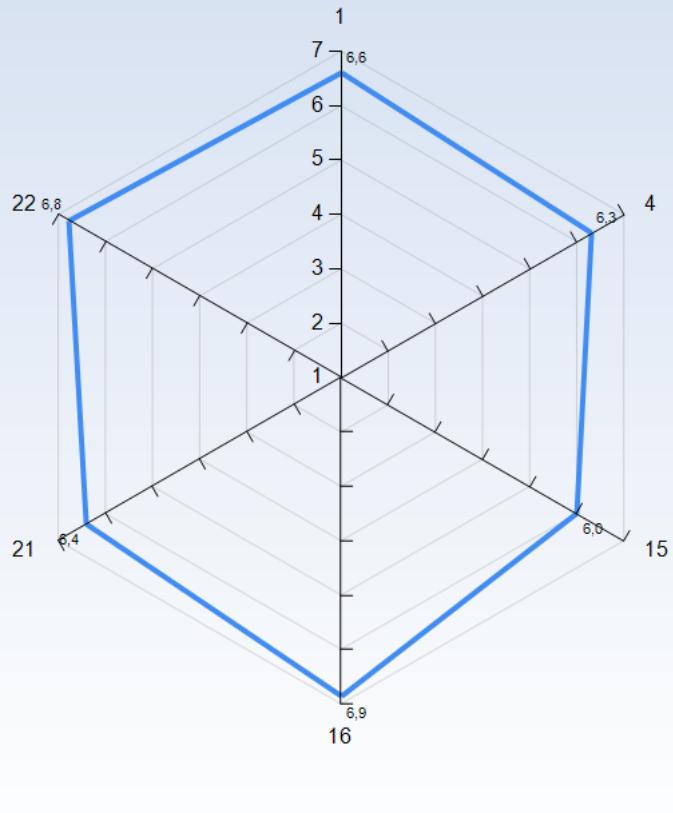
LEARNING EXPERIENCE

The polar diagrams below show the average response to the LEQ statements for different groups of respondents (only valid responses are included). The scale that is used in the diagrams is defined by:

- 1 = No, I strongly disagree with the statement
- 4 = I am neutral to the statement
- 7 = Yes, I strongly agree with the statement

Note! A group has to include at least 3 respondents in order to appear in a diagram.

Average response to LEQ statements - all respondents





KTH Learning Experience Questionnaire v3.1.4

Meaningfulness - emotional level

Stimulating tasks

1. I worked with interesting issues (a)

Exploration and own experience

2. I explored parts of the subject on my own (a)
3. I was able to learn by trying out my own ideas (b)

Challenge

4. The course was challenging in a stimulating way (c)

Belonging

5. I felt togetherness with others on the course (d)
6. The atmosphere on the course was open and inclusive (d)

Comprehensibility - cognitive level

Clear goals and organization

7. The intended learning outcomes helped me to understand what I was expected to achieve (e)
8. The course was organized in a way that supported my learning (e)

Understanding of subject matter

9. I understood what the teachers were talking about (f)
10. I was able to learn from concrete examples that I could relate to (g)
11. Understanding of key concepts had high priority (h)



Constructive alignment

12. The course activities helped me to achieve the intended learning outcomes efficiently (i)
13. I understood what I was expected to learn in order to obtain a certain grade (i)

Feedback and security

14. I received regular feedback that helped me to see my progress (j)
15. I could practice and receive feedback without being graded (j)
16. The assessment on the course was fair and honest (k)

Manageability - instrumental level

Sufficient background knowledge

17. My background knowledge was sufficient to follow the course (f)

Time to reflect

18. I regularly spent time to reflect on what I learned (l)

Variation and participation

19. The course activities enabled me to learn in different ways (m)
20. I had opportunities to influence the course activities (m)

Collaboration

21. I was able to learn by collaborating and discussing with others (n)

Support

22. I was able to get support if I needed it (c)



Learning factors from the literature that LEQ intends to examine

We tend to learn most effectively (in ways that make a sustained, substantial, and positive influence on the way we think, reflect, act or feel) when:

- a) We are trying to answer questions, solve problems or acquire skills that we find interesting, exciting or important
- b) We are able to speculate, test ideas (intellectually or practically) and learn from experience, even before we know much about the subject
- c) We are able to do so in a challenging and at the same time supportive environment
- d) We feel that we are part of a community and believe that other people have confidence in our ability to learn
- e) We understand the meaning of the intended learning outcomes, how the environment is organized, and what is expected of us
- f) We have adequate prior knowledge to deal with the current learning situation
- g) We are able to learn inductively by moving from concrete examples and experiences to general principles, rather than the reverse
- h) We are challenged to develop a true understanding of key concepts and gradually create a coherent whole from the content
- i) We believe that the work we are expected to do will help us to achieve the intended learning outcomes
- j) We are able to try, fail, and receive feedback before, and separate from, each summative assessment of our efforts
- k) We believe that our work will be considered in an honest and fair way
- l) We have sufficient time for learning and devote the time needed to do so



- m) We believe that we have control over our own learning, and not that we are being manipulated
- n) We are able to collaborate with other learners struggling with the same problems

Literature

Bain, K. (2004). *What the Best College Teachers Do*, Chapter 5, pp. 98-134. Cambridge: Harvard University Press.

Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

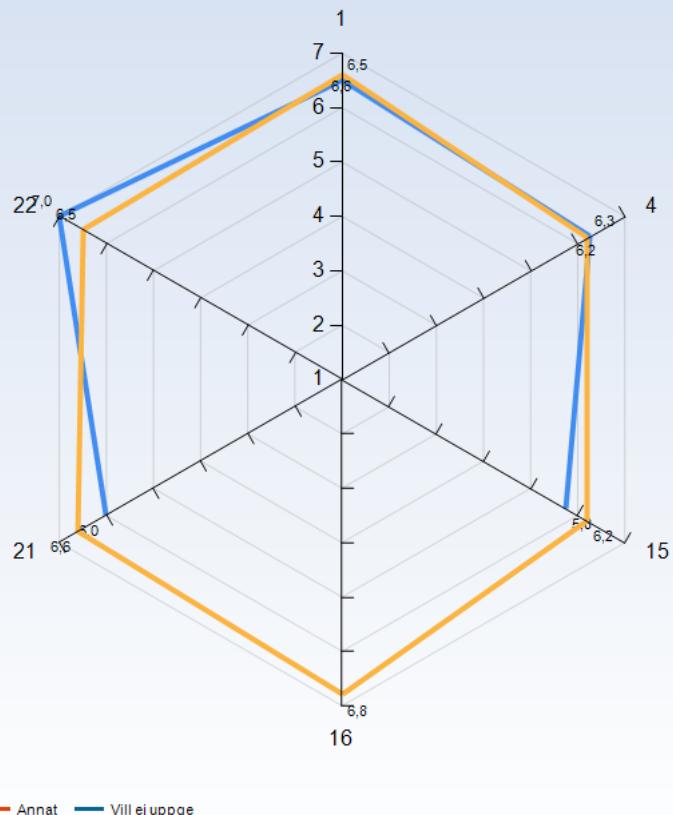
Elmgren, M. & Henriksson, A-S. (2014). *Academic Teaching*, Chapter 3, pp. 57-72. Lund: Studentlitteratur.

Kember, K. & McNaught, C. (2007). *Enhancing University Teaching: Lessons from Research into Award-Winning Teachers*, Chapter 5, pp. 31-40. Abingdon: Routledge.

Ramsden, P. (2003). *Learning to Teach in Higher Education*, Chapter 6, pp. 84-105. New York: RoutledgeFalmer.



Average response to LEQ statements - per gender



Comments

Comments (I am: Kvinna)

