

Report - AF2023 - 2023-01-30

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):

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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 by the students at the first lecture; this year both were female. Students comments were collected through a questionnaire at the end of the course (18% (12/67) responded which can be considered quite low). 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 briefly in the meeting (observed differences in answers between gender in the LEQ questionnaire may have been due to statistical uncertainty, no clear reason for observed differences could be found).

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 first meeting with the student representatives were held Nov 17 2022, and a final meeting was held 30 Jan 2023. 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 two main parts, a theory and methodology of science part and a risk and safety part, divided into lectures, exercises and seminars. This year a new module on gender and working environment on the construction site was implemented in the course. It consisted of a workshop where the students reviewed scientific papers on the subject and discussed different aspects.

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?

In average, the students spent time as expected. However, a large variation in the answers were observed. The reason for this variation is expected to be the time spent on courses read in parallel with this course. Another possible reason is that the course also contains some new learning activities that the students were not familiar with, resulting in more time required on these activities.

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?

The students results were as expected.

STUDENTS' ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

In general, the answers were quite positive. However, some negative answers were also given. Mainly related to working load, flipped classroom performed with students from other programs, and the theory and methodology of science exam who some students considered to be unfair (due to random selection of questions).

SUMMARY OF STUDENTS' OPINIONS

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

Students think the course in general is acceptable, but that there are some opportunities for improvement to make it even better, listed 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.

Most students think the course is good, but there are always a few students who are quite negative to the course. The main reason for this is believed to be that some students are not familiar with the non-engineering subjects. The teachers and students were happy with the new module on gender and working environment, which was very positive.

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?

Differences between the male and female answers on the learning environment was observed. The possible reasons for this are unclear. However, there are uncertainties between the responses of male and female students, mainly due to the few respondents. In the meeting with the students representatives no reason for the observed differences could be found. Generally, the learning environment seems to be acceptable, considering the students' responses.

PRIORITIZED COURSE DEVELOPMENT

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

Some potential improvements that we discussed at the course evaluation meeting with the student representatives were:

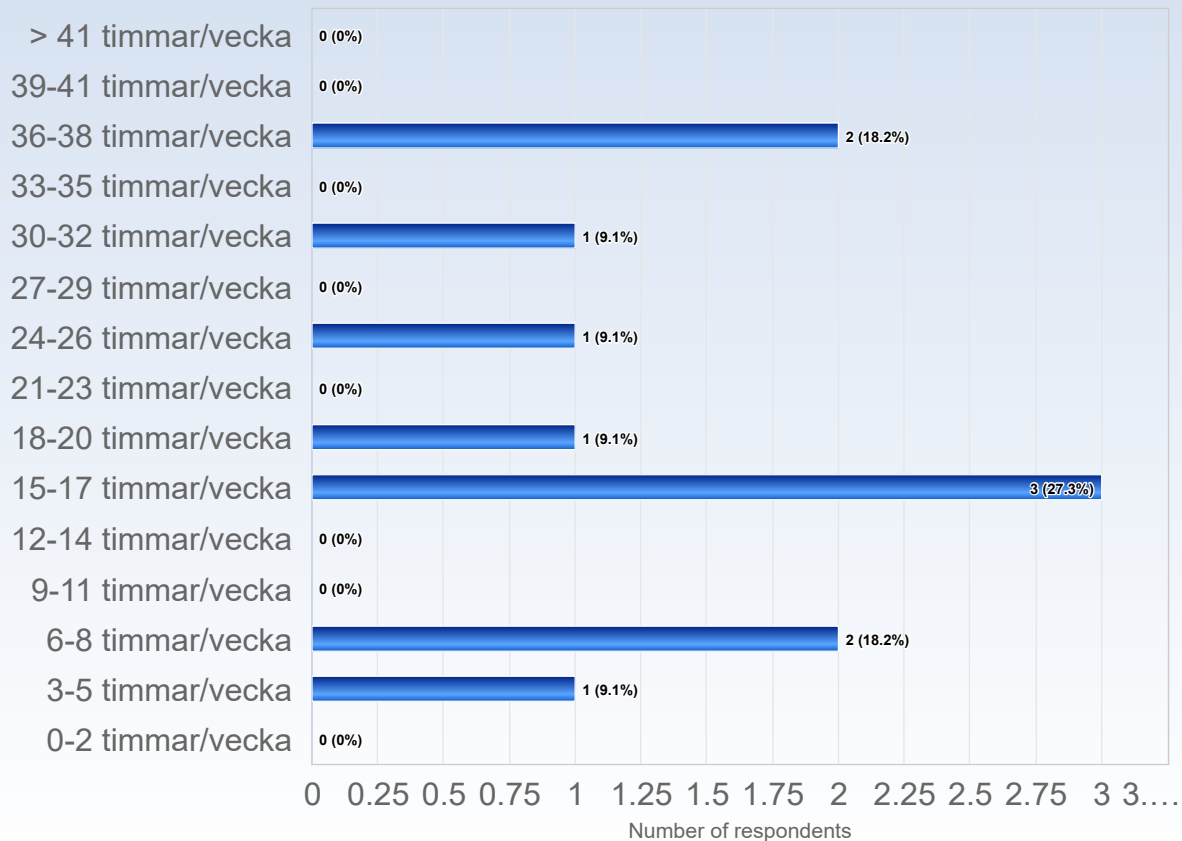
- Add time for quiz in the schedule, so the students can plan their time better.
 - Separate flipped classroom for the course AF2023 (not with the other programs).
 - More clear instructions on how the theory and methodology of science part is structured and on the essay (more clear instruction on what is needed for a passed essay).
 - Final seminar on essay should be evaluated in a more similar way, independent on the teacher. Guidelines for the teachers to follow should be developed.
 - There exists some repetition between Geotechnical and Structural part in risk and safety. Try to minimize repetition between the lectures.
 - Examples on how to search for literature for the master thesis subject should be given.
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AF2023 - 2023-01-12

Antal respondenter: 67
Antal svar: 12
Svarsfrekvens: 17,91 %

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)

Normal tempo.

