

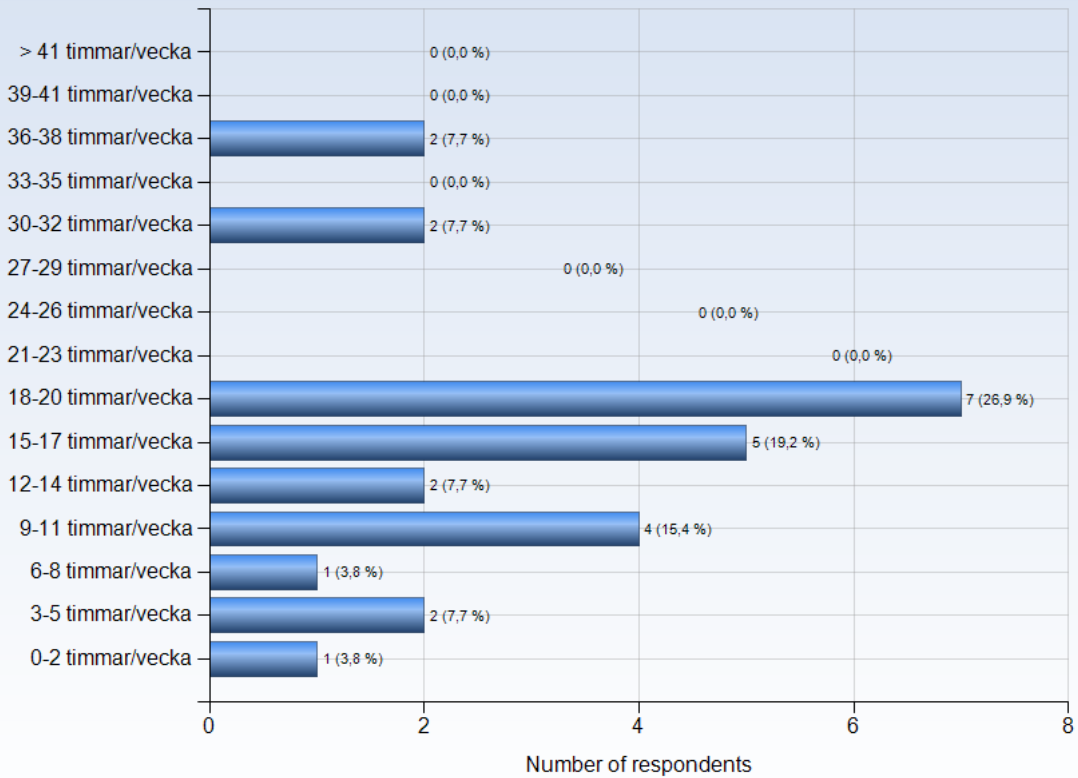


ID1019 - 2019-04-02

Antal respondenter: 174
Antal svar: 26
Svarsfrekvens: 14,94 %

ESTIMATED WORKLOAD

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





Comments

Comments (I worked: 0-2 timmar/vecka)

I did not attend any lectures. I studied old exams and internet resources exclusively.

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

I did not attend any lecture

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

Övriga två kurser fick fokus

Optimal time required for the course should probably be around 20 hours per week.

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

Already had experience with functional programming, most time was spent on attending lectures.

Fair amount of workload. As there is no mandatory assignments you can allocate the time as it suits you

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

Good workload, can decide after ambition.

It was easy to neglect this course due to the lack of obligatory assignments/submissions

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

Ganska omfattande tidvis att sätta sig in i seminarieuppgifterna.

Vissa seminarier är MYCKET mer krävande än andra.

Have not really studied seriously yet but I estimate that I would need around that amount of time to achieve a good understanding

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

was hard to know what to study or do

a combination of bad course materials, bad teaching pedagogy and bad evaluation in the examination made me suffer, I put in too much effort just to understand basics that the teacher took for granted like we know functional programming from before or something, I would recommend that his majesty take some time to watch over his slides if he can accept that his slides really sucks and the fact that students already pointed it out and make better incremental type of exercises.

