ID1206 - 2022-01-29

ESTIMATED WORKLOAD

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

Category	Respondents
> 41 timmar/vecka	1 (3.6%)
39-41 timmar/vecka	0 (0%)
36-38 timmar/vecka	1 (3.6%)
33-35 timmar/vecka	0 (0%)
30-32 timmar/vecka	0 (0%)
27-29 timmar/vecka	1 (3.6%)
24-26 timmar/vecka	3 (10.7%)
21-23 timmar/vecka	4 (14.3%)
18-20 timmar/vecka	8 (28.6%)
15-17 timmar/vecka	3 (10.7%)
12-14 timmar/vecka	2 (7.1%)
9-11 timmar/vecka	4 (14.3%)
6-8 timmar/vecka	1 (3.6%)
3-5 timmar/vecka	0 (0%)
0-2 timmar/vecka	0 (0%)

Number of respondents
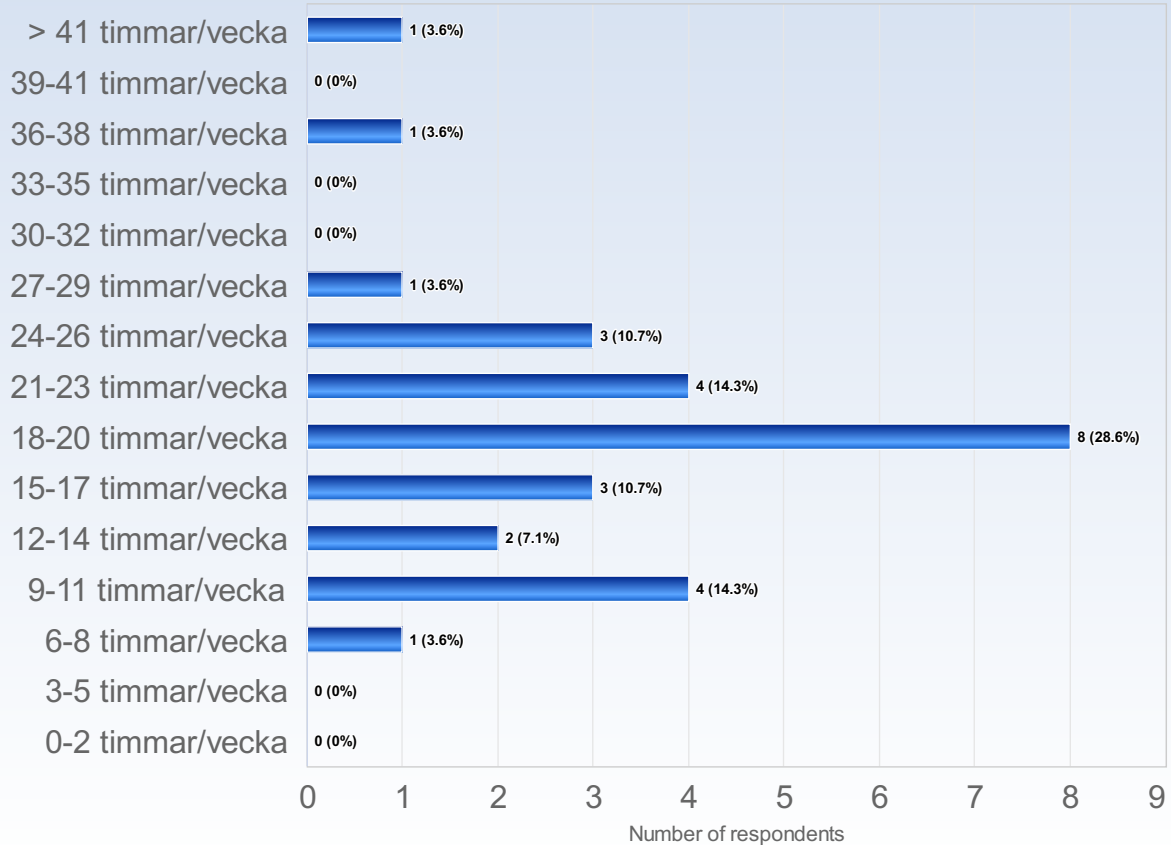
Comments

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

I should've spent more time on this course, it covers a lot of material so you really have to make an effort in order to keep up.

I can say that this time was enough to to get a decent understanding of the concepts covered in classes, but to fully master the material I think it would need more time.

Väldigt varierande då jag läste ADK samtidigt, det blev ju att man la ner mer tid i den här kursen inför seminarier

Comments (I worked: 12-14 timmar/vecka)

good

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

Seems reasonable

Wanted to work more, but other courses was consuming time.

Decent workload

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

Seminar weeks was quite heavy but other than that it was quite normal workload.

Seminarie 2 och 3 tog lång tid att bli klara med, speciellt den andra seminariet.

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

This time was spent watching lectures and completing seminars/recommended assignments.

Inget att anmärka.

Comments (I worked: 24-26 timmar/vecka)

quite time consuming with labs etc and to do övn... to help understand concepts

The seminars often took a full week of work to complete and lectures had to be postponed to be seen long after the actual day it was questions on the lecture in the schedule. Once there were no seminar the upcoming week the workload decreased significantly.

Comments (I worked: 27-29 timmar/vecka)

Kändes fortfarande som att det var för lite då man höll på med seminarierna.

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

Mycket innehåll, allt var inte så svårt men det var många olika delar

Comments (I worked: > 41 timmar/vecka)

