

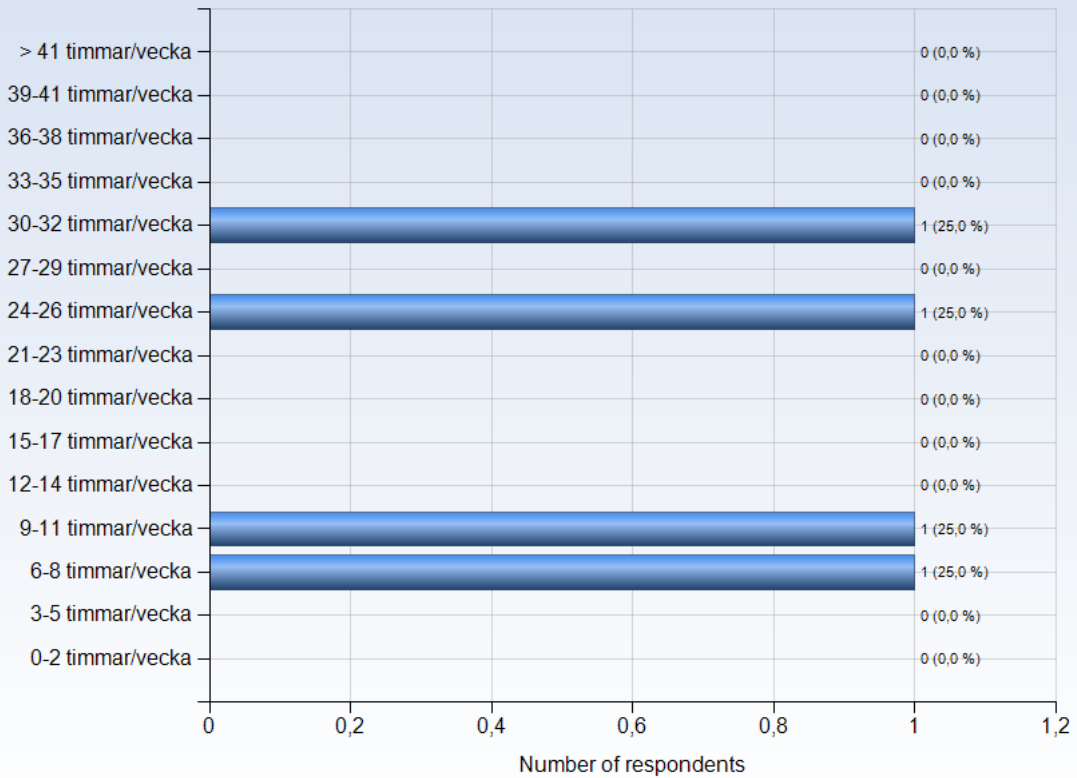


DD2372 - 2020-06-12

Antal respondenter: 17
Antal svar: 4
Svarsfrekvens: 23,53 %

ESTIMATED WORKLOAD

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



Comments

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

The course was suitably loaded with work. The work required was more but it helped in learning a lot.

Comments (I worked: 30-32 timmar/vecka)

This course was quite time intensive, but at the same time extremely rewarding.



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:

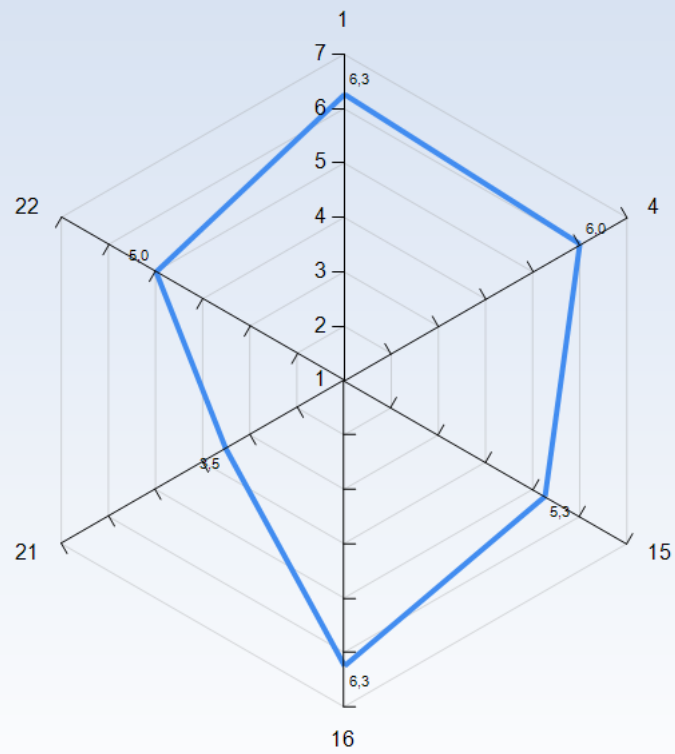
1 = No, I strongly disagree with the statement

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



— Medelvärde



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.

