

Report - AF2602 - 2022-04-05

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):

Johan Spross, spross@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.

Two student representatives were elected at the first lecture; this year both were male (last year, both were female). Students comments were collected through a questionnaire at the end of the course. The result was discussed with the student representatives at a course evaluation meeting. Gender aspects and answers relevant for disabilities was covered in the KTH LEQ result sorting and commented on in the meeting. An extra question had been added to consider gender aspects specifically.

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.)

A meeting with the two student representatives was arranged after the questionnaire results were available. Examiner and course responsible represented the teachers. The outcome of the questionnaire was discussed and a list of action points for upcoming years was prepared.

COURSE DESIGN

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

The course consists of morning lectures and afternoon workshops revolving around one key concept in rock mechanics per day. The workshops constitute the main learning activity for the students, as this is when they practice using the theoretical material from the lectures. 3 group reports and 1 quiz are handed in and graded. The course ends with a written exam. The lectures were this year given digitally, while most workshops were in a classroom.

THE STUDENTS' WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?

The workload is believed suitable (18-23 hours per week reported by most students).

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?

Student results are believed to be comparable to previous years.

STUDENTS' ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

See appended questionnaire.

SUMMARY OF STUDENTS' OPINIONS

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

Main conclusions were that the course works well, but that we could try a new structure with pre-recorded videos instead of on-campus lectures. See below.

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 teachers' impression is that the students did very well this year, and that the course offering was run without major problems.

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 learning environment is very good to excellent overall, with average LEQ scores above 6 for all questions. Current focus is to keep and maintain the high level. Too few responses to draw conclusions for subsets of the student group.

PRIORITIZED COURSE DEVELOPMENT

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

1. Check that all excerpts have references.
2. Test to have some lectures as prerecorded videos, that shall be viewed before the workshop. Each workshop is then started with a possibility to ask questions to the lecturer. Most suitable for the theoretical lectures.

The following development points from 2021 can also be considered in the future:

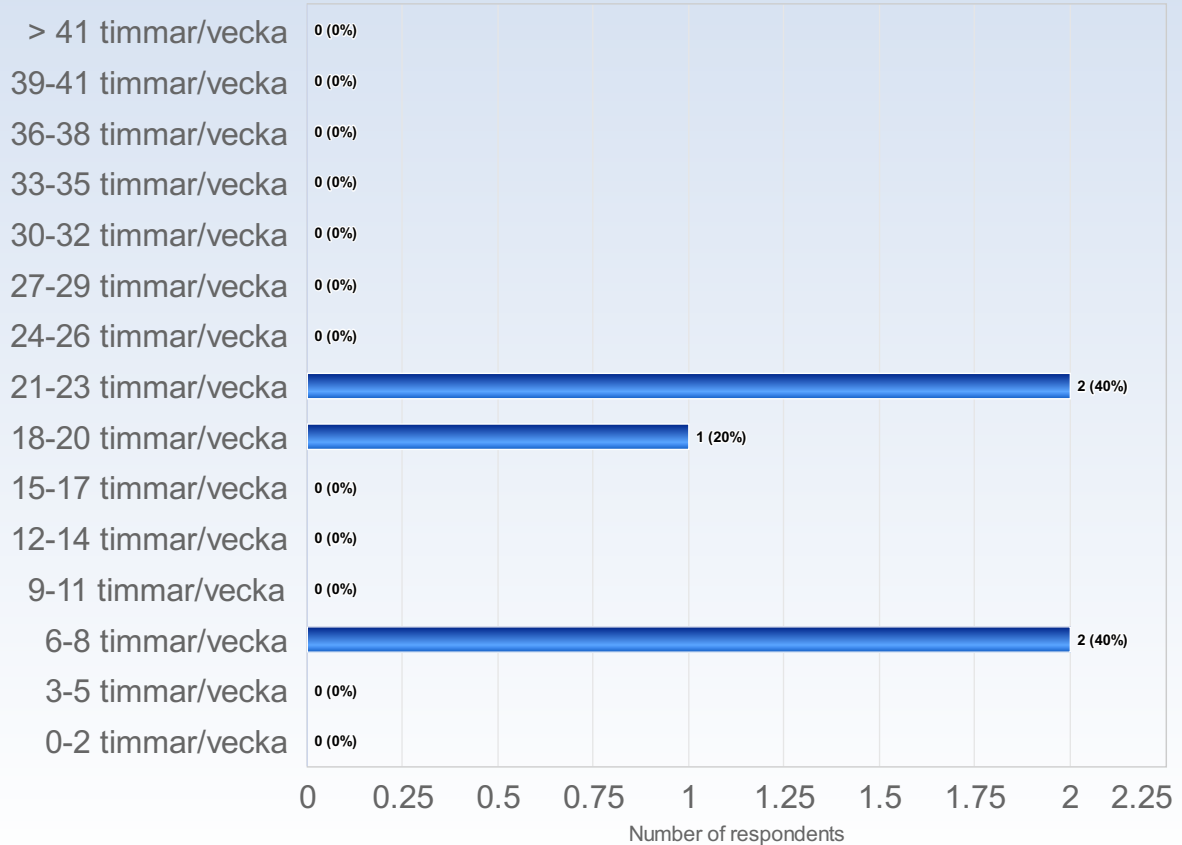
- Be clearer about requirements for technical reports. Consider sharing an "excellent" report in advance to point out what to strive for.
 - Prepare reading instructions for literature. Many articles to cover and can we assist in the prioritization?
 - Prepare an exercise "book" with extra assignments to practice as homework, based on the best old exam questions.
-