Comments (I worked: 15-17 timmar/vecka)

Så tidskrävande!!! Varför ska vi dela kursen i två och sen så ska varje del ha sina egna seminarier och sina egna inlämningar och sina egna beräkninguppgifter. Och så är seminarierna och deras uppgifter obligatoriska och quiz är poänggivande vilket betyder att vi tekniskt sätt behöver göra dem med.

Folk har TaMos utan tenta medan vi har TaMos med dubbla tentamen. Fett skämmigt upplägg.

Comments (I worked: 36-38 timmar/vecka)

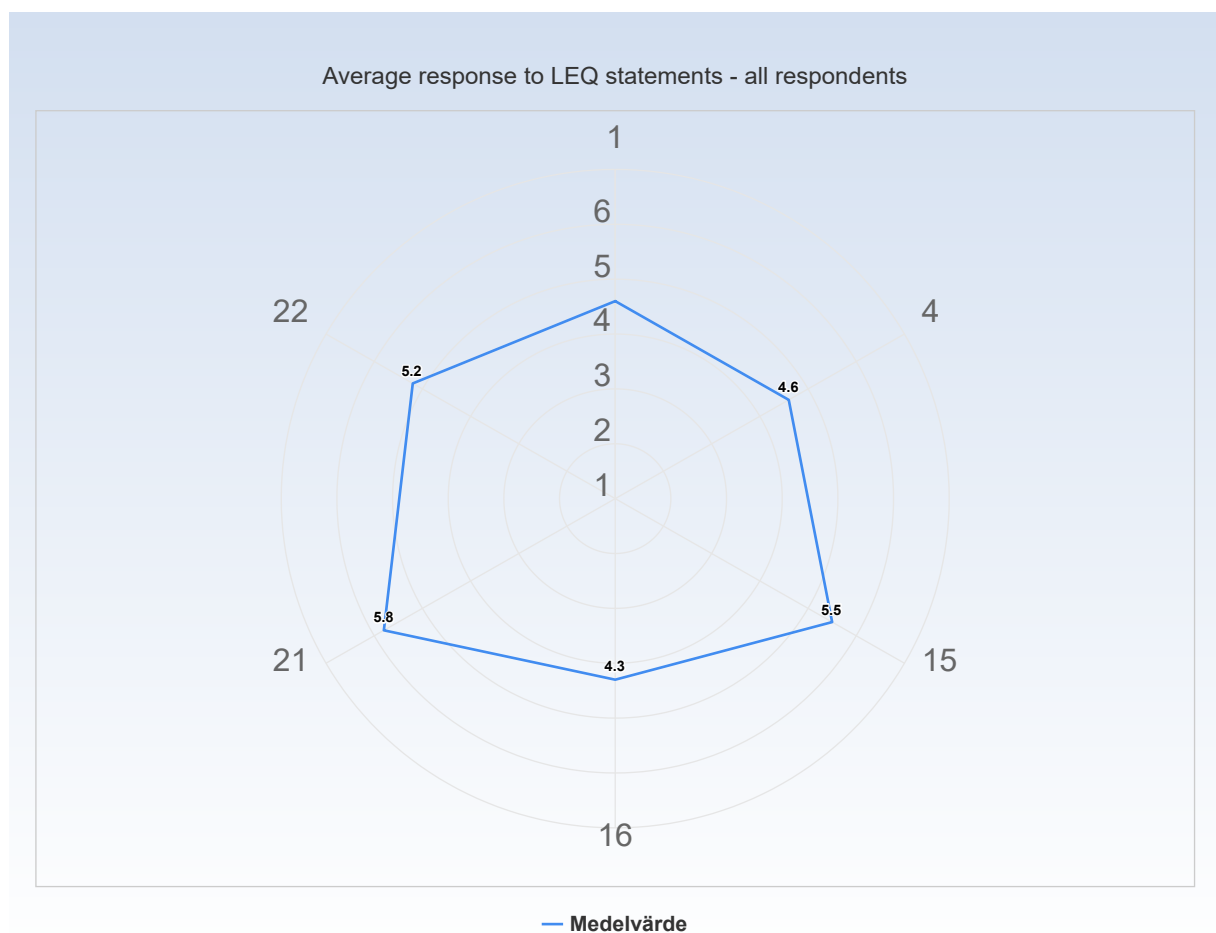
A lot of time consuming , since we are taking risk plus another class besides thamos is like having 3 classes. This need to change.
This course was a bit too much in the time needed to be put in

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.