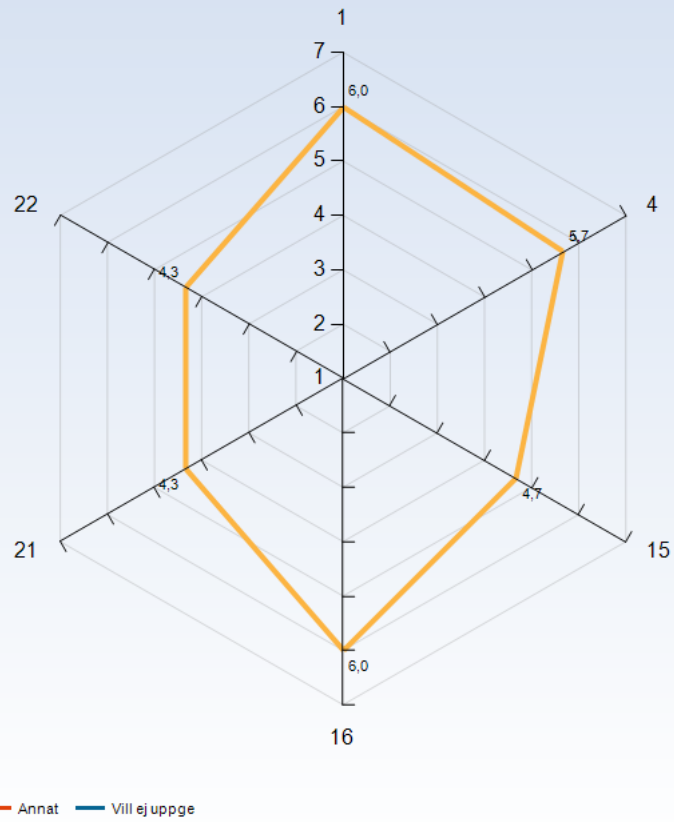
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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

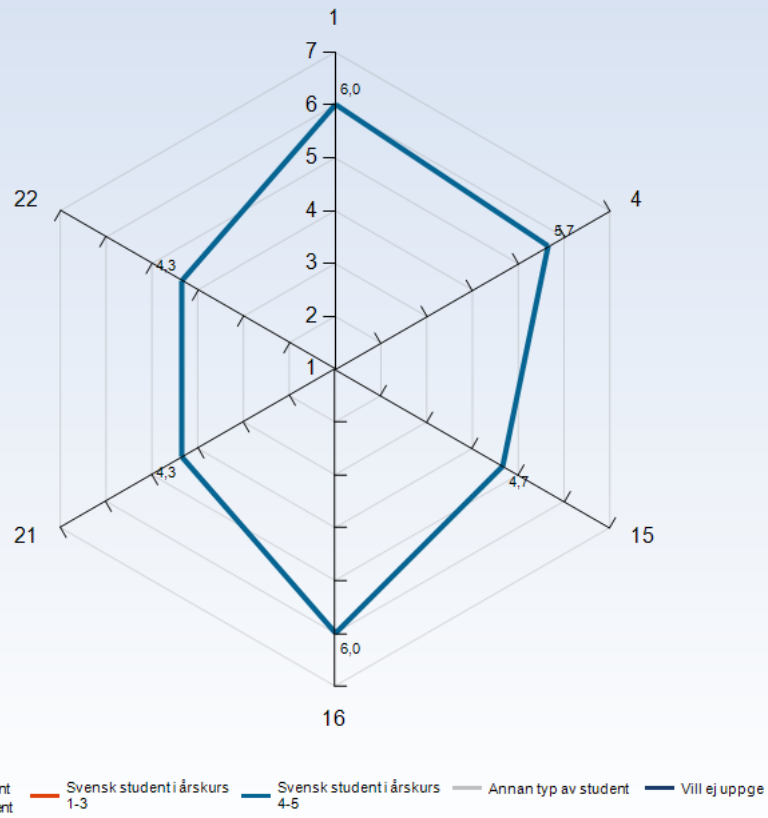


Comments

Comments (I am: Kvinna)