Benchmark uppgifterna var rena marddrömen. Antingen bör det finnas en tillgänglig benchmark eller så bör det finnas en separat uppgift där vi får guide och en kod skelett.
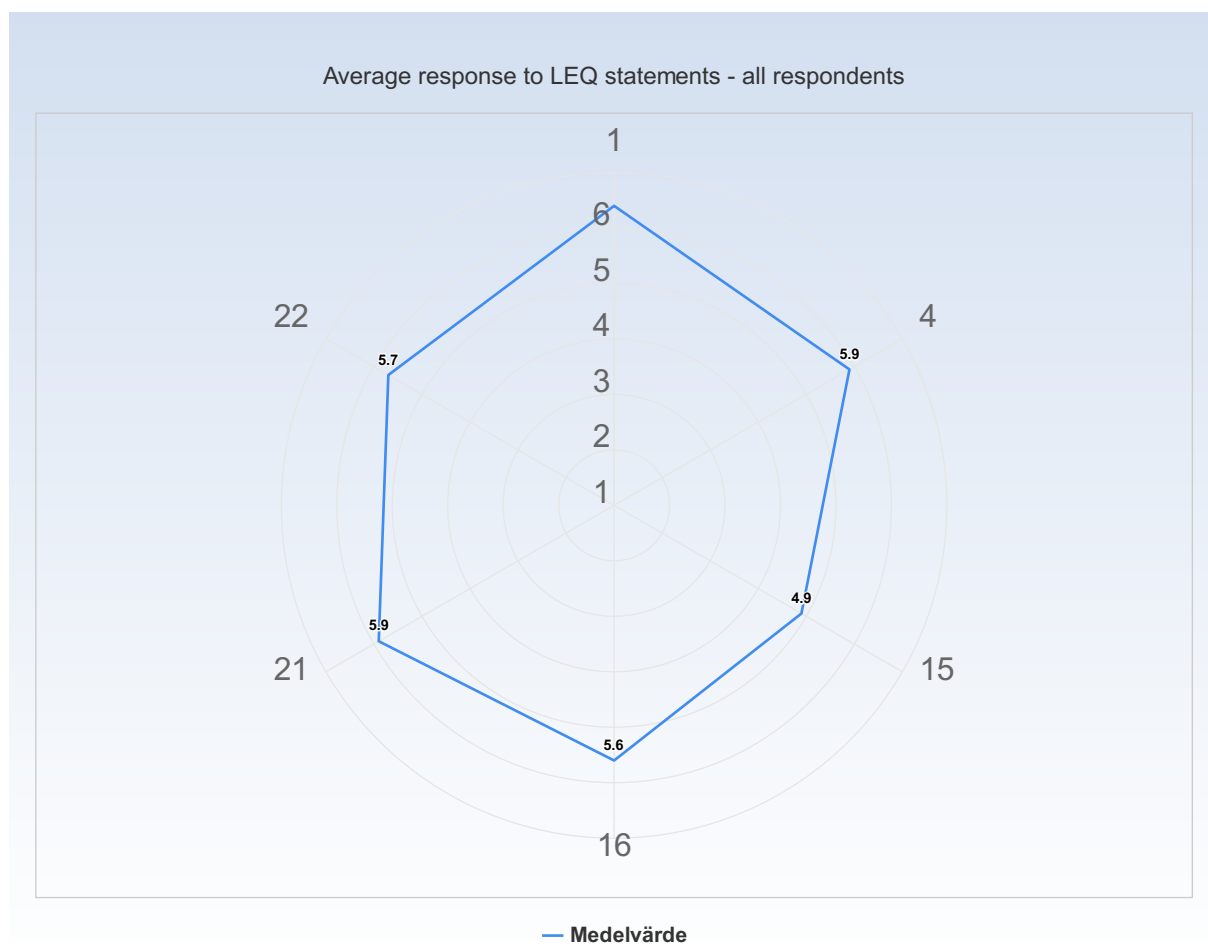
LEARNING EXPERIENCE

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.
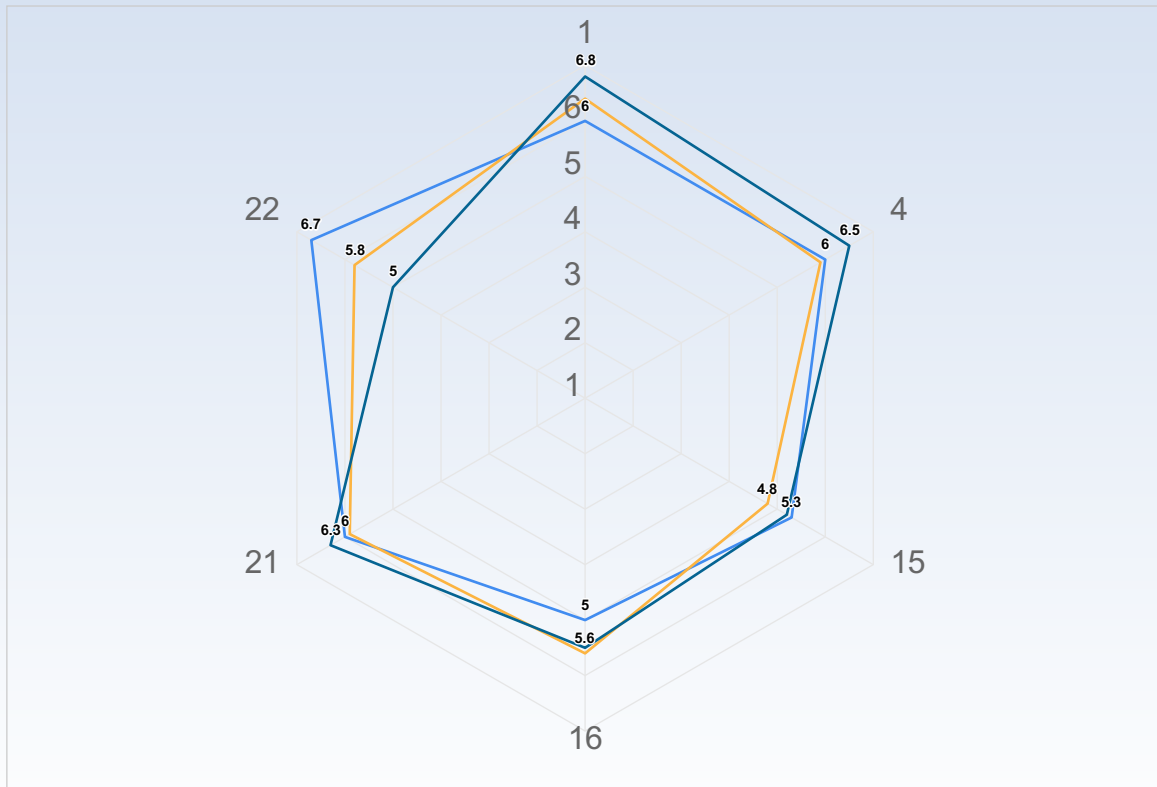

Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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