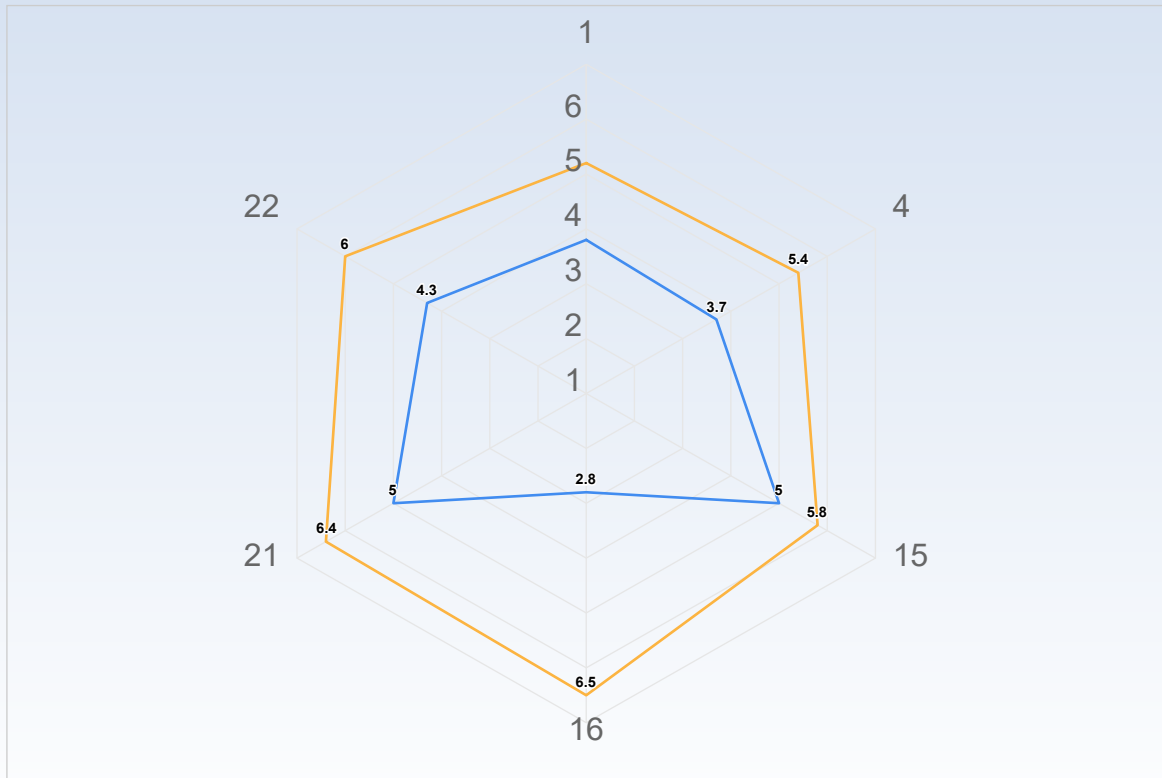
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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

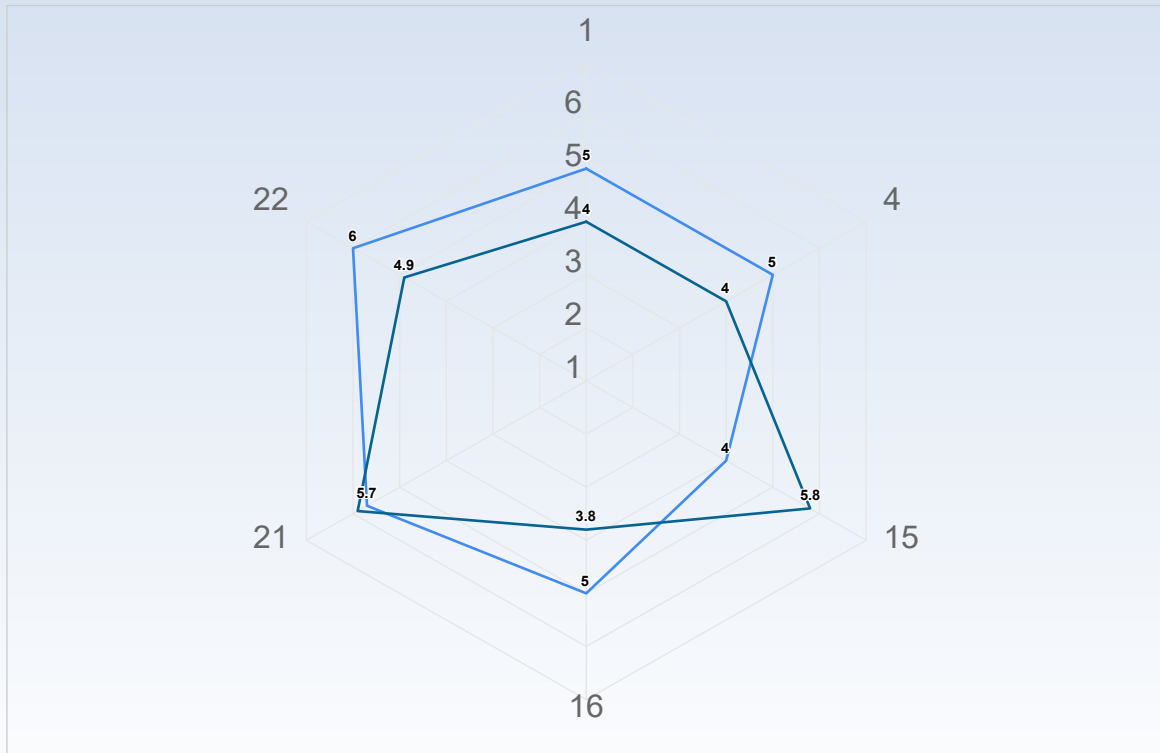
Comments

Comments (I am: Man)

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I do have but better to not express it.