I think I was the only female student in class but I never faced any shortcoming because of that

Average response to LEQ statements - per type of student



Comments

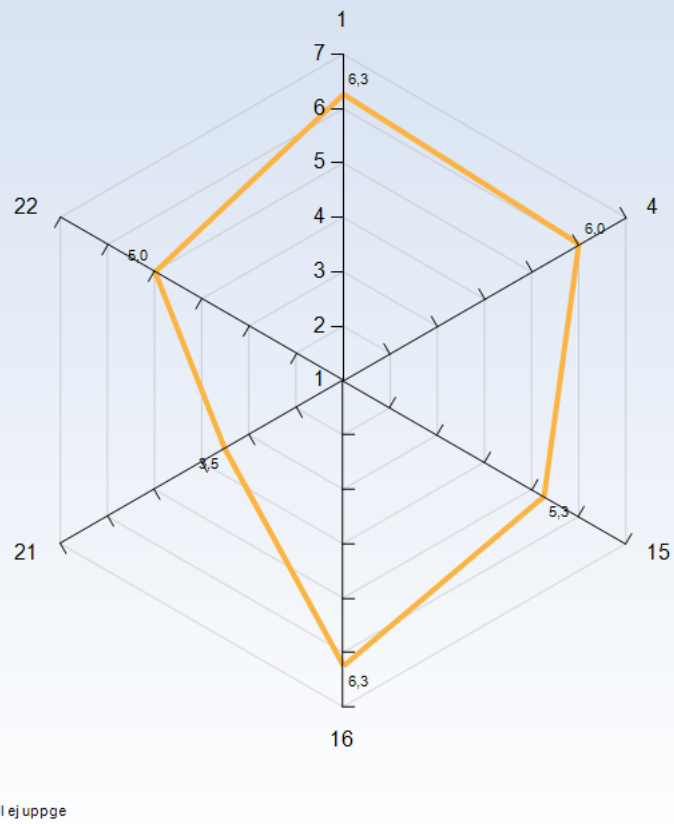
Comments (I am: Internationell utbytesstudent)

I faced on difficulty in the course with respect to that

Comments (I am: Svensk student i årskurs 4-5)

I am actually quite surprised that this course is not taught earlier in the Computer Science 5 year programme, it seems to cover such fundamental material.

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)
being finished

What was the best aspect of the course? (I worked: 9-11 timmar/vecka)
The lectures were really good, Prof Dilian had put in great efforts to explain the content. And I always learned something more than the book.

What was the best aspect of the course? (I worked: 24-26 timmar/vecka)
Jag tycker generellt kursen var väldigt bra! Kul att man fick välja programmeringsspråk till labbarna.

What was the best aspect of the course? (I worked: 30-32 timmar/vecka)
-It was really interesting material.
-It was hard material, but still manageable.
-It was very nice to train my mathematical proof skills.
-The labs were really cool.

What would you suggest to improve?

What would you suggest to improve? (I worked: 6-8 timmar/vecka)
It is very difficult to understand all the new terminology sometimes and the book we used was extremely difficult to read.

What would you suggest to improve? (I worked: 9-11 timmar/vecka)
Nothing in my mind

What would you suggest to improve? (I worked: 24-26 timmar/vecka)
Det hade varit praktiskt om det hade funnits lite fler testfall till labbarna.
Indataformatet till 2a labben var onödigt krångligt och nästan det svåraste i hela labben.

What would you suggest to improve? (I worked: 30-32 timmar/vecka)
I actually think that this is one of the best courses I have read while studying at KTH, so there is not much to improve I think.

Obviously, there are small things to improve due to the pandemic.
-The lectures could have been recorded, although I do understand, and agree, to the rationale behind not doing so. Some of the lecture material is not covered in the books, but is however examined in the homeworks. If you miss any lecture due to for example double booked lecture times, then catching up on the material can be very hard.
-The peer reviewing felt quite lacking in this format, often the comments were not very in depth at all. I think that the format used in previous course rounds sound better.
-A takehome exam would be interesting. Even though solving problems under pressure is a very good skill to have, I think that it is more suitable and rewarding to get more time to reason about the harder problems (maybe a day or so?).