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

Read book, program and Write code. Do exercises

LEARNING EXPERIENCE

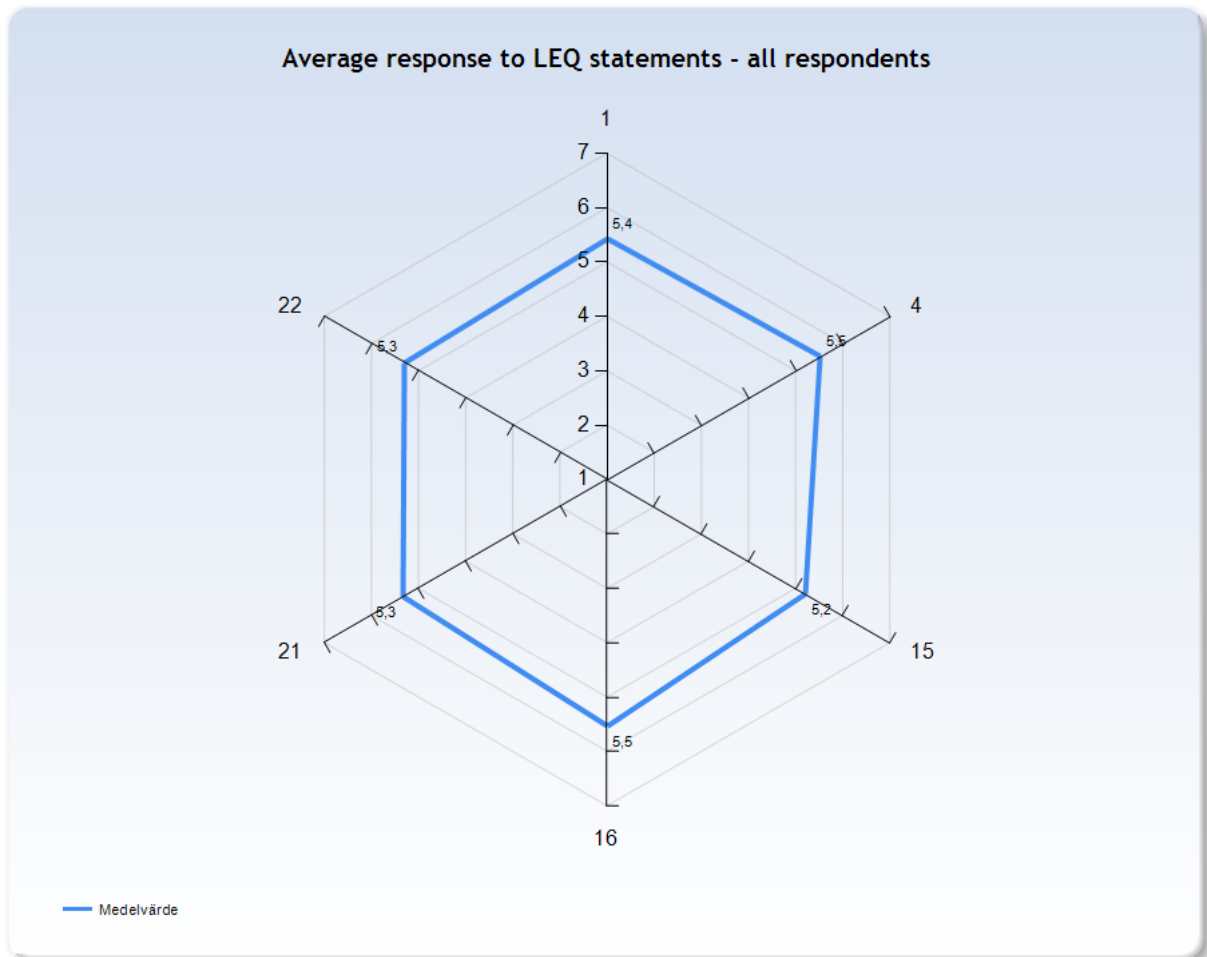
The polar diagrams below show the average response to the LEQ statements for different groups of respondents (only valid responses are included). The scale that is used in the diagrams is defined by:

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.