Average response to LEQ statements - per type of student



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

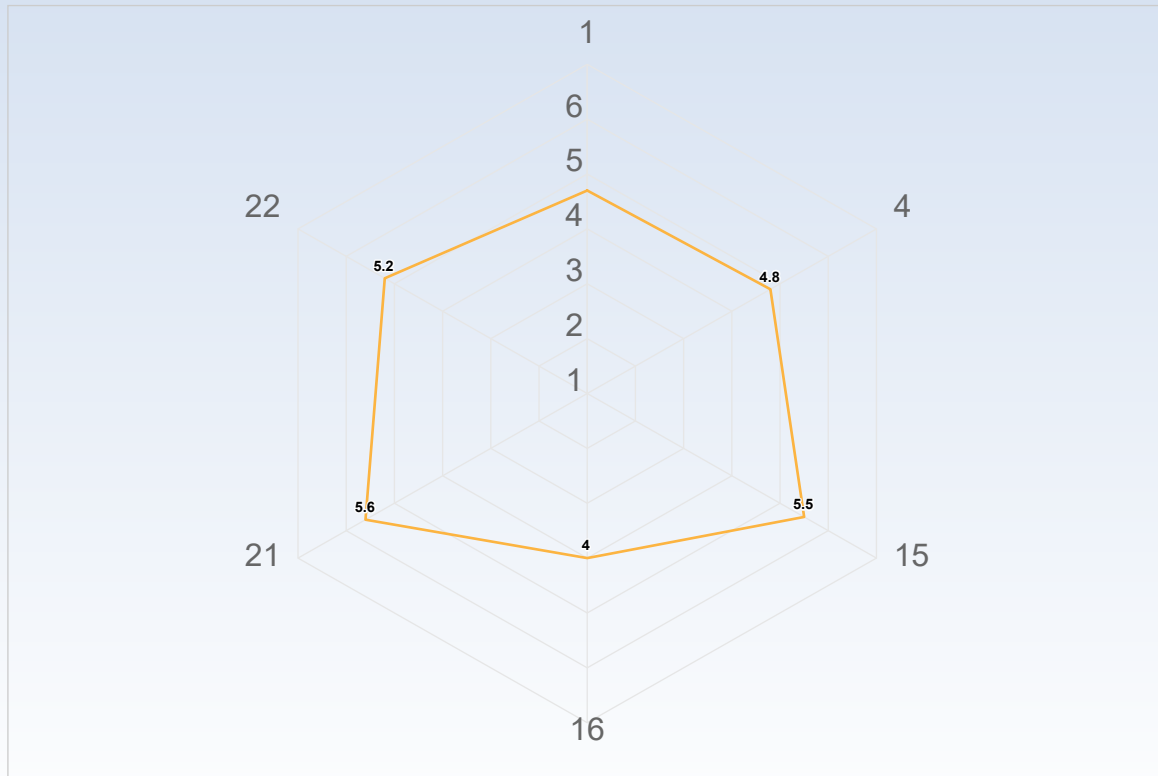
Comments

Comments (I am: Internationell masterstudent)

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Wonderful I wished we had same course in my country however some contents can be counted as a revolutionary. I still assume we haven't change that much since Galileo, just a bit modernised.

Average response to LEQ statements - per disability



— Ja — Nej — Vill ej uppge

GENERAL QUESTIONS

What was the best aspect of the course?

What was the best aspect of the course? (I worked: 3-5 timmar/vecka)

When I read each header of euro code I can understand the effort and hard work to create that model or theory.
Different point of view

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

Johan Silwerbrands lectures, the gender seminar by Johan Spross and the videos by Yanoff Grune.
Also Adam answered questions really well.
Learning to calculate probability of events.

What was the best aspect of the course? (I worked: 15-17 timmar/vecka)

The best aspect was that you learned more about methodology and were able to apply it to your thesis that you are suppose to write now.
Att den är över
The bonus points and the seminars. The gender seminar was interesting and needed!

What was the best aspect of the course? (I worked: 24-26 timmar/vecka)

I liked the short videos and the corresponding questions. This course is different from any other course and to be able to reflect after 10 minutes was essential for me to be able to understand. It also encourages studying throughout the semester with the bonus points which is a good way to help the students to study.

What was the best aspect of the course? (I worked: 36-38 timmar/vecka)

Nothing. It was extremely difficult and ridiculous as a course of engineers.
Not sure why they make it like this, it is like they want all of us to fail the course.
The seminar were ok but at the end not sure if they helped or not.
Risk and safety was interesting and should be its own course. Where the seminar question are study more and we have more calculations if risk and statistics.

What would you suggest to improve?

What would you suggest to improve? (I worked: 3-5 timmar/vecka)

All were good just more examples.

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

We should be able to keep our bonus points if we have to retake the quiz in the exam!!!
Spent many hours to collect them.

Everything was great.

What would you suggest to improve? (I worked: 15-17 timmar/vecka)

I would maybe change the period for doing the course to earlier, because it could have been handy to have earlier in the education.
I would also make the methodology part more specific towards the direction of the studies. This is way too broad and not specific enough. I would also simplify the formulations of the methodology part, cause it was way too confusing and difficult to understand.

Ta bort tentorna!!!!!!!

Johan S. lectures. He is a good teacher but his powerpoints makes it impossible for us to review for the tests and exercises.

What would you suggest to improve? (I worked: 24-26 timmar/vecka)

To have more workshops where it is more easy to discuss. I kind of liked the flipped classroom because you got to listen to more points of views, but if it was something difficult to understand it was difficult to get the help since the time is short and a lot of people attending.

What would you suggest to improve? (I worked: 36-38 timmar/vecka)

Don't see the point of having risk and safety ?

The thamos part needs a lot of improvement. Video lectures were time consuming and the way the professor explains things was more confusing than helpful since it was from a philosophical perspective, don't see the point of doing it like that.

We have seen methodology since we were kids. In our bachelors thesis etc. why the point of making it that complex ? An essay would given the same results as other master students have the opportunity of do so (such as real state masters)

Make it more adjustments to each education so the examples are easier to understand for tamos.

Risk and safety part of the course feel just thrown in. Maybe that part of the course should have come earlier in the education and been a full course. It is a really interesting subject and could be taking a larger place in our education. That this part is kind of thrown in here makes this course having a too high workload where other courses adopt to this course.

What advice would you like to give to future participants?

What advice would you like to give to future participants? (I worked: 3-5 timmar/vecka)

Read the literature before watching videos .

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

Important course, especially in recent years.

What advice would you like to give to future participants? (I worked: 15-17 timmar/vecka)

Keep up in the course and do the quizzes to get bonus points, cause the quiz is veeery difficult

Lycka rill

Watch the video lectures according to the schedule.

What advice would you like to give to future participants? (I worked: 24-26 timmar/vecka)

Keep up. It is a handful sometimes but worth it in the end.

What advice would you like to give to future participants? (I worked: 36-38 timmar/vecka)

This is the worse course and the most stressful course I have ever taken and it is only METHODOLOGY... ? It is crazy ... this is my second master and I haven't experienced anything like this at all. Not fair at all and I don't see the "outcome" of learning all of this as the way is giving.

Simpler concepts and more applicable to our thesis would have given better results than this ...

Do the quizzes.