What advice would you like to give to future participants?

What advice would you like to give to future participants? (I worked: 9-11 timmar/vecka)
Read the literature, it helps you to ground the content covered in class

What advice would you like to give to future participants? (I worked: 24-26 timmar/vecka)
Utöver att försöka hänga med i kursen att förstå strukturell induktion och de andra bevisteknikerna.

What advice would you like to give to future participants? (I worked: 30-32 timmar/vecka)
Make sure that you spend time to actually understand the course content during the course. Take the homeworks quite seriously since it is an excellent opportunity to train your presenting skills. Make sure that you are quite comfortable in (structural) induction proofs and set theory before taking the course.

Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 6-8 timmar/vecka)
Did adapt fairly well to corona, could have been better but a lot worse. Lectures were still held. It felt like lab sessions or similar could have been useful, asking questions in mail compared to face to face is rather different in my opinion

Is there anything else you would like to add? (I worked: 30-32 timmar/vecka)
Keep up the good work on the course!



SPECIFIC QUESTIONS

Enligt dig, fungerade kursen bra trots koronakrisen?

Enligt dig, fungerade kursen bra trots koronakrisen?

As mentioned earlier yes

Jag tycker allt fungerade bra, men önskar att normen bland studenterna hade varit att ha kamerorna på under föreläsningar och workshop.

I think that the course did run well, despite the pandemic. It lacked some discussions in the homework as said earlier, but other than that it was fine.

The course run well but the aspect of communicating with other students in the class was a major missing

RESPONSE DATA

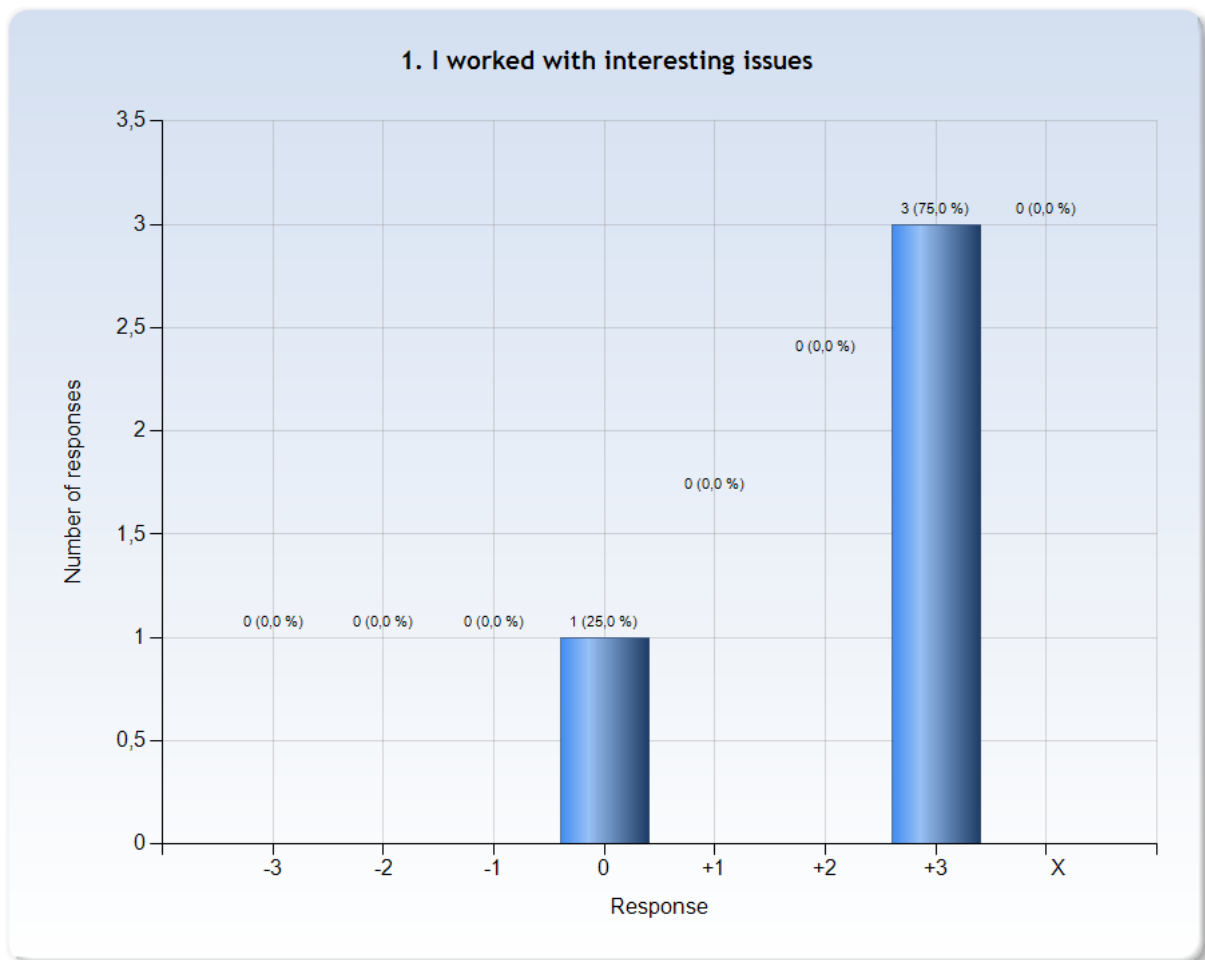
The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:

-3 = No, I strongly disagree with the statement

0 = I am neutral to the statement

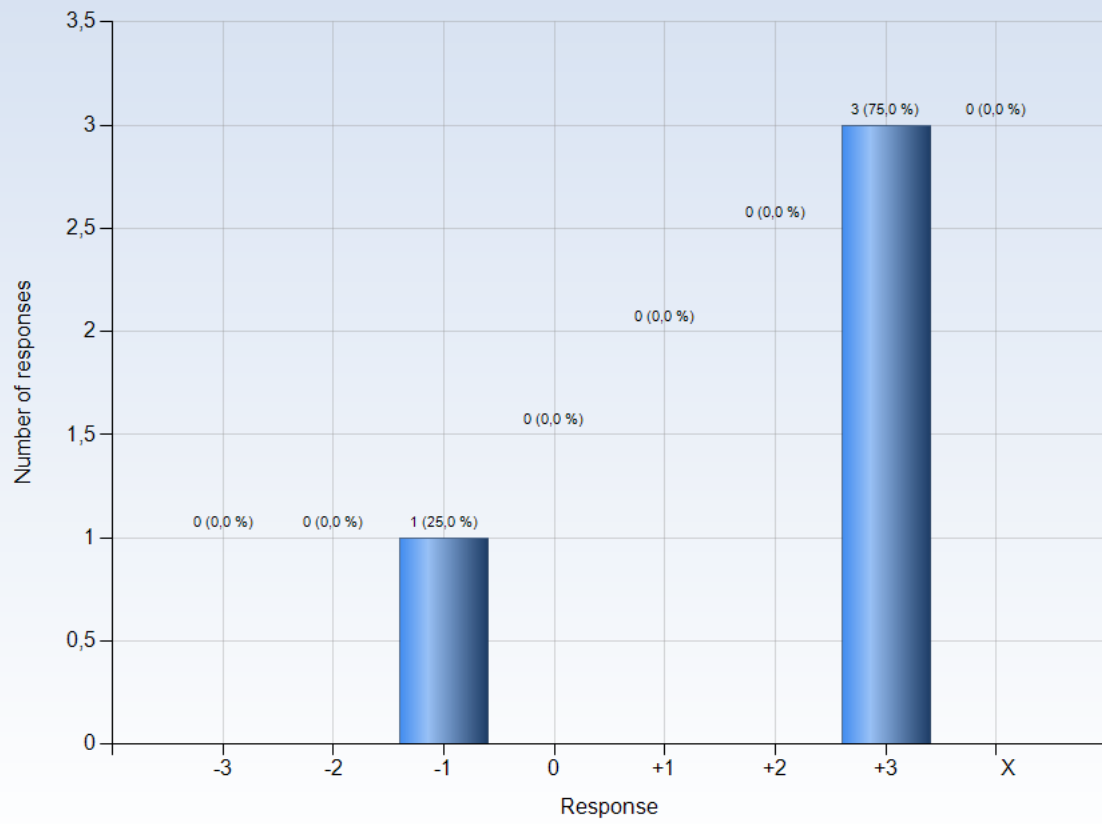
+3 = Yes, I strongly agree with the statement