Legend: Kvinna — Man — Annat — Vill ej uppge

Axis values shown on chart:
- 1: 6.8, 6
- 4: 6.5, 6
- 15: 4.8, 5.3
- 16: 5, 5.6
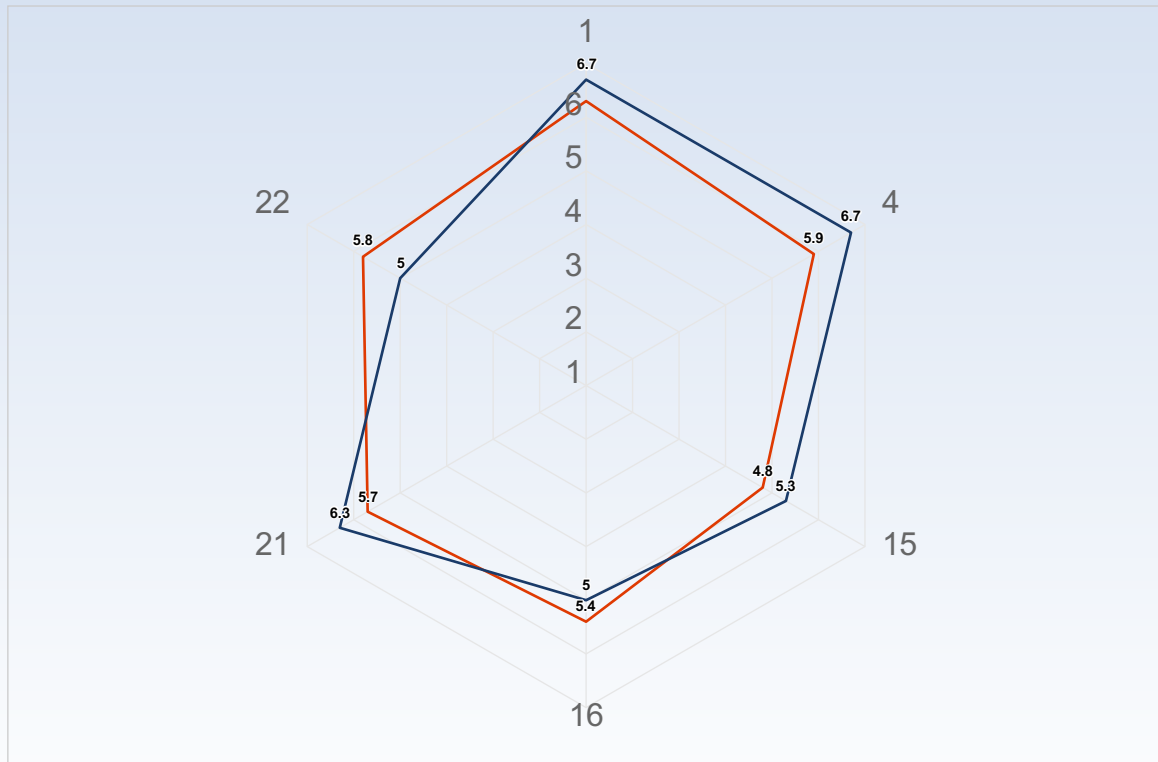- 21: 6, 6.3
- 22: 6.7, 5.8, 5

Comments

Comments (I am: Man)

Inget särskilt.

The course was very male-friendly (cannot speak for females&other but I imagine it's pretty much the same).

Average response to LEQ statements - per type of student

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

Comments

Comments (I am: Svensk student i årskurs 1-3)
Inget särskilt.
I found the course to be very relevant to both my studies and my post-studies-future.

Comments (I am: Annan typ av student)
KTH has an international bachelor program but these questionnaires don't even know about it. Aside for that, all the material was available in English and I didn't have any problem.

Average response to LEQ statements - per disability
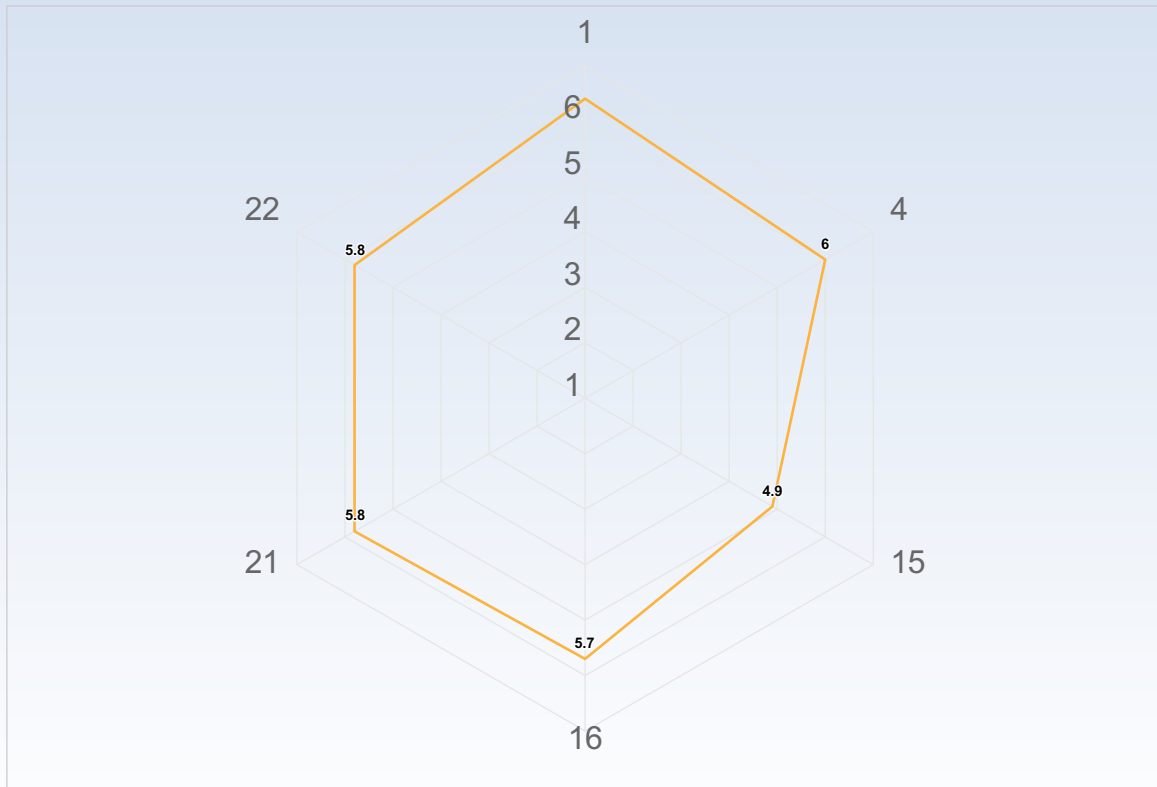
Ja — Nej — Vill ej uppge

Comments

Comments (My response was: Nej)
But I have documented reading problems

GENERAL QUESTIONS

What was the best aspect of the course?

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

The seminars were a lot of fun to do and throughout the course the material was very interesting. I also learned how to use linux and became more comfortable workkng with the terminal which I feel are very valuable skills. Also, thanks to Johan the lectures were always interesting. The litterature was very good and easy to read.

Course material (was very interesting).

Intressant kurs, känns som kursen knyter ihop saker man lärt sig i andra kurser som datateknik, som man inte riktigt förstod då.