Risk and safety, study the exams

Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 3-5 timmar/vecka)

All good interesting subject to dig in but destruct your religious believes :))))))

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

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Is there anything else you would like to add? (I worked: 15-17 timmar/vecka)

Usch

Is there anything else you would like to add? (I worked: 36-38 timmar/vecka)

Major improvement on both thamos and methodology if not a lot of people will continue failing the class

Going though mathematical problems on power points and just stressing through them makes it hard to take in. Much better if you either have a thorough exercise where you go through them or do those part on the board during lectures - risk and safety

SPECIFIC QUESTIONS

RESPONSE DATA

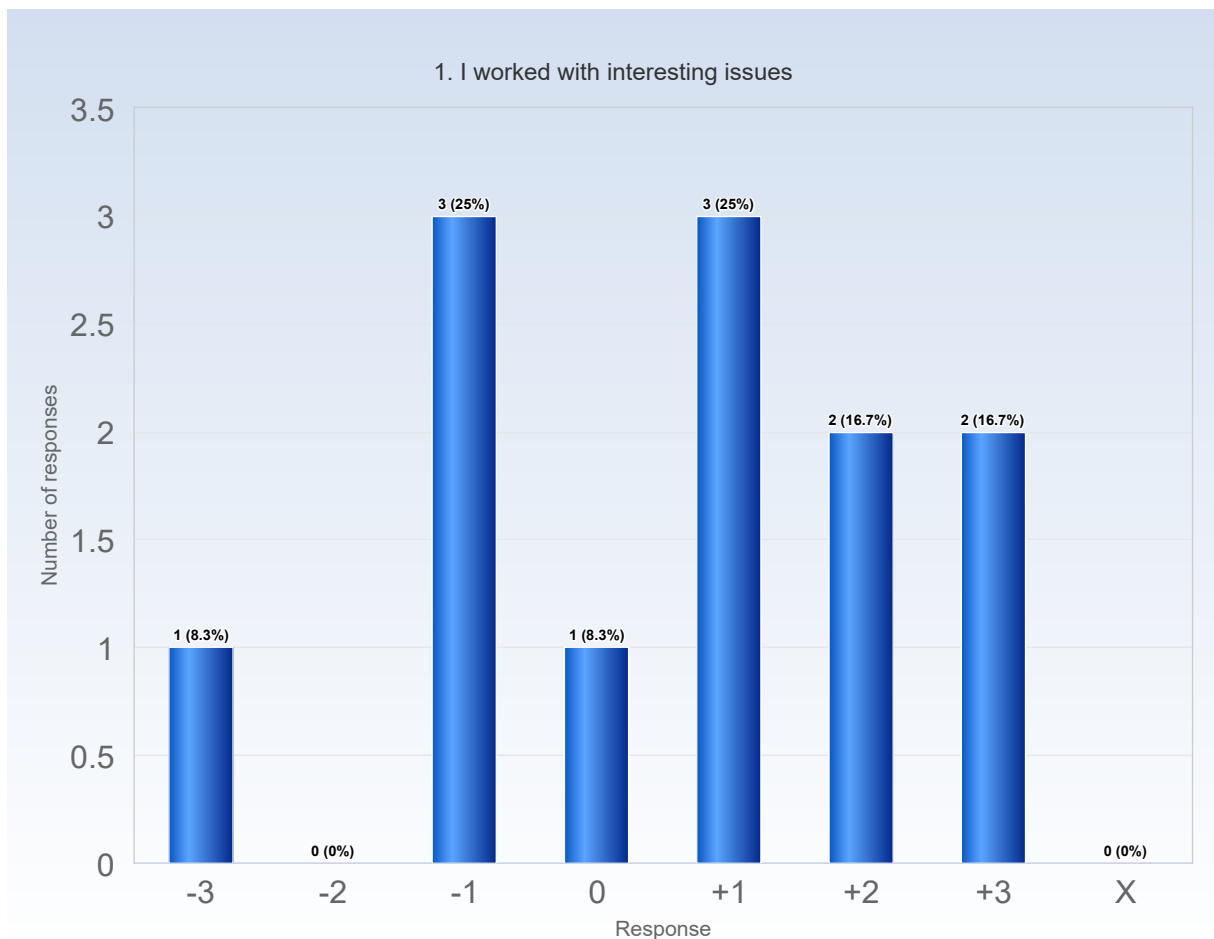
The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:

-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

Comments (My response was: -3)

I don't see the point of learning that detailed information on both subjects. Specially thamos for a philosophical point of view. We are engineers

Comments (My response was: -1)