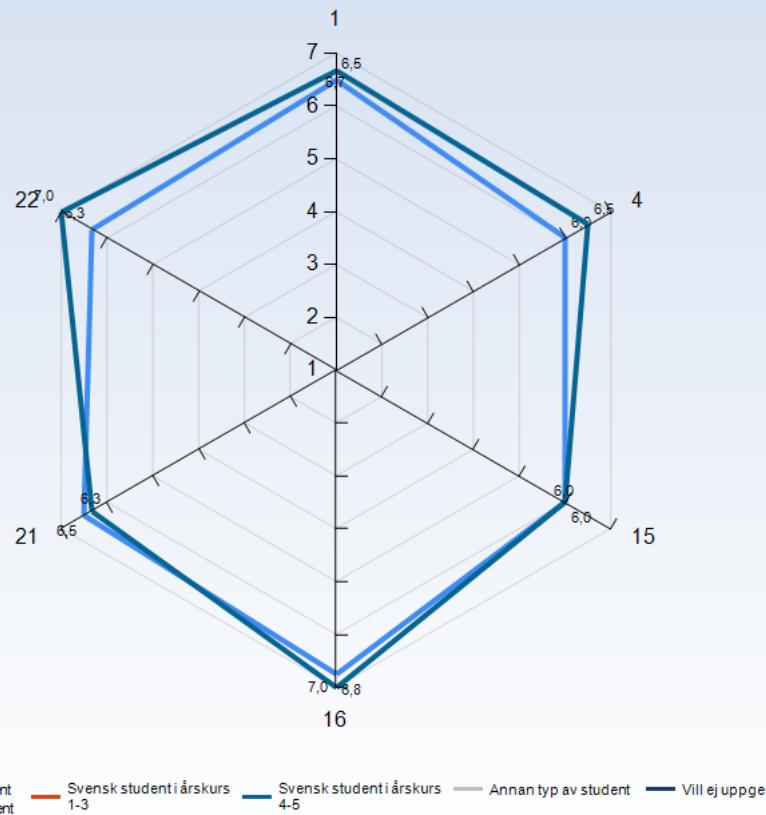
I really enjoyed having a female course assistant. It makes me feel like the field is open for women to join.

Comments (I am: Man)

The course(Professors and every faculty involved) were fair and equal to everyone!

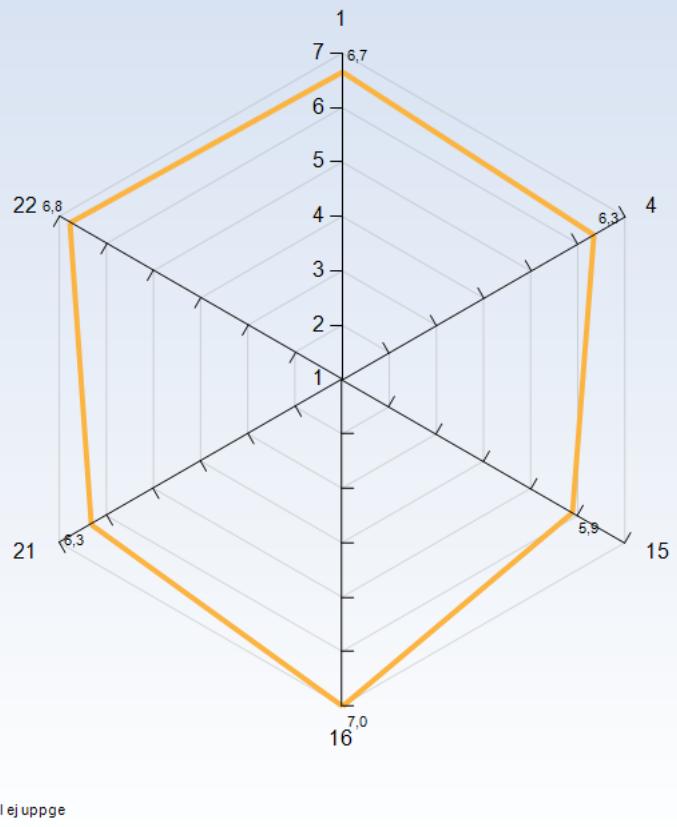


Average response to LEQ statements - per type of student



Comments

Average response to LEQ statements - per disability



Comments



GENERAL QUESTIONS

What was the best aspect of the course?

What was the best aspect of the course? (I worked: 6-8 timmar/vecka)

The proposed ideas for the project, punctual and all stimulating, in different ways.

I really enjoyed the whole course so i am not sure what to comment! The labs were very fun, the lectures were very interesting and engaging and the project was fun!

What was the best aspect of the course? (I worked: 9-11 timmar/vecka)

The understanding of the importance of sounds in interaction compared to silent interaction, how to use sounds to give your own idea of perception based on sounds and how to evaluate this kind of interaction.

It's a fun and interesting area with possible cool applications

What was the best aspect of the course? (I worked: 12-14 timmar/vecka)

Hearing about different topics within sound in interaction

What was the best aspect of the course? (I worked: 18-20 timmar/vecka)

Being exposed to different new and exciting technologies to create different sounds was really interesting and exciting! And for me was the best aspect of the course.

Interesting material!

What was the best aspect of the course? (I worked: 21-23 timmar/vecka)

The lectures held a really high quality.

What would you suggest to improve?