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

Not many mandatory tasks. Good teacher.

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

I think the seminar assignments and reports were the best and the most interesting part.

Assignments and Seminar labs

Recorded lectures.

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

Rolig bok

Montelius himself

The lectures and the course litteratur. Seminar assignments also taught me a lot.
+ using Latex for the seminars, finally I had to learn it.

Föreläsningarna var bra, övningarna var bra. Kursen var intressant.

Väldigt intressanta föreläsningar, skönt att kunna få "ännu mer" om man kollar på den inspelade föreläsningen och sedan går på frågestundsföreläsningen i skolan. Bra lärarassistenter på övningarna.

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

Amazing lectures. Enjoyed the fact that each lecture was split up in multiple parts. Also, I felt like the exam touched on all subjects taught in lectures, which is good (no bigger surprises on the exam).

Having a teacher that actually listened and was helpful. He gave us a chance to redo some assignments which helped a lot with the stress of having several courses at the same time. I also found the online lectures really helpful, being able to choose when to watch a lecture was great.

Bra och lärorika föreläsningar, trots att det var förinspelade. Johan lyckas berätta på ett intressant sätt.

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

The practical side of it, to actually do exercises that required us to code or work with the terminal.

bra föreläsningar- båda inspelat och live- engagerande och enthusiastisk undervisning hjälpte mig mycket

Seminar on malloc and free, provided me with a deep understanding on how general memory allocation works.

What was the best aspect of the course? (I worked: 27-29 timmar/vecka)

Seminarierna var mycket intressant och svåra.

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

Kul och se black boxen som operativ system alltid har varit

What was the best aspect of the course? (I worked: > 41 timmar/vecka)

Allt var hyper intressant, kul och bra. Sättet Johan börjar med någon låt sedan kopplar det till föreläsning hjälper mycket . Johan är en duktig föreläsare som gör allt roligare men helst att man får se honom live, typ i någon zoom video eller i person än att kolla enbart på förinspelade videos.

What would you suggest to improve?

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

Most of the exercises included a lot of code which you had to copy "by hand" which became very tedious. It would be nice if you could copy and paste it from somewhere. When I tried to copy it from the pdf:s the formatting changed and I had to go through it all and fix it, and it became even more tedious.

Exam time. Through fault of no-one, the exam in this course was scheduled at the same time as in another course (EQ2330). Would be great if that didn't happen to future students.

Jag ser inte riktigt poängen med seminariet där Montelius kritiserar rapporter live. Absolut viktigt att titta på andras rapporter och att kritiskt titta på grafer. Men att "hänga ut" studenter ser jag som totalt onödigt. Majoriteten vet om vad de kunde gjort bättre och jag tror det hade varit mer konstruktivt om t.ex Montelius anonymiserat några rapporter som han tyckte han ville lyfta fram/diskutera(bra och dåliga).

What would you suggest to improve? (I worked: 12-14 timmar/vecka)

Knowledge about what will be on the final exam.

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

I'd say that the questions for higher grades were challenging and almost impossible to answer without prior knowledge or reading that book. However most of the people would read it because it's too large and very sparse. So getting higher grades, even a D, was pretty hard.

More support for MacOS users

More recordings.

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

Tentabetygkritier

To use only free software, as a good start he shows of the GNU/Linux operating system so if he would go away from Canvas and Zoom he could have a course that is doable without any nonfree programs (free as in libre, not gratis)

Schedule help/sessions for the other assignments. The other assignments wasn't mandatory but they were great however some of them were quite hard so a session for help/questions about them would be nice.

Det borde finnas övningstentor för det nya formatet. Det borde finnas labbtillfällen där man kan få hjälp med seminarier. Jag märkte att tentorna återanvände samma frågor från gamla tentor, detta gör det för lätt att fuska om man har tillgång till gamla tentor som hölls i Canvas vilket inte alla har, då får vissa ett övertag när de gör tentor medan vissa inte har ett övertag.

Gällande seminarium för malloc och free: Upplägget för seminarium tillfället känns inte riktigt bra, att gå igenom studenters inlämningar inför andra studenter för att kommentera vad som gjordes bra och vad som kan göras bättre inför nästa seminarium. Hade varit trevligare om läraren gjorde en sammanställning efter att ha gått igenom alla rapporter, där det listas vanligaste misstagen, och punkter som gjordes bra. Sedan skicka ut detta som anslag där alla studenter kan se vad som såg bra ut och vad som bör göras bättre.

Upplägget för tentamen var bra, först en del med lite enklare frågor för godkänt, och sedan delar för högre betyg, dock känns det som att delen för högre betyg inte riktigt var rättvis. En elev som bara klarar E delen, och en student som klarar E delen samt klarar i snitt 3 av 4 på högre betygsdelarna får i slutändan samma betyg. Kanske rättvisare om högre betyg sätt utifrån hur mycket en student kan av de högre betygsuppgifterna, alltså hur många poäng som samlats totalt, eller kanske göra så att 4/4 på högre betygs-delen ger 1 högre betygspoäng, 3/4 ger 0.5 högre betygspoäng, för att i slutet räkna samman högre betygspoängen och ge ett betyg.

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

Have all activities online, including TA-sessions. I did not attend any TA-sessions as they were on campus.

Maybe allow for more variety in the ways that you solve a problem. Instead of having everyone do the exact same.

I think the seminar- instructions, especially for seminar 2, could be clearer. It was really confusing to figure out how to solve them.

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

Maybe expand the canvas quiz that opens up the next chapter, this could serve as a checkpoint for students which checks if they really understood the content.

identifiera och lägga mer vikt på vissa delar av kursen- typ det som är relevant och examineras och tydliggör vilket material är central och vilket är bara bra att kunna

More seminars, they were best at teaching course topics. Rather 5-6 seminars than exam.

What would you suggest to improve? (I worked: 27-29 timmar/vecka)

Skulle hellre se att man bedöms på seminarierna än på en tentamen.

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

Jag är inte riktigt såld på alla dessa retoriska frågor och frågor som lämnades till läsaren. Även om det är viktigt att lära sig och tänka rätt osv så får man i vissa fall bara inte ihop det och behöver då en förklaring.

Sen det jag skrev om kursens examination. Kan tillägga även om det var open book så blir det i mina ögon felaktigt att om man exempelvis hade får rätt på 3 av 4 frågor så blir betyget ändå E trots att man i mina ögon då visar ganska god kunskap i flertalet områden, man har ju då endast haft fel på 5 frågor totalt.