AF2602 - 2022-03-11

Antal responder: 11
Antal svar: 6
Svarsfrekvens: 54.55%

ESTIMATED WORKLOAD

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



Comments

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

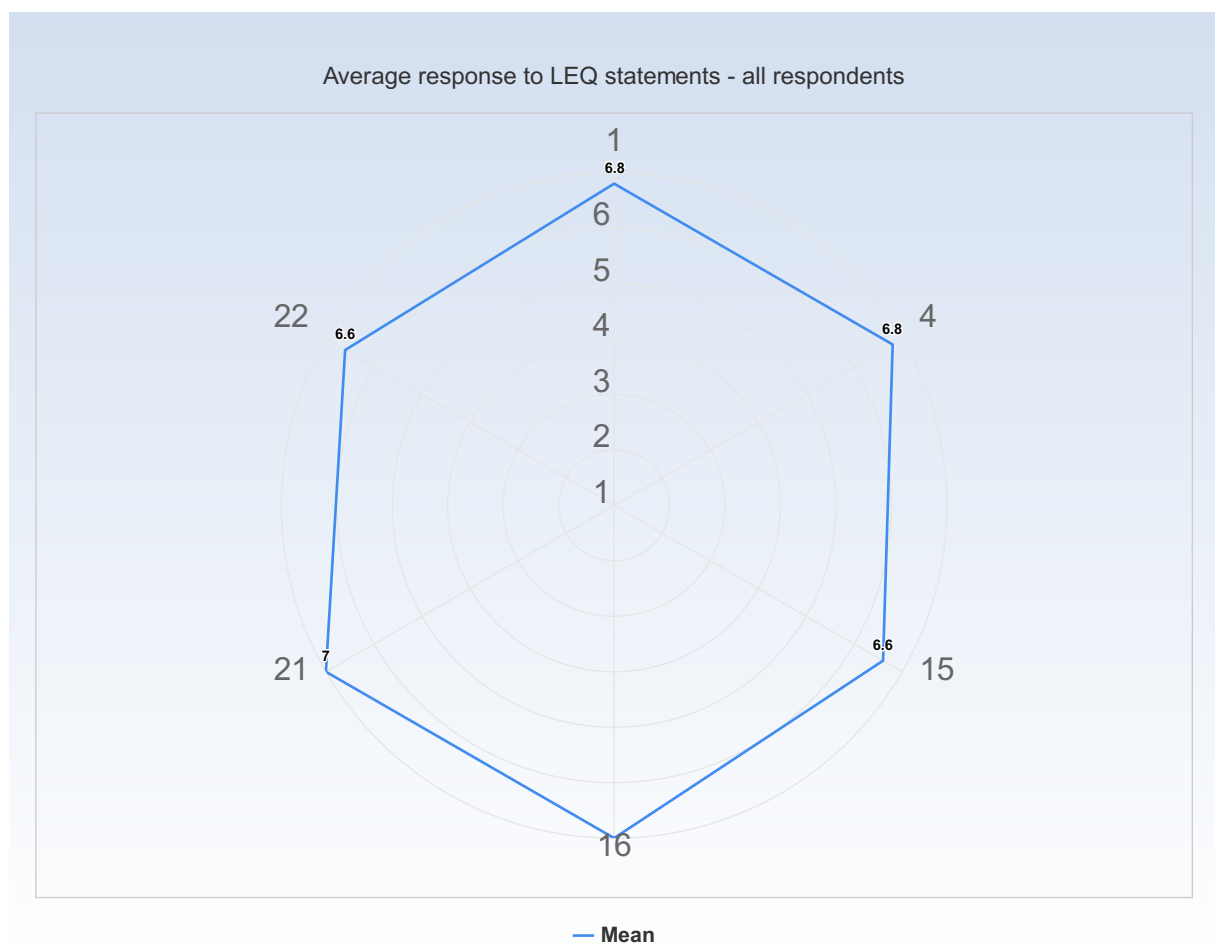
It was 12-18 hours of scheduled lessons every week. Then about one extra day (6-8h) was spent on the assignments every week
Most of the time i put in was because i really wanted to understand the subject. The difficulty was at a good level

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.



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.