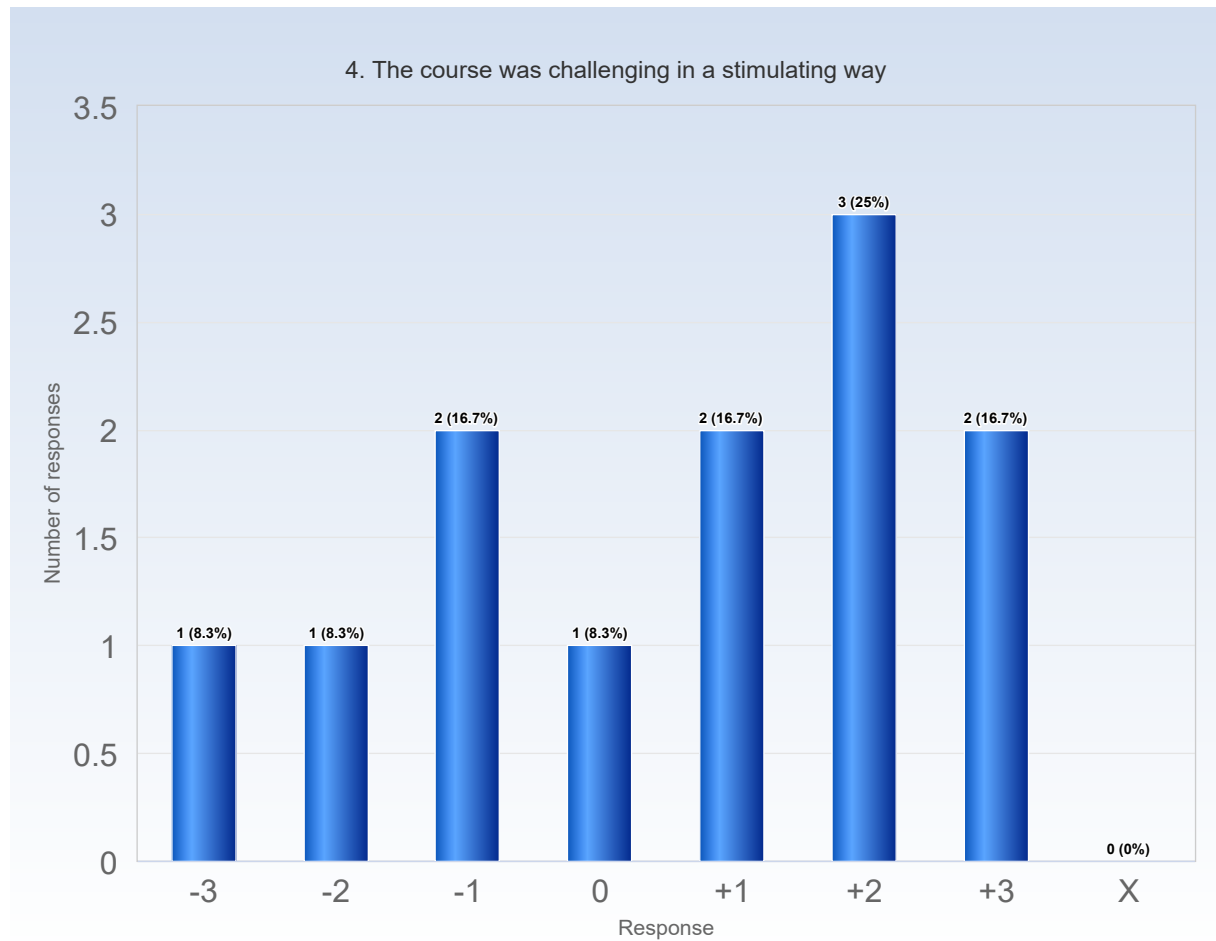
It would been better if more examples in tamos were related to my own education. Chemist examples are for example hard to under when you have read it

Comments (My response was: 0)

Both ways, it was interesting with the risk and safety part but the methodolgy part was sometimes not specific enough for our direction.

Comments (My response was: +1)

The tamos part seemed irrelevant



Comments

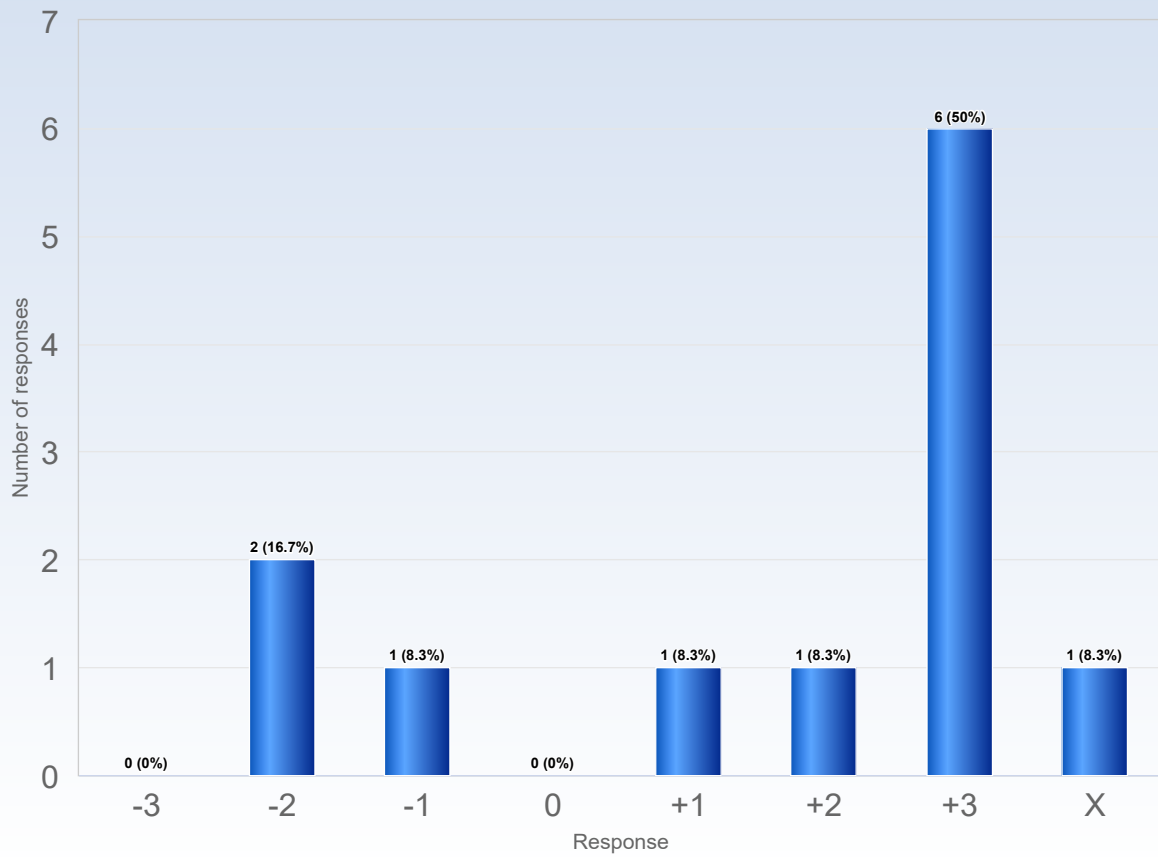
Comments (My response was: -3)

Very hard to follow and absurd the amount of lectures and time spending regarding thamos

Comments (My response was: -1)