What would you suggest to improve? (I worked: > 41 timmar/vecka)

Mer zoom tillfällen att prata med dig, vissa tillfällen i kursen var alldeles för svårt och det räckte ej med enbart förinspelade videos

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)

Make sure to read the litterature, it's easily the best one I've had of yet. If the format for the exam stays the same, make sure to think about how you will go about doing it. I made the mistake of trying to of all the modules at once and ended up not having enough time to look up everything I wanted to, which gave me a lower grade than if I focused on one module at a time.

Follow provided instructions.

Det är okej om din multitrådade kod inte funkar, det är svårt men du lär dig mycket ändå. Ta hjälp av andra och diskutera.

What advice would you like to give to future participants? (I worked: 12-14 timmar/vecka)

I don't know.

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

Read the book, I guess…

Read the book and dont fall behind schedule.
Try not to plan for more than 15 credits the period this course is given to not hate life.

Don´t take this 55+ sarcastic man so serious. He just have attitude problems like a 12 year old

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

Läs varje vecka

Start early with seminars

Börja med seminarie 2 och 3 tidigt. Försök gör alla övningar och kolla på föreläsningarna om man satsar på högre betyg. För lägre betyg är bara de första föreläsningarna och övningarna nödvändiga.

Börja tidigt med seminarium uppgifterna, så slipper ni stressa.
Gå på frågestunds/föreläsnings tillfällen som ges i skolan. + Övningarna.

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

Watch all lectures, and do so multiple times (2-3 times). Also, do all seminars and exercises.

Start early with the seminar 2 and 3, don't underestimate them.

Lägg ner tiden. Det blir mycket att göra, så börja i tid!

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

Watch the video lectures, take notes or do small summaries of every chapter, and do the exercises. Do not wait until the end to do everything.

kör hårt
var inte så rädd för materialet det är ganska kul till slut

Look at exam questions throughout the course, preferably after each completed lecture and search for exam questions on the lectures topics covered!

What advice would you like to give to future participants? (I worked: 27-29 timmar/vecka)

Börja i god tid med seminarierna.

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

Lyssna på Johan och lär er C

What advice would you like to give to future participants? (I worked: > 41 timmar/vecka)

GÖR ALLA ÖVNINGAR& SEMINARIUM I GOD TID och börja med tentorna typ 3 veckor innan tentan

Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 9-11 timmar/vecka)

A very interesting course, both regarding the subject matter and the lecturer.

No.

Is there anything else you would like to add? (I worked: 12-14 timmar/vecka)

No.

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

I liked the flow of the course with seminars, exercises, lectures. And of course Johan is one of the best teachers at KTH! Props to him

Good course

Do it somewhere else and credit it.

Is there anything else you would like to add? (I worked: 24-26 timmar/vecka)

no

-

Nope

Is there anything else you would like to add? (I worked: > 41 timmar/vecka)

Feedback på tentorna hade varit bra. Vissa frågor tycker jag borde jag ha fått poäng men fick det inte och fick inte heller någon förklaring till det.
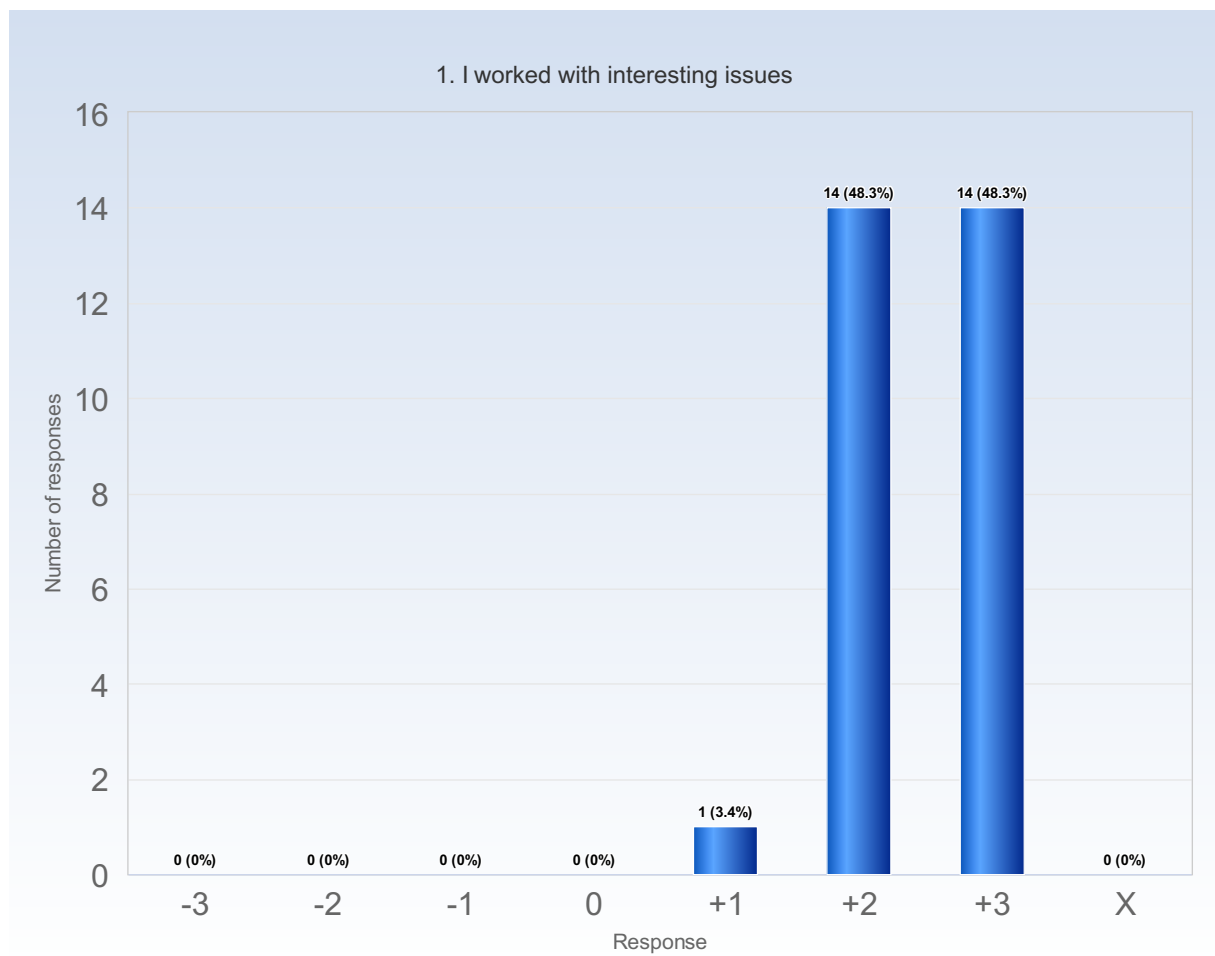
SPECIFIC QUESTIONS