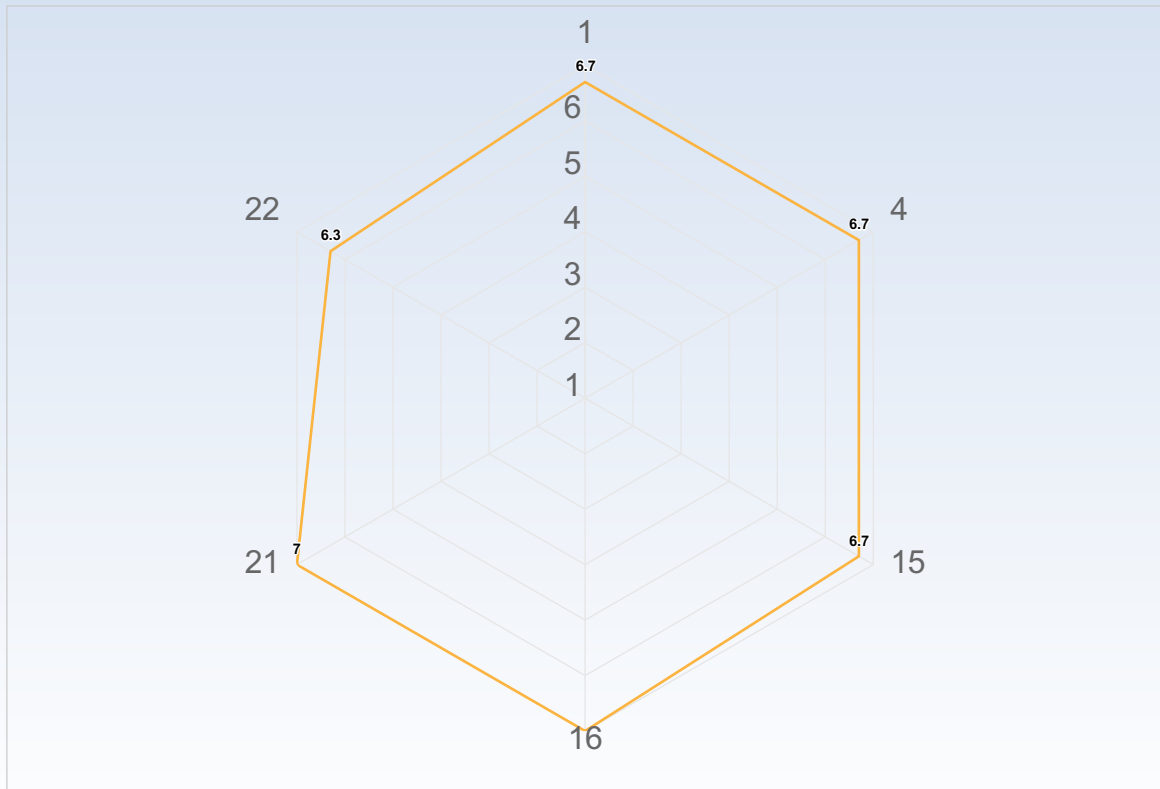
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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.

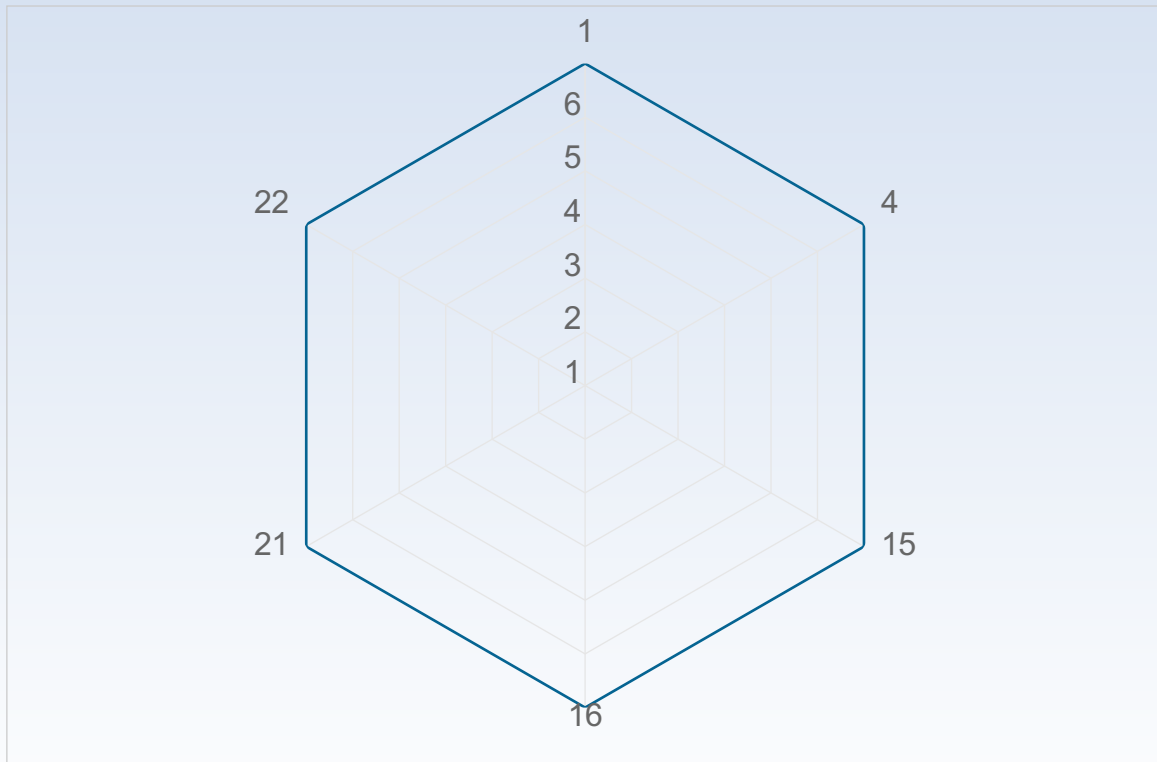
Average response to LEQ statements - per gender