X = I decline to take a position on the statement



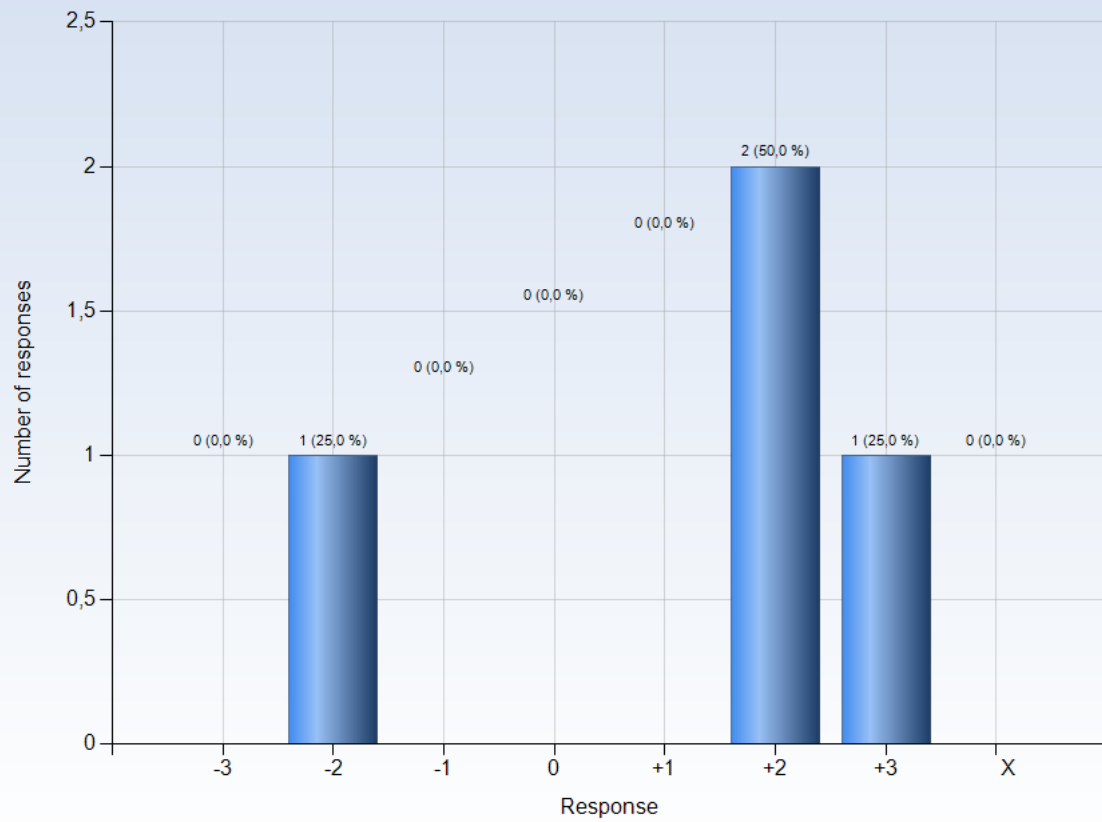
Comments

4. The course was challenging in a stimulating way



Comments

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

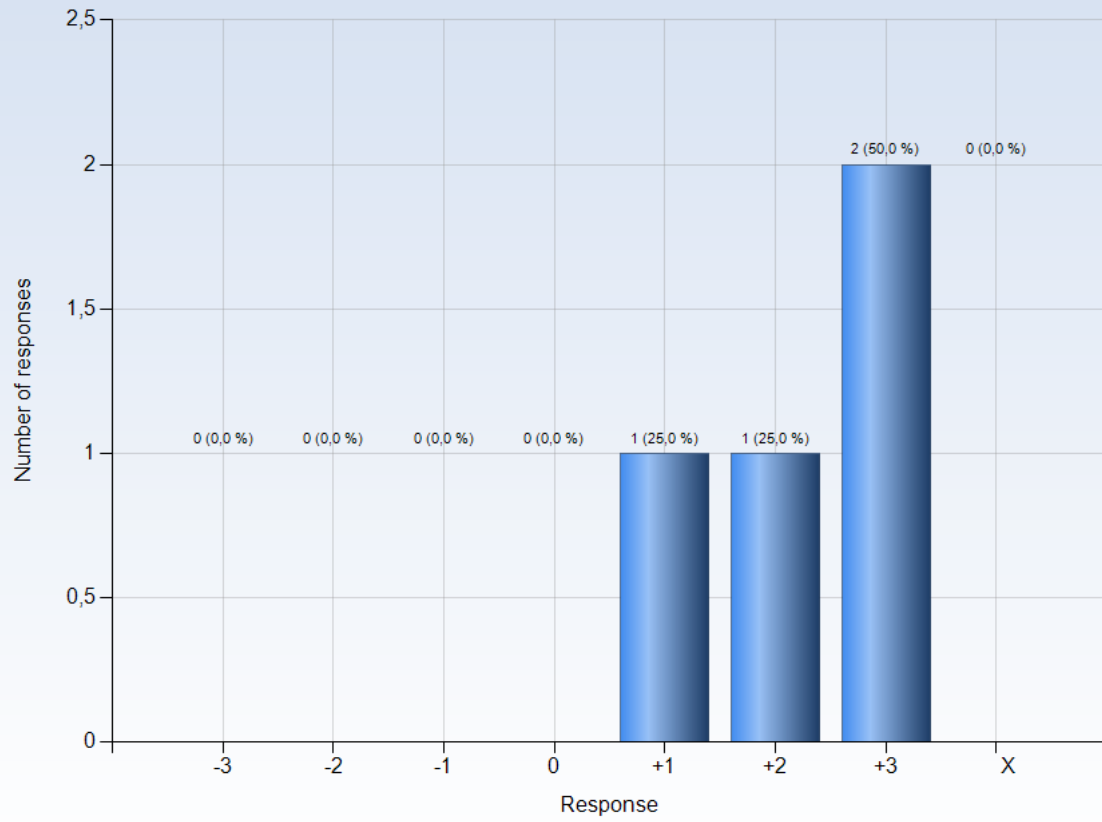