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
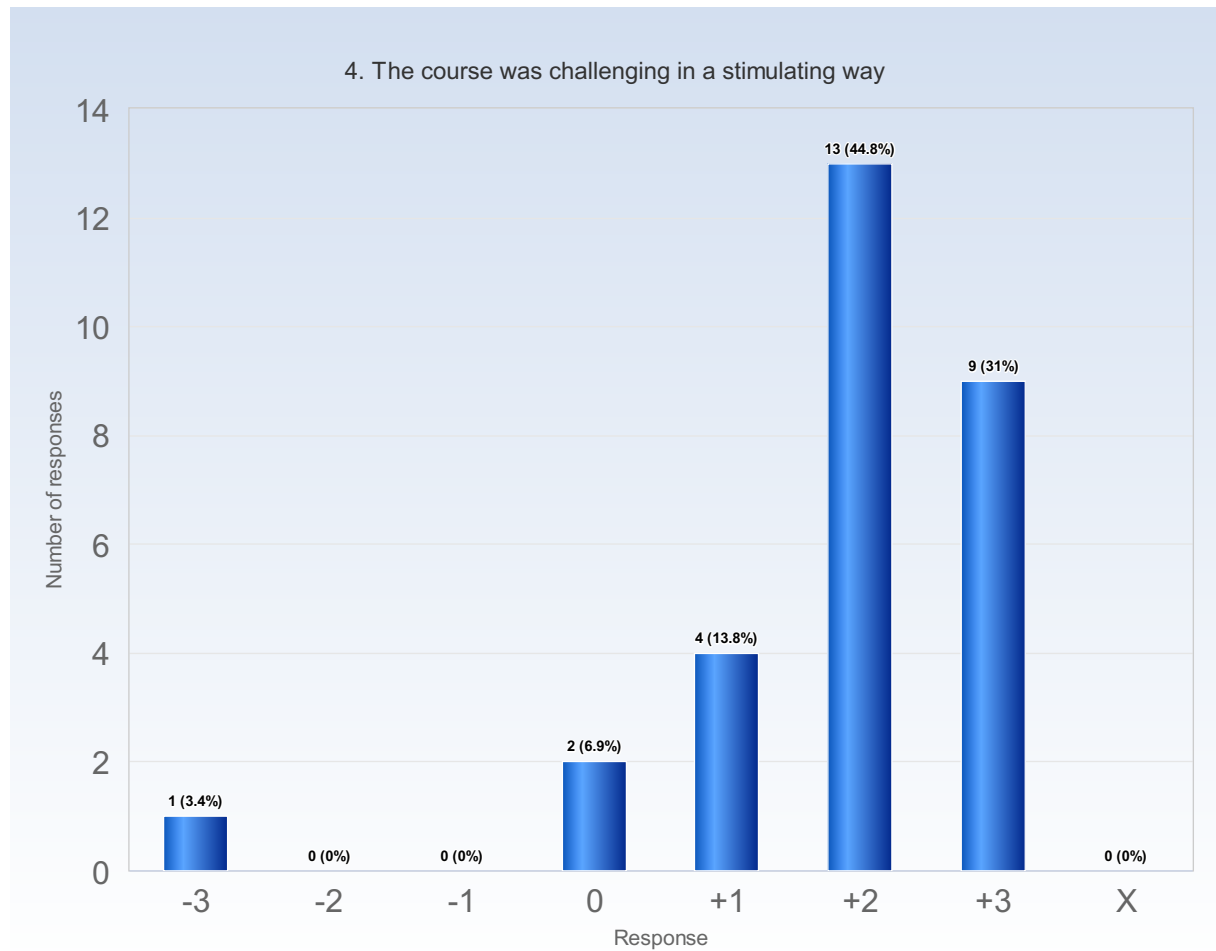
X = I decline to take a position on the statement

1. I worked with interesting issues

Response	-3	-2	-1	0	+1	+2	+3	X
Number of responses	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (3.4%)	14 (48.3%)	14 (48.3%)	0 (0%)

Comments

Comments (My response was: +2)

Wanted more MacOS focus

Comments (My response was: +3)

sjukt intressant

always interesting topics!!

4. The course was challenging in a stimulating way

Comments

Comments (My response was: 0)

Upplägget med alla programmerings uppgifter passade mig inte helt, i vissa fall så som scheduling, malloc m.m var det bra men ofta så hade jag fler frågor efter en programmerings övning än svar vilket gjorde att jag ofta ifrågasatt vad jag egentligen kunde.
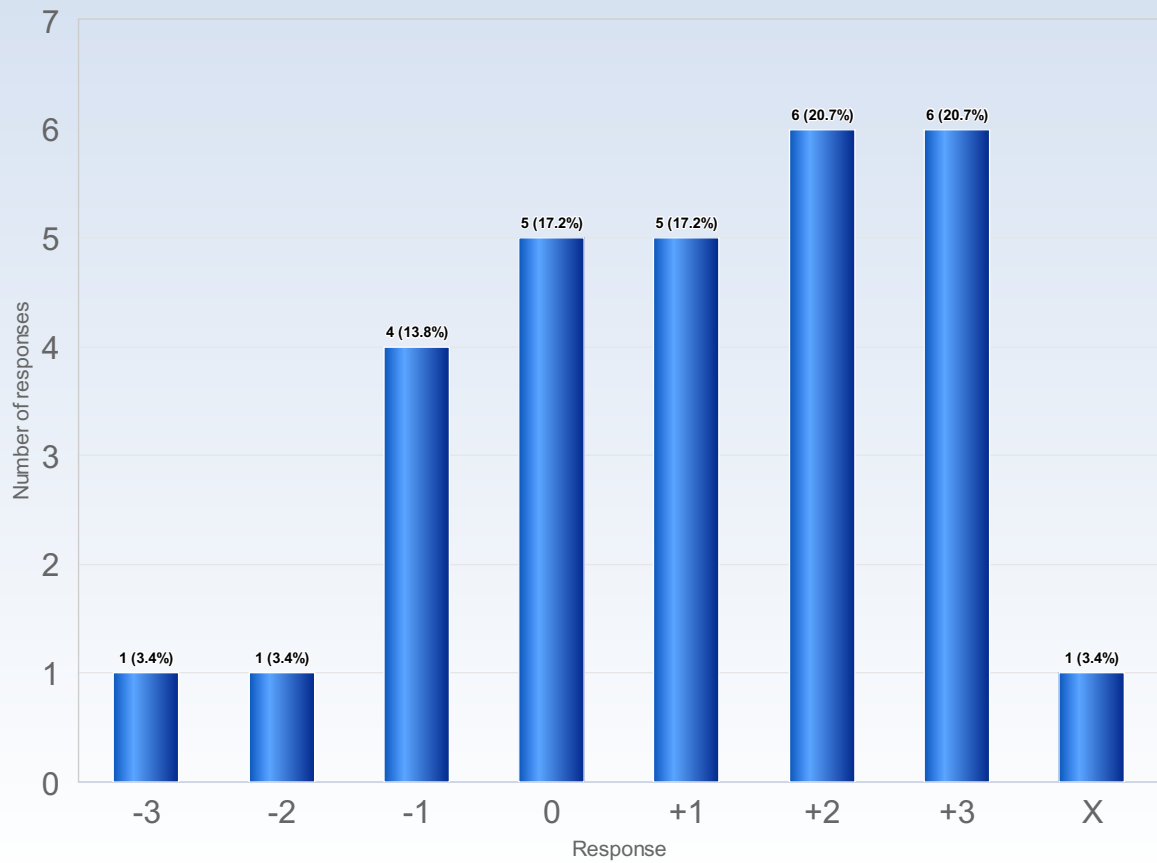
Comments (My response was: +2)