— Kvinna — Man — Annat — Vill ej uppge

Comments

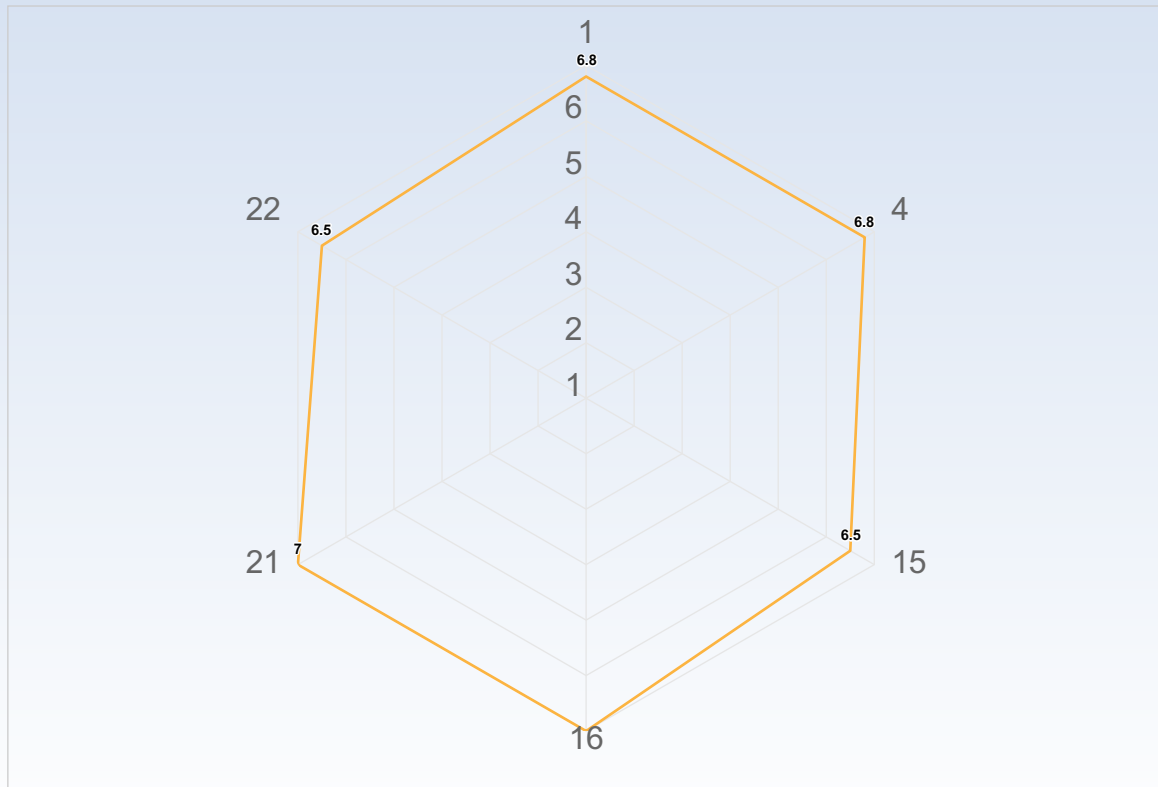
Average response to LEQ statements - per type of student



— Internationell masterstudent — Internationell utbytesstudent — Svensk student i årskurs 1-3
— Svensk student i årskurs 4-5 — Annan typ av student — Vill ej uppge

Comments

Average response to LEQ statements - per disability



— Ja — Nej — Vill ej uppge

Comments

GENERAL QUESTIONS

What was the best aspect of the course?

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

The best part of the course was the assignments which you learned a lot by doing. I think they were on a very good level which made them challenging but still reasonable.

The level of difficulty of the report-problems were really good. Not too complicated calculations and therefore you could focus more on a good /deep discussion and understanding the concepts. The structure of the whole course was also great.

What would you suggest to improve?

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

I would suggest to start the exercise sessions earlier for the lectures which only took 1 hour, so you don't have to wait for 2-3 hours for the exercise session.

Furthermore, the guest lectures were interesting, but as a non-swedish person they were hard to follow due to some swedish words in the slides and the swedish based projects they discussed.

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

A course book instead of all materials in canvas.

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

En studying for the exam there were only two or three old exams with solutions. It would be so much easier to study if we got more exams with solutions.

Nothing comes to mind

What advice would you like to give to future participants?

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

Begin with the assignments in time.

Just be on the exercises and ask questions, then the course should be fine.

Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 21-23 timmar/vecka)

I know it was because of Covid, but I would definitely prefer to have the lectures in a classroom and not digitally.

no sir

SPECIFIC QUESTIONS

RESPONSE DATA

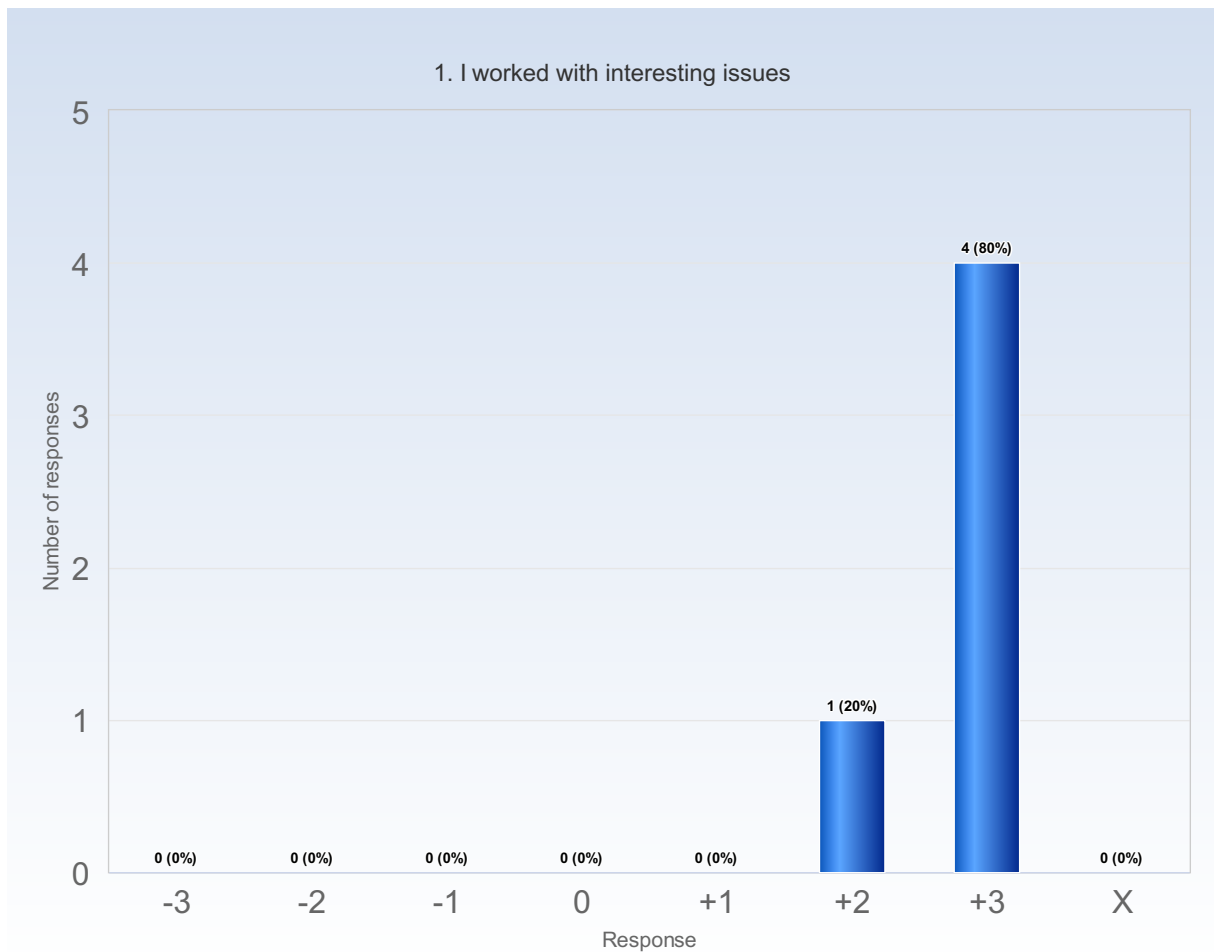
The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:

-3 = No, I strongly disagree with the statement

0 = I am neutral to the statement

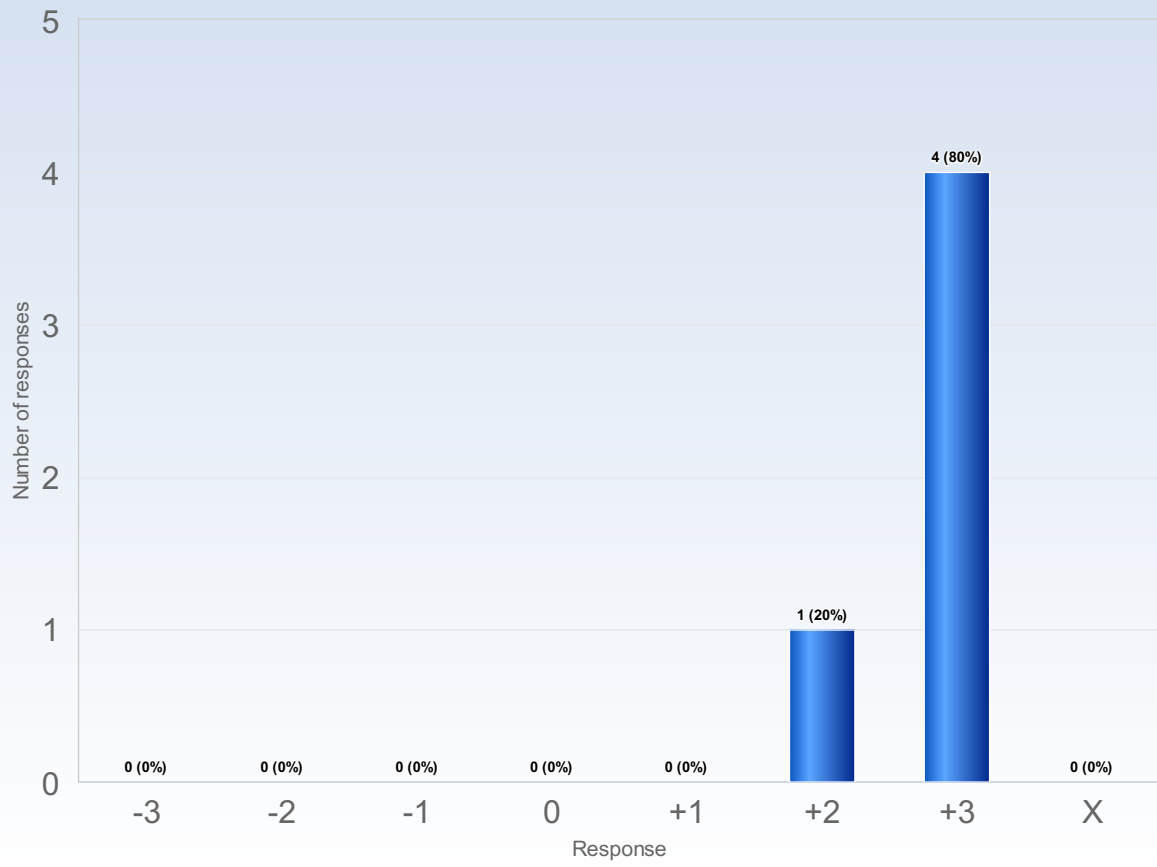
+3 = Yes, I strongly agree with the statement