What would you suggest to improve? (I worked: 6-8 timmar/vecka)

I am actually not sure that something should be improved... perhaps a little more tutorial about Pure Data, which appears to be tremendously interesting, nevertheless tremendously unknown - in the Media Technology path some students faced it in the Multimodal Interaction course, but it appears to be still pretty unexplored by the majority, which is pitiful, as it is very versatile and usable.

What would you suggest to improve? (I worked: 9-11 timmar/vecka)

More focus on evaluation.

Some of the lectures were quite boring. I think showing videos and other types of interactive content (as it is in fact a course in interaction) would make it easier to understand and enjoy the information that is given.

What would you suggest to improve? (I worked: 18-20 timmar/vecka)

Perhaps a little more focus on Foley Sounds would've been nice, maybe this is my personal interest but I would have loved to experience more of that side of Sound Interaction!

Organization/management. It was sometimes a bit unclear.

Perhaps more discussions/seminars around literature?

What would you suggest to improve? (I worked: 21-23 timmar/vecka)

The labs felt a bit iterative and were not very well related to the projects we did.

What advice would you like to give to future participants?

What advice would you like to give to future participants? (I worked: 6-8 timmar/vecka)

Try to get some previous info about Pure Data and, generally, sound oriented coding/editing environments

Maybe try to think outside the box when it comes to doing the project aswell as have regular communication with the supervisor.

What advice would you like to give to future participants? (I worked: 9-11 timmar/vecka)

Start as soon as possible with finding a project idea that feels your interest and mostly your skills.

Do a project in an area that you find interesting, makes it more fun and easy to work on :)

What advice would you like to give to future participants? (I worked: 18-20 timmar/vecka)

The best advice I can give is to enjoy the course to the fullest and take it seriously because there were a lot of interesting things to be learned in this course!

Attend lectures. Read course literature

What advice would you like to give to future participants? (I worked: 21-23 timmar/vecka)

Have fun and enjoy this course! The more time you put into it the more value and enjoyment you get.



Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 6-8 timmar/vecka)

i understand that it was equally difficult for the lecturers and professors regarding COVID-19 and i would like to commemorate you guys and say you did a great job working around it!

Is there anything else you would like to add? (I worked: 18-20 timmar/vecka)

Soundwalk was great! More lab time, with more guiding and introduction to using the different software

SPECIFIC QUESTIONS



RESPONSE DATA

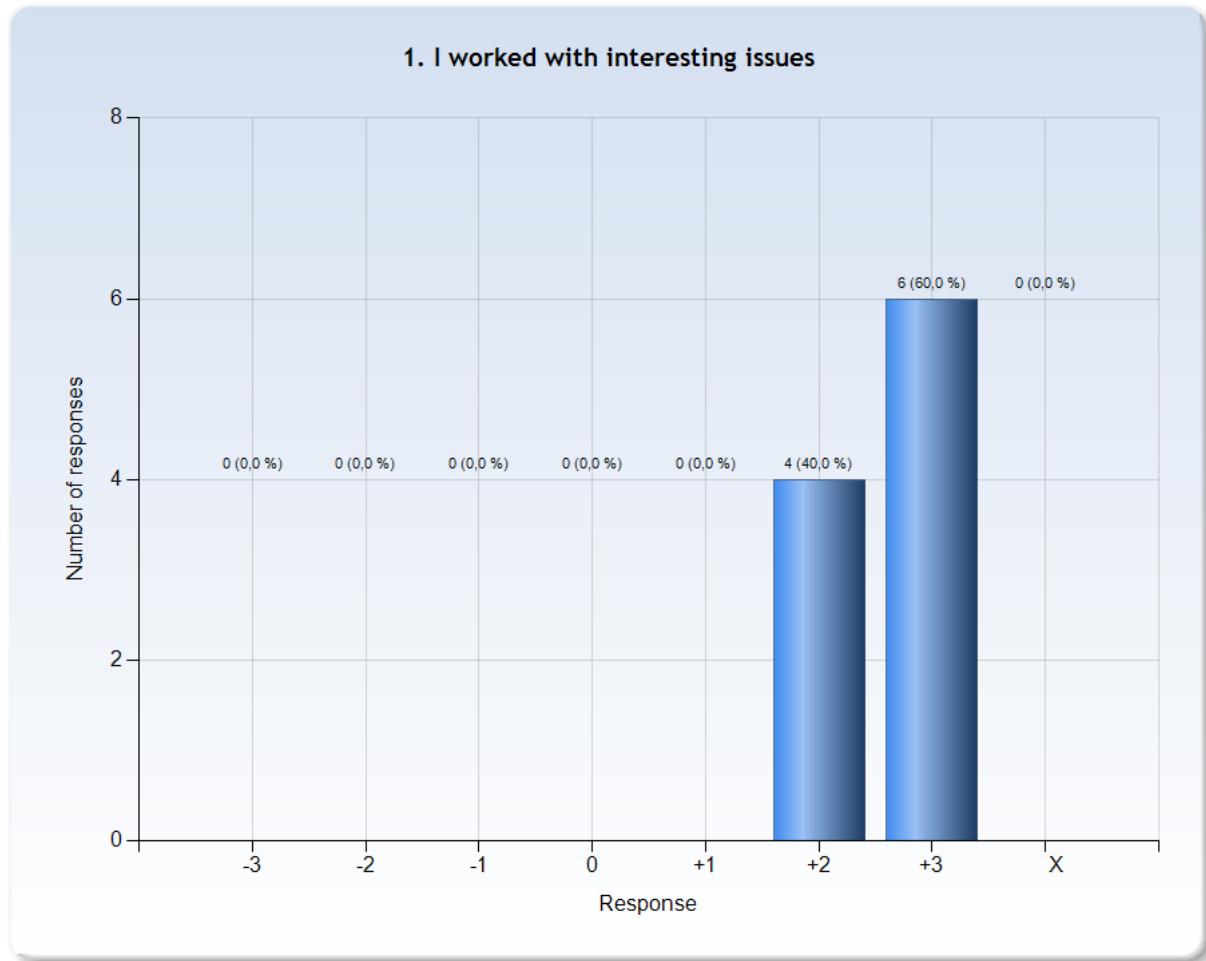
The diagrams below show the detailed response to the LEQ statements.
The response scale is defined by:

-3 = No, I strongly disagree with the statement

0 = I am neutral to the statement

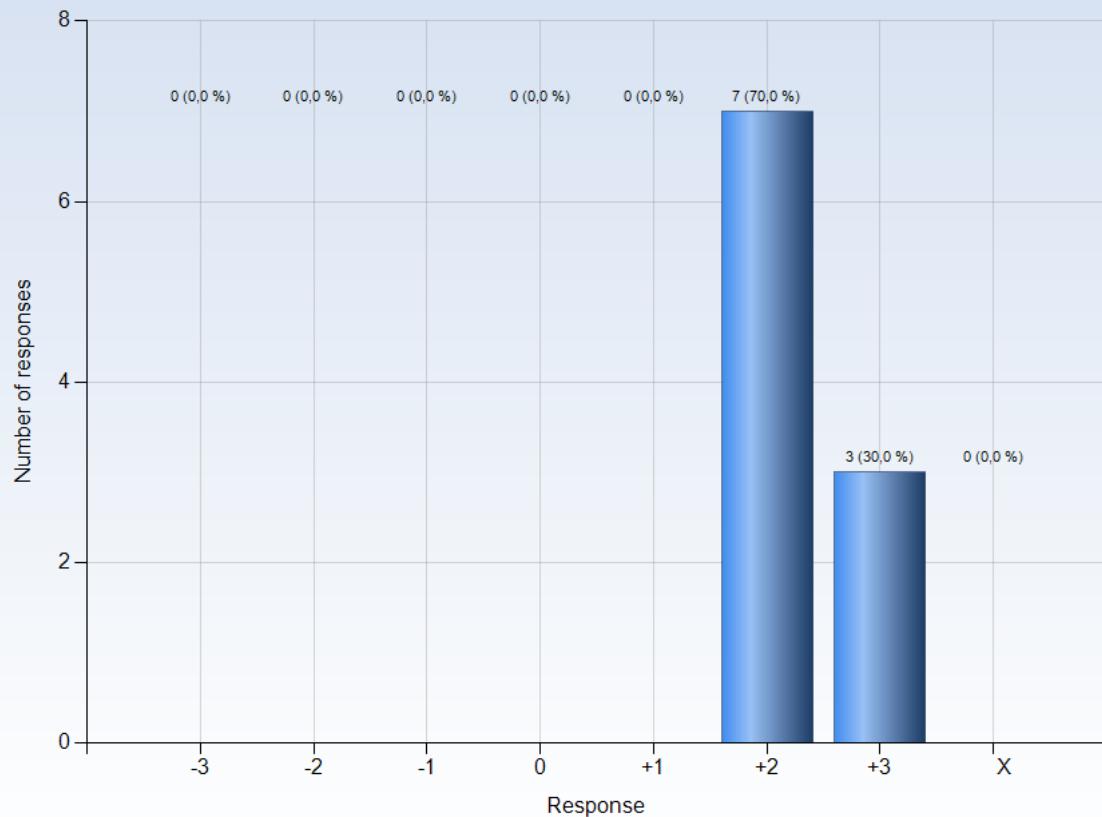
+3 = Yes, I strongly agree with the statement