The lectures weren't very simulating

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



Comments

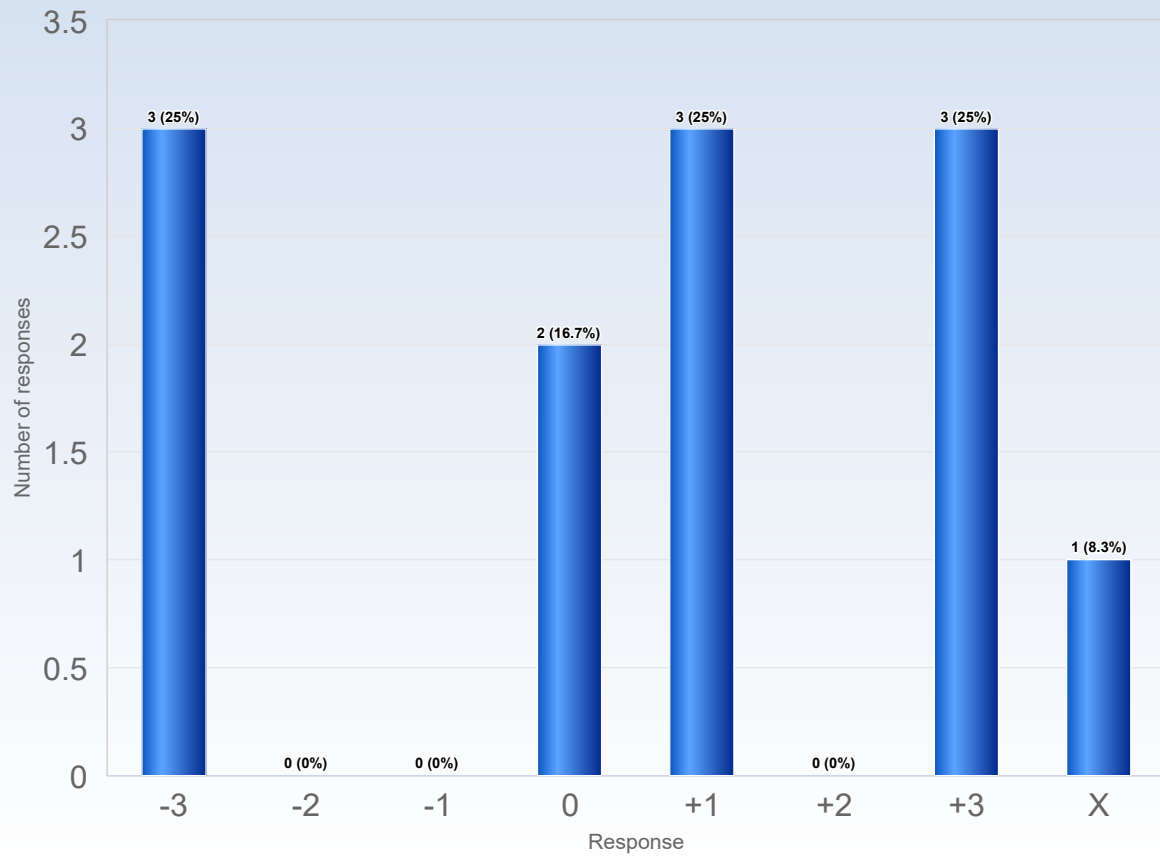
Comments (My response was: -2)

The quizzes took me more than 2-3 hours to be completed in order to get the satisfactory grade.
Everything in Tamos part was graded

Comments (My response was: +3)

The seminars were very good and you learned alot and were able to discuss without being graded.

16. The assessment on the course was fair and honest



Comments

Comments (My response was: -3)

The exam was not fair. We need to get certain amount of point in order to get part 3 corrected. This is not fair.

It was unfair that some groups had presentations (presenting the essay) and some groups just sat and discussed. Did not really seem fair some did not even had to do that part of the course.

Comments (My response was: 0)