X = I decline to take a position on the statement



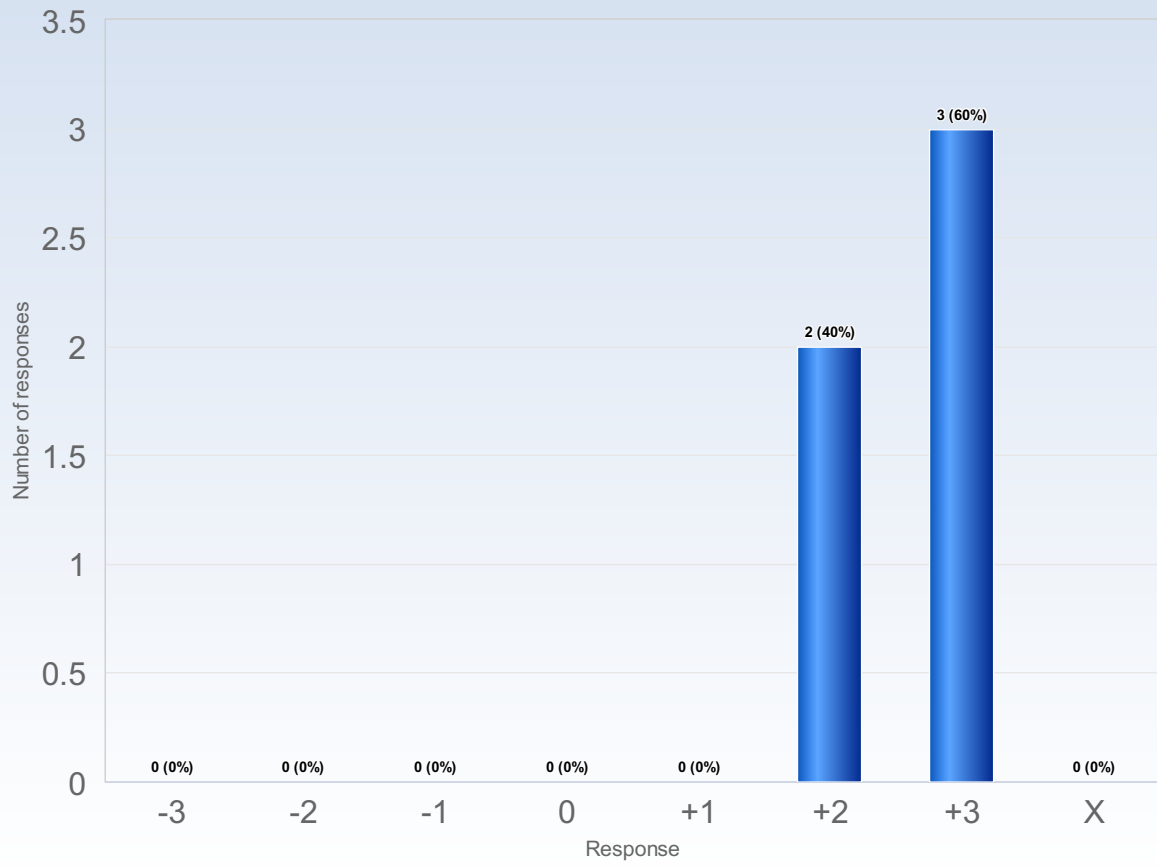
Comments

4. The course was challenging in a stimulating way



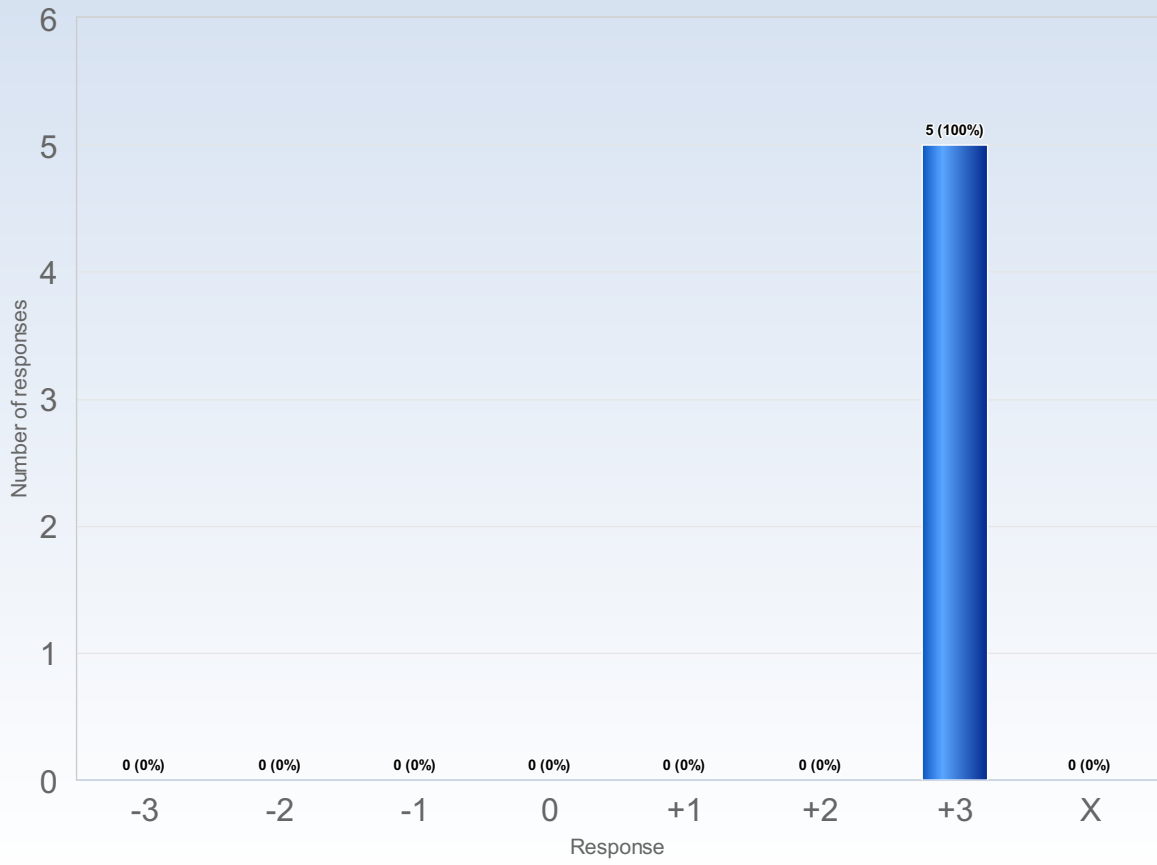
Comments

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



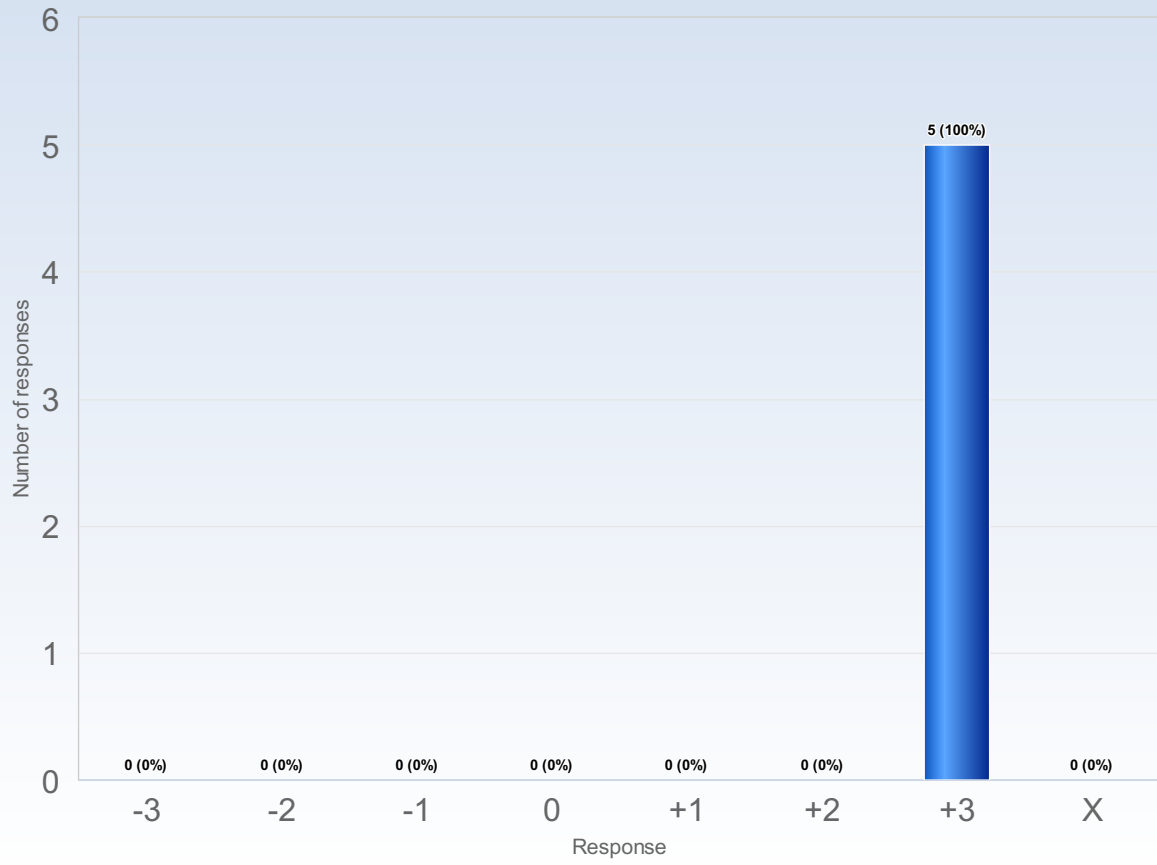
Comments