little tough to work in c seen from a debugging perspective

Comments (My response was: +3)

Especially the seminars

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

Number of responses

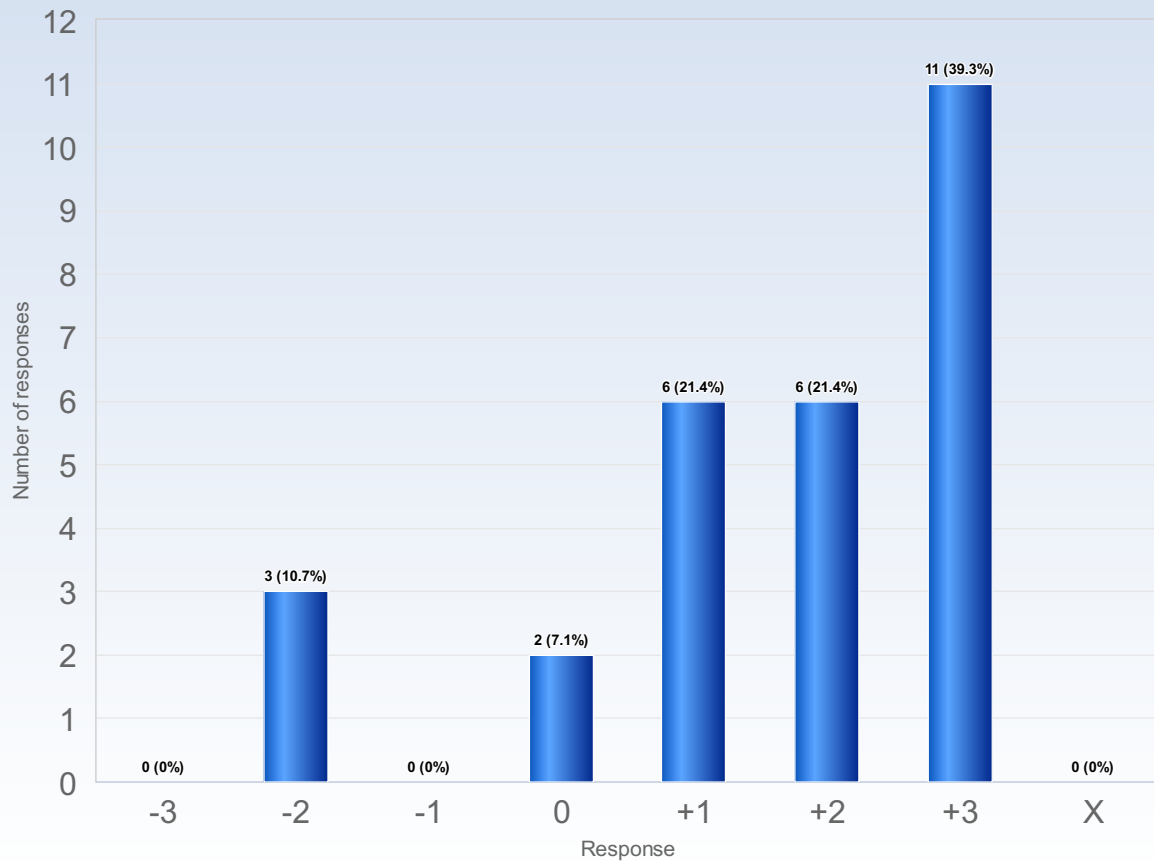| Response	Count
-3	1 (3.4%)
-2	1 (3.4%)
-1	4 (13.8%)
0	5 (17.2%)
+1	5 (17.2%)
+2	6 (20.7%)
+3	6 (20.7%)
X	1 (3.4%)

Comments

Comments (My response was: -1)
Inte alls för tentan vilket var den största delen av kursen (fanns inga gamla tentor som hade ett quiz-format).
4 övningar. lite svårt att practive utan att få betyg

Comments (My response was: +2)
great exercises

16. The assessment on the course was fair and honest

Comments

Comments (My response was: -2)
Tyckte årets upplägg var lite underligt då den inte gynnande att man kunde lite om allt. Utan ville man maximera betyg så hade det varit smartare att lägga allt krut på låt säga 3 områden istället för att lära sig lite mer om varje område. Jag fick känslan om att man jämförde med tidigare års tentor så var man mer gynnad av att kunna lite inom alla områden.
Att ändra kravet för godkänt dagen innan tentan kändes inte särskilt ärligt...