Comments

Comments (My response was: +2)

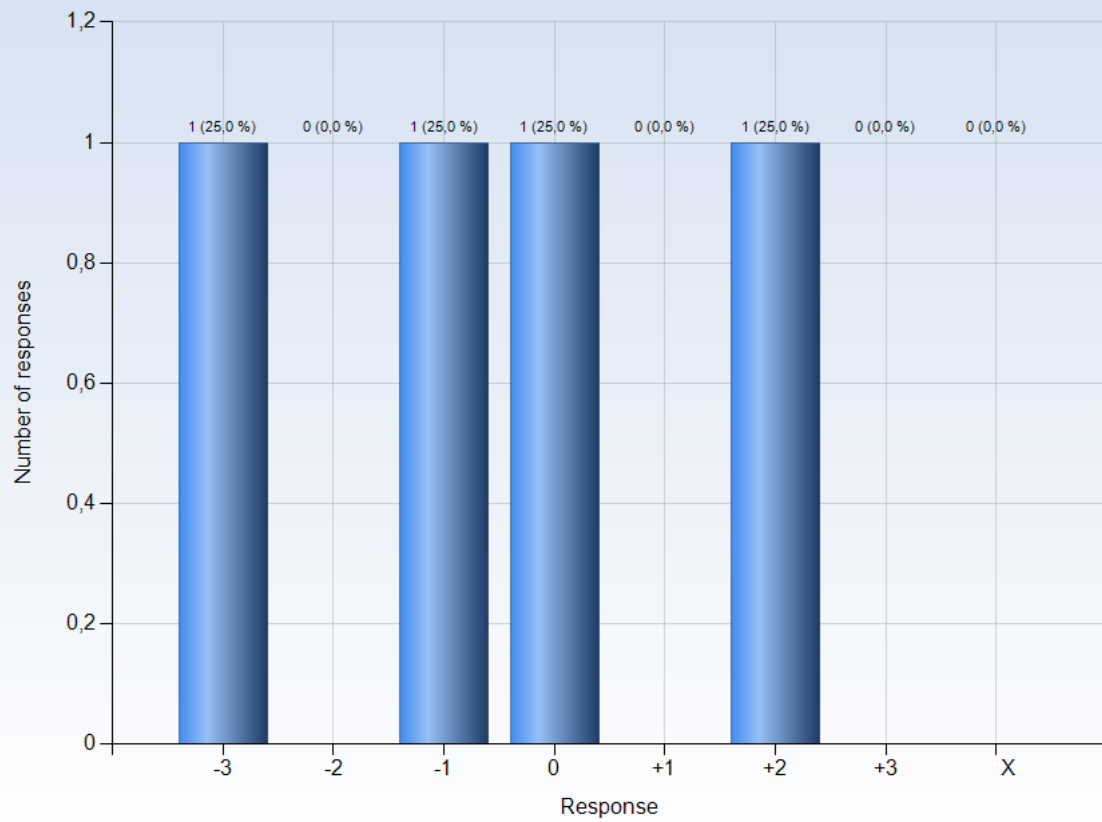
I think that the homeworks were a great way to train my skills while the only real penalty for (big) mistakes were loss of bonus points on the exam.