X = I decline to take a position on the statement





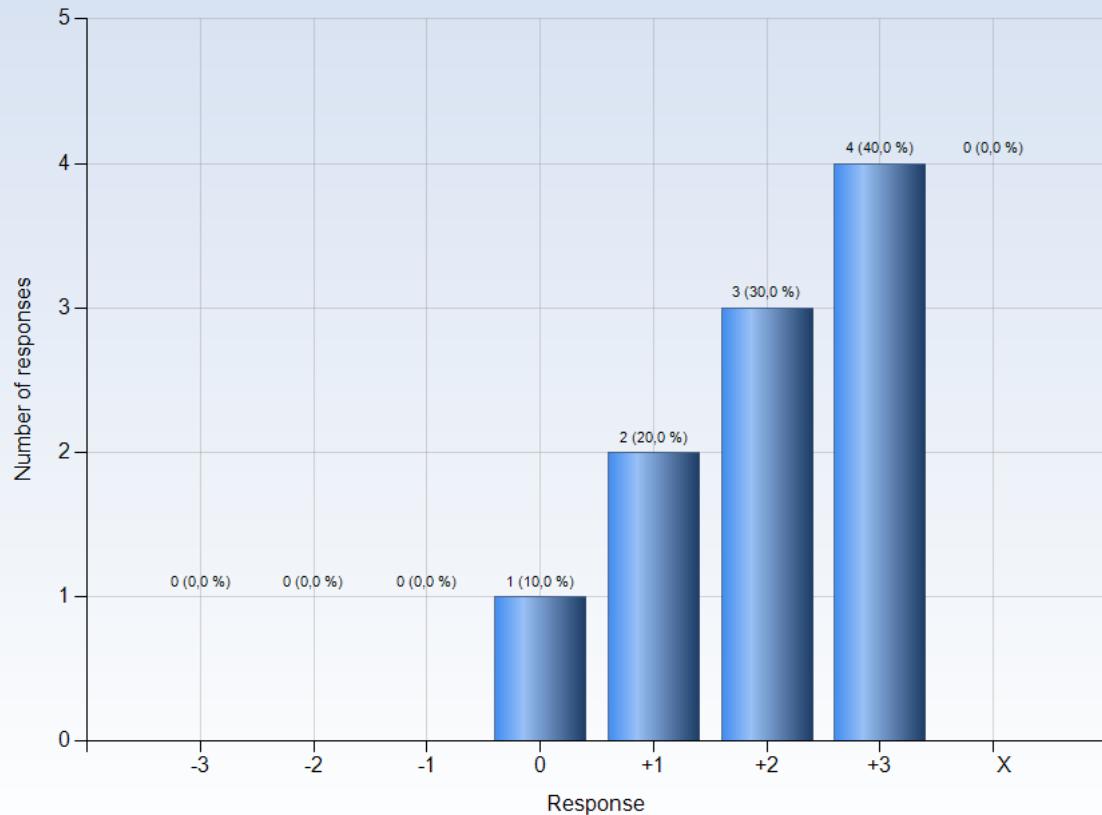
4. The course was challenging in a stimulating way