Comments (My response was: 0)
quite easy tenta

Comments (My response was: +1)
Kravet för 4/4 på en del för högre betyg verkade rimligt men får man ganska bra på allt kunde man lätt få ca 80% och ändå få ett E
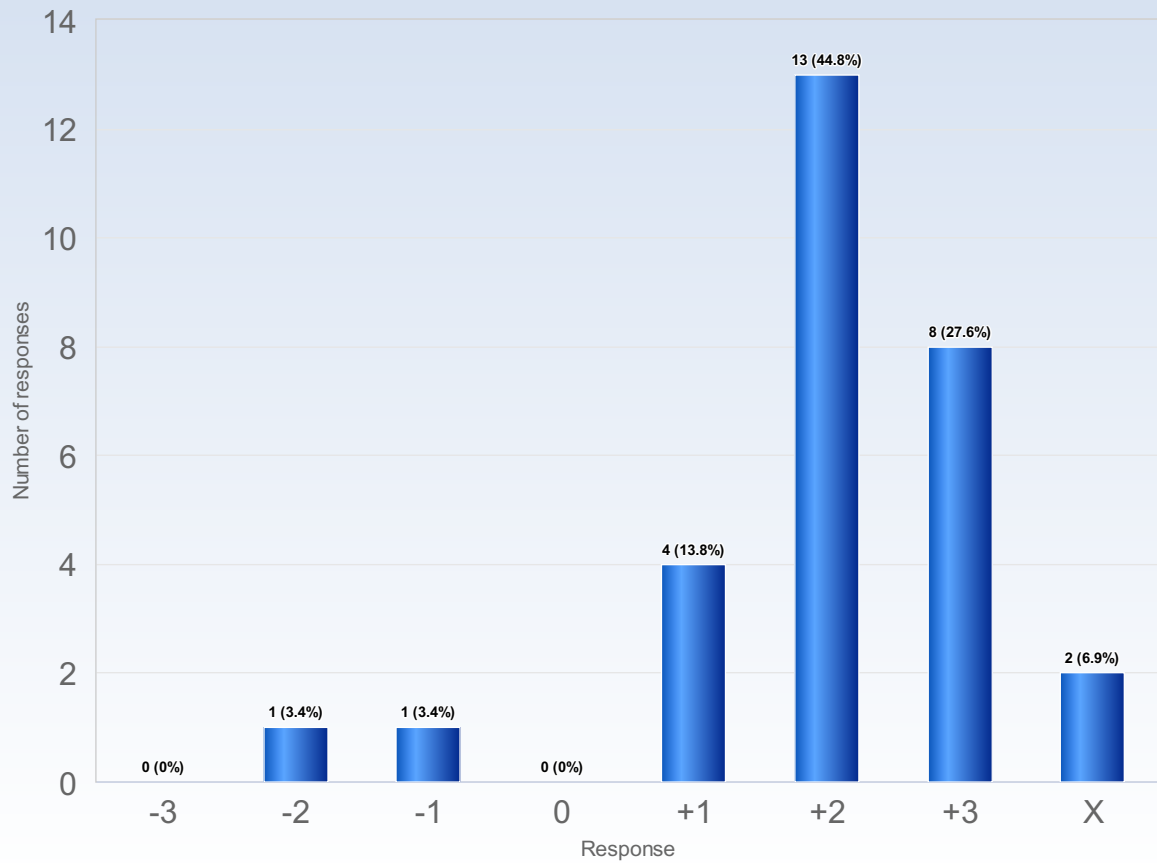
Comments (My response was: +2)
nja, Lite hård rättning på tentan men bortsett från detta då ja

Comments (My response was: +3)
I felt that the exam was structured in a fair way and it was great that you could make up for failed seminars.

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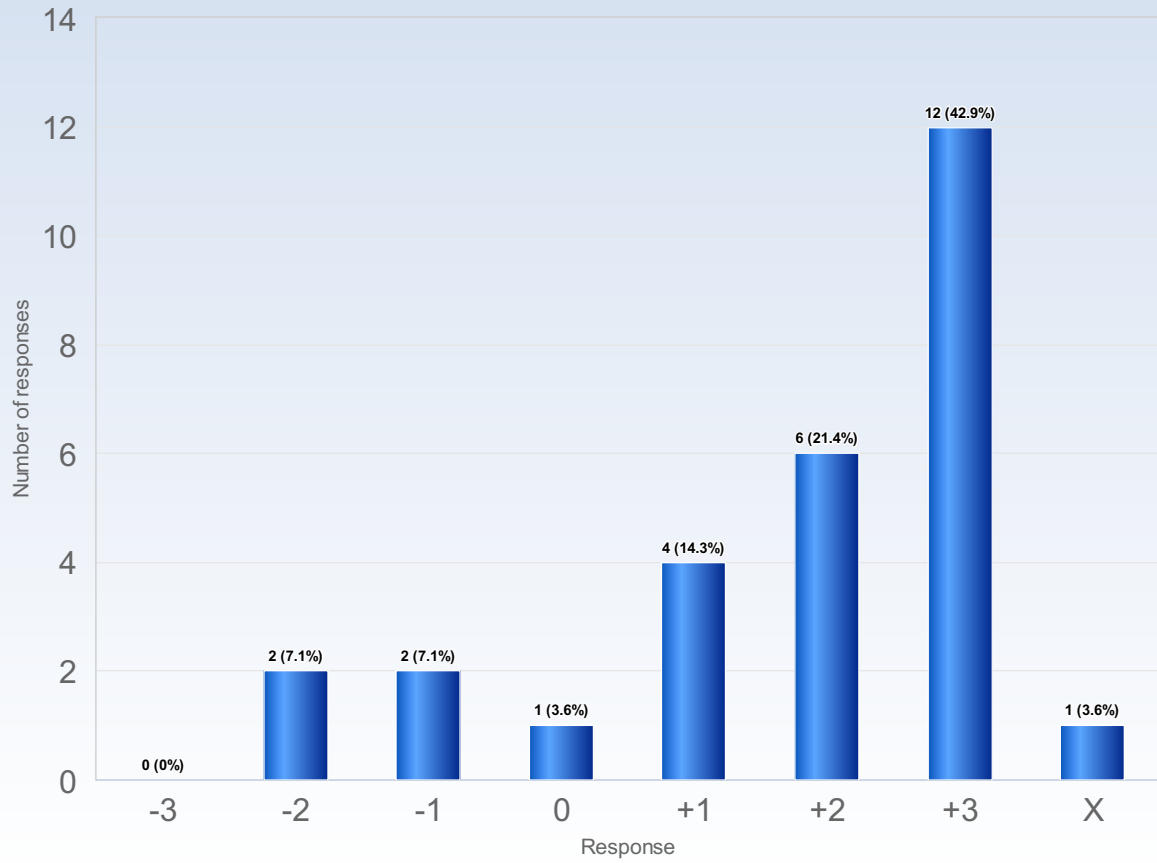

Comments

Comments (My response was: +2)
The examiner was available in zoom meetings and throigh canvas/emails. Always got quick and good answers.

Comments (My response was: +3)
Doing the seminars together with someone else made them way less stressful
really helpful during lecture exercises and seminars!

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

Comments

Comments (My response was: -1)
Fanns inga labbtillfällen, behövde fråga i Canvas där det tog mer tid att få svar och där man inte fick lika bra hjälp.

Comments (My response was: +3)
once again great exercises