16. The assessment on the course was fair and honest



Comments

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



Comments

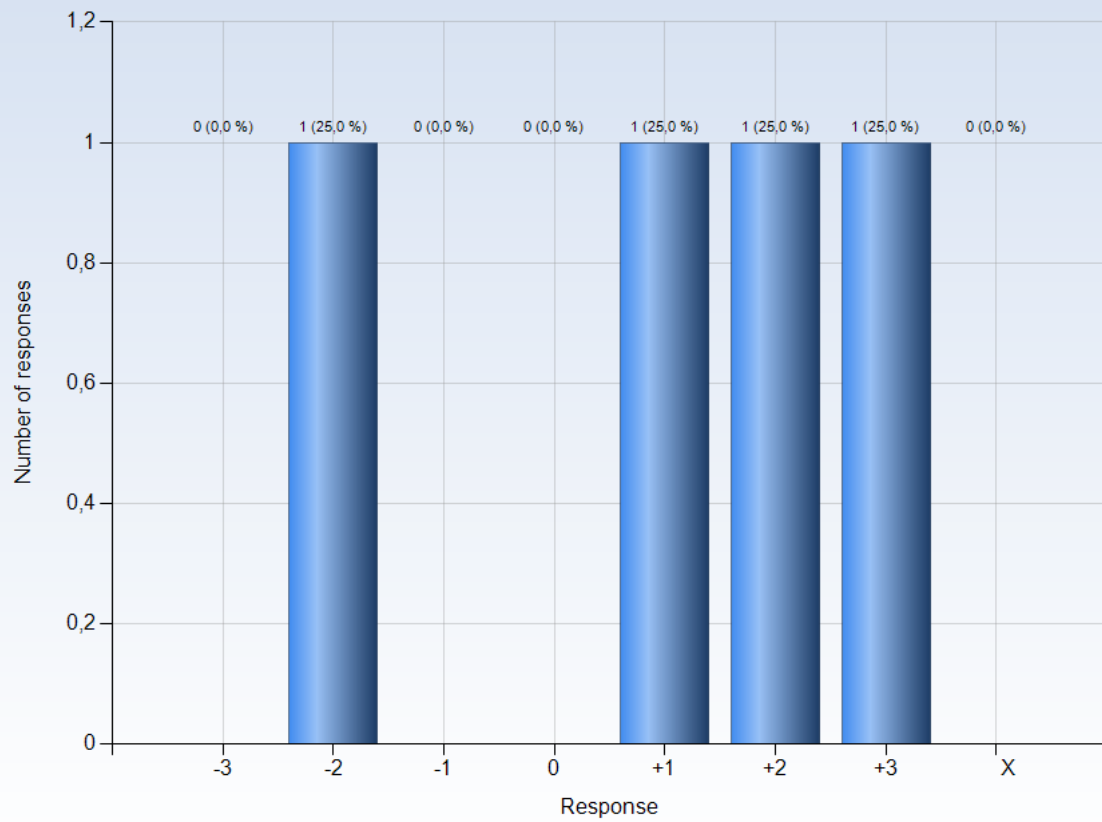
Comments (My response was: -3)

It is because the classes were shifted online

Comments (My response was: +2)

Yes, in some way by the peergrade. As suggested during the course, a more in-depth discussion could probably be obtained in an on-campus setting.

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



Comments

Comments (My response was: +1)

Probably, yes although I never used it.