16. The assessment on the course was fair and honest

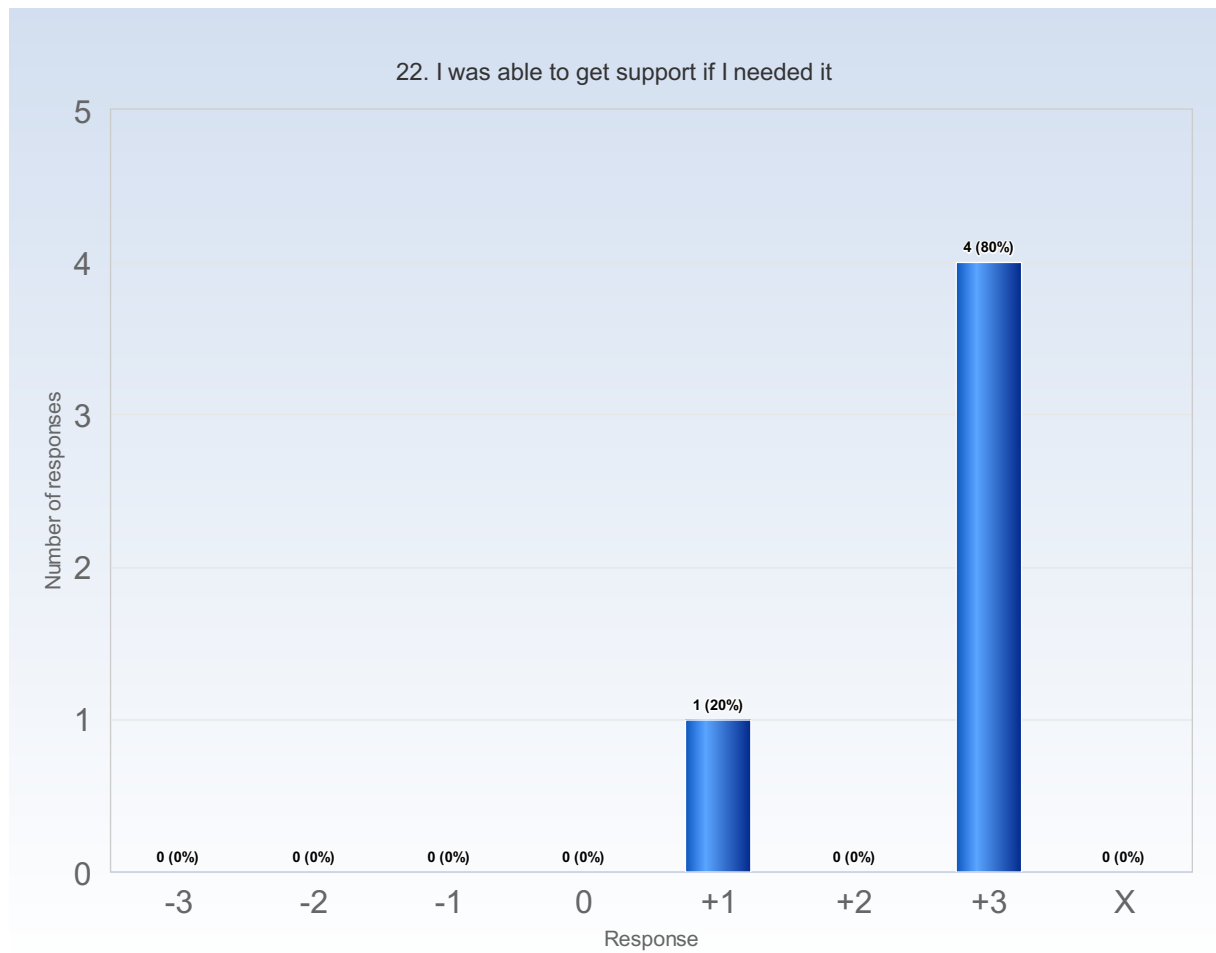


Comments

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



Comments



Comments

SPECIFIKA FRÅGOR

Hur väl beaktade kursen jämställdhetsaspekter? Beakta både kursens innehåll och lärmiljö (t.ex. grupparbete, personal, bemötande). Ge gärna förslag på förbättringar.

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- Well, I didn't notice any points of improvement.
- I think the course considered gender equality well.
- I think it was good. I also enjoyed that it wasn't that many students
- I didn't experience any inequalities, so I guess good.