Comments



15. I was able to practice and receive feedback without being graded



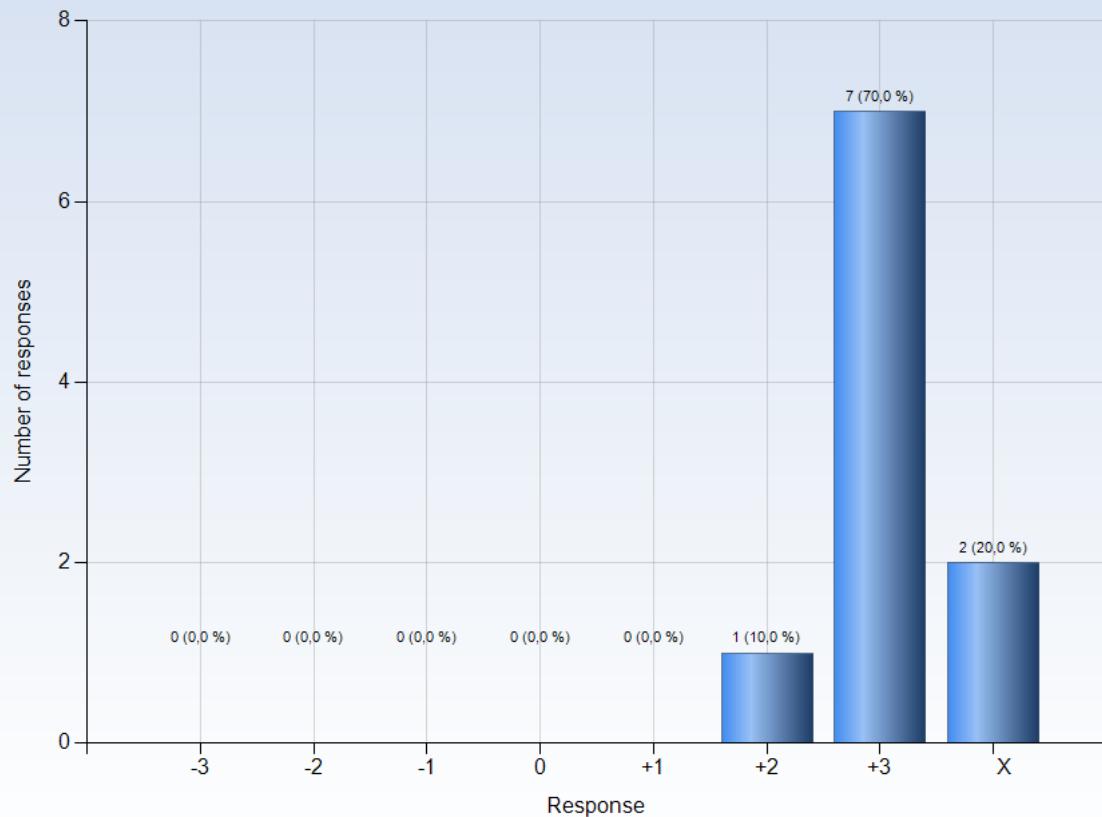
Comments

Comments (My response was: +3)

Good to have weekly meetings with the supervisor



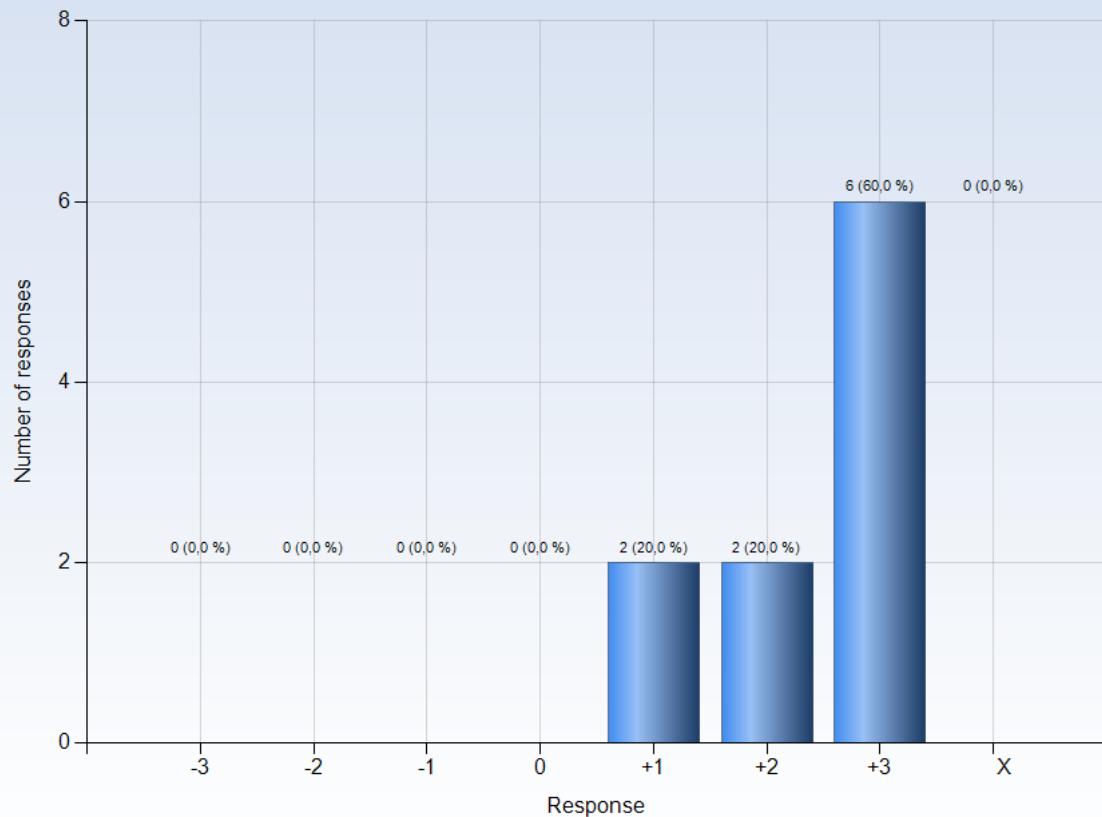
16. The assessment on the course was fair and honest