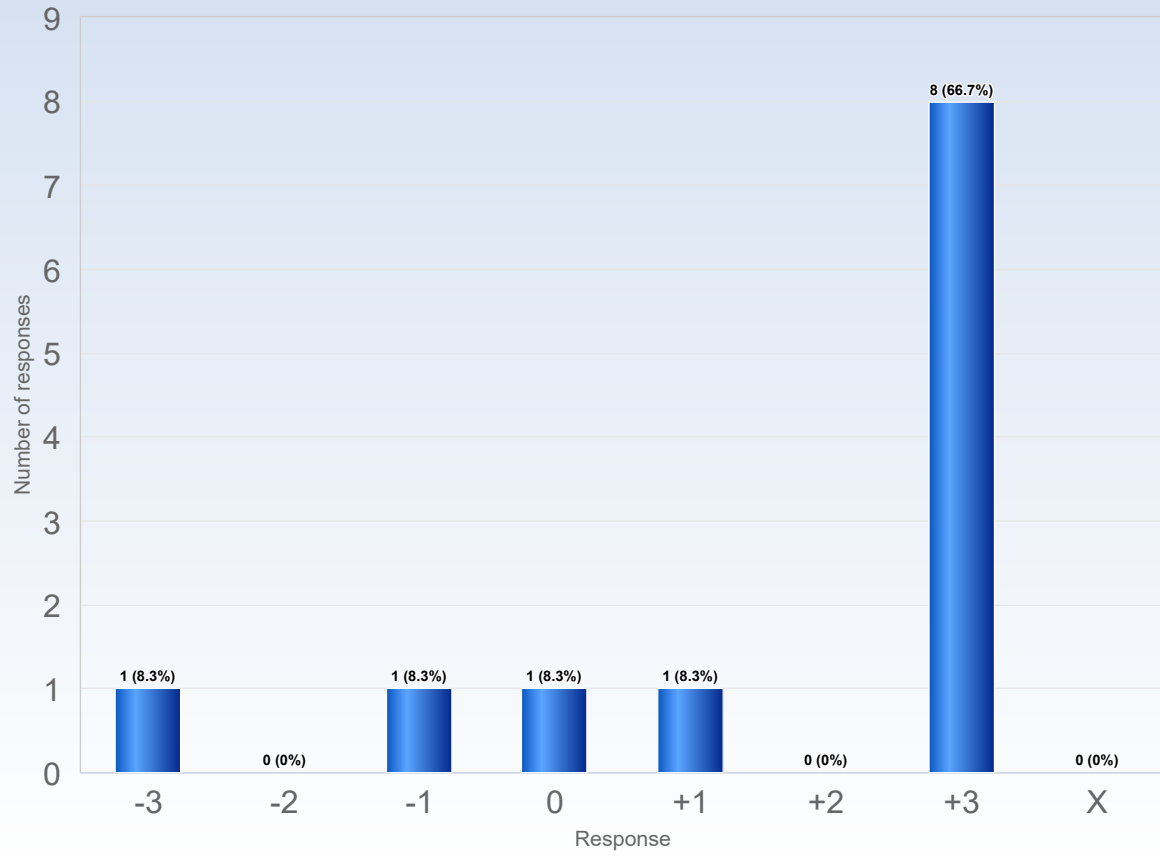
Not assessed at current time

Comments (My response was: +1)

I think the exams were too difficult. TEN A was not fair. Even if i think i knew the concepts enough, it was very difficult. The questions are formulated way too confusing, and the alternatives as well. It must be possible to simplify the formulations of the questions more.

Haven't got the results yet.

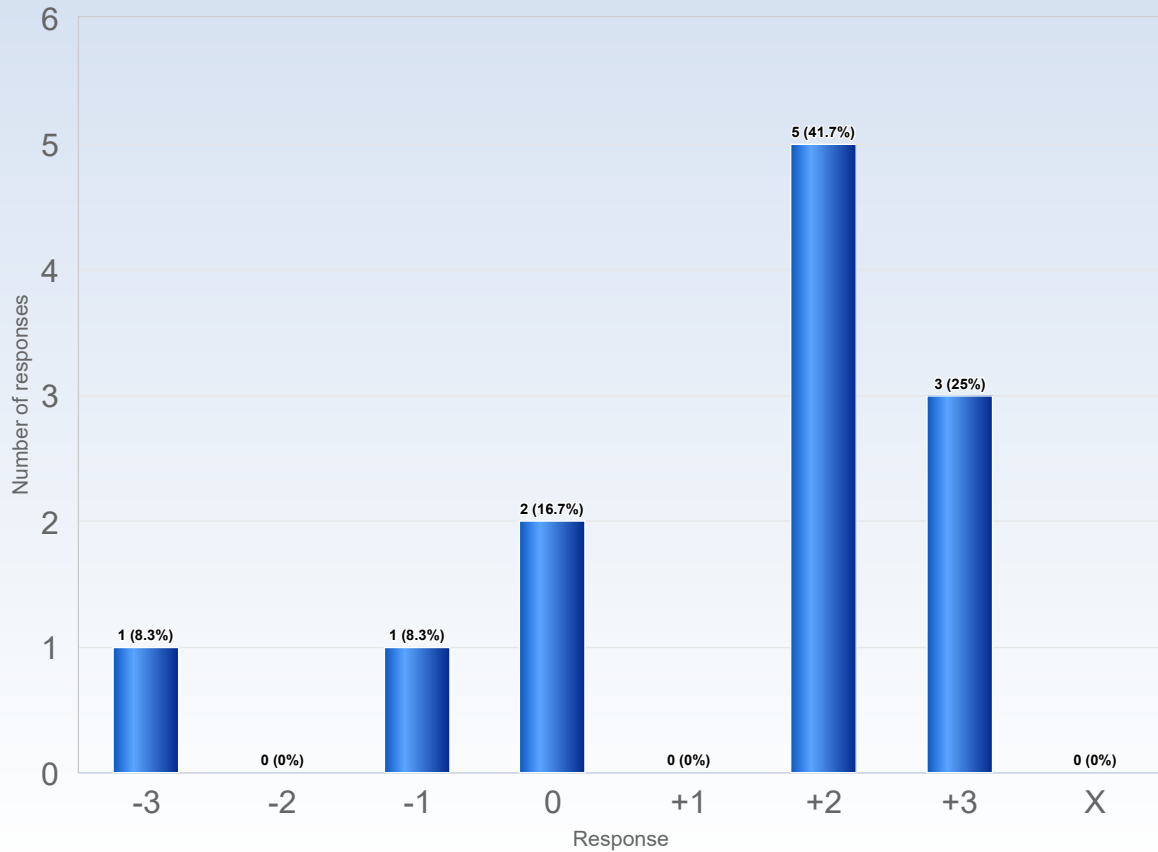
21. I was able to learn by collaborating and discussing with others



Comments

Comments (My response was: +3)
The seminars were good

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



Comments

Comments (My response was: -1)

I felt like the teachers at the seminar did not have the answers sometimes or did not have the time - tamos and rs

Comments (My response was: 0)

The flipped class was more confusing than helpful.

Comments (My response was: +2)

Adam was very helpful

SPECIFIKA FRÅGOR

This year we introduced a new seminar on gender and workers' safety. Do you have any specific feedback on this seminar? Consider both the topic in itself and whether the session can be improved.

SPECIFIKA FRÅGOR

This year we introduced a new seminar on gender and workers' safety. Do you have any specific feedback on this seminar? Consider both the topic in itself and whether the session can be improved.

This was good and easy to understand but it was not evaluated at all in the exam, so I don't see the point

I thought this part was really good! If this part was its own course this part should take more place. And needs to take more place! Clear at the seminar that the view on gender in the industry was a bit "old fashioned"

I liked it. The collaboration in our group was good and Johan lead it well.

I think it was a very good seminar to have. I'm a woman, and I think its a big issue to address in the industry. It was interesting to discuss with people that don't think like you

It was fun!

Bra

Really interesting topic. It was good to hear others experiences when it comes to gender and safety. It is important that men (specifically) learns about women's experience in civil engineering field.