Comments



21. I was able to learn by collaborating and discussing with others



Comments

Comments (My response was: +1)

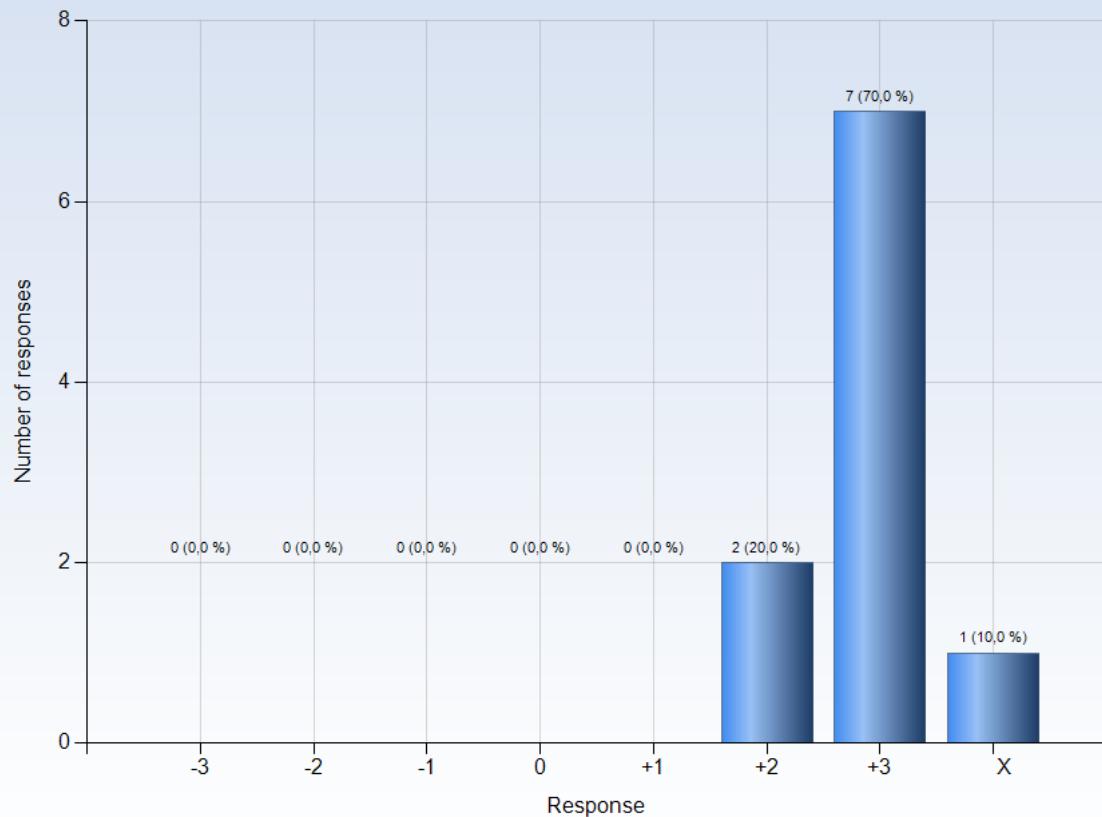
I think the groups were a little bit too small

Comments (My response was: +3)

I liked the labs



22. I was able to get support if I needed it



Comments