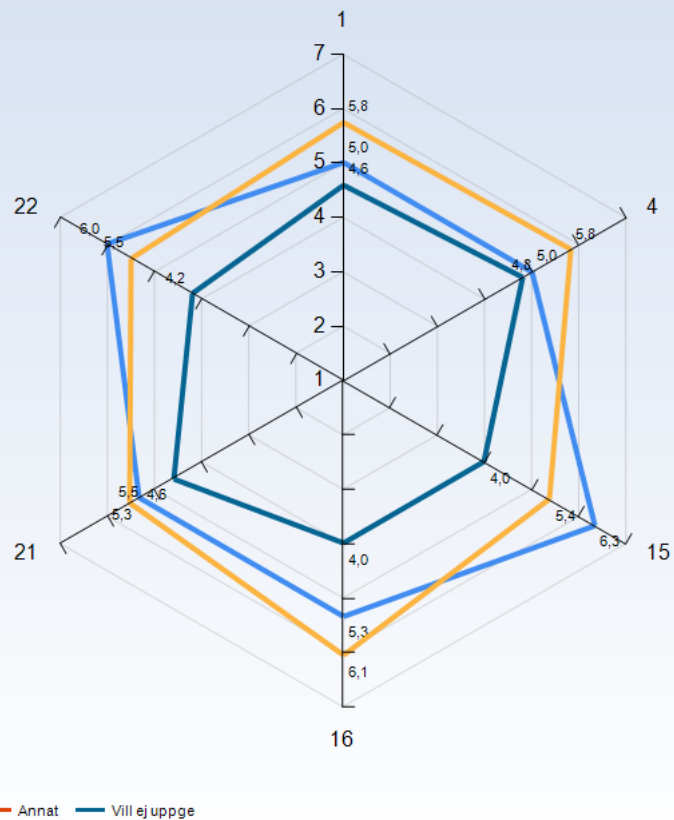
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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



Comments

Comments (I am: Man)

Wtf does this question mean?

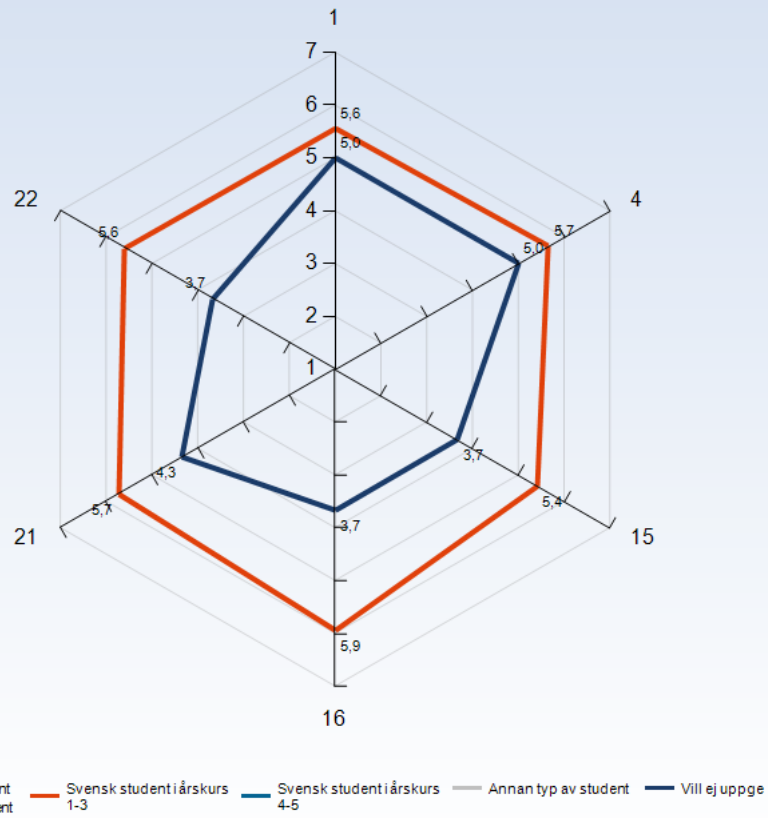
penis person

What does it matter if I am a male or female and how my comment would change based on that? Which genius came up with this question and above all who agreed?? My comment is with good and playful intension, not insulting:)

Comments (I am: Vill ej uppge)

this course and this teacher was really a good example of how a MAN can kill the enthusiasm and make you disappointed that you take the course at all. I am so sorry but Johan is unfit as a teacher in this course.

Average response to LEQ statements - per type of student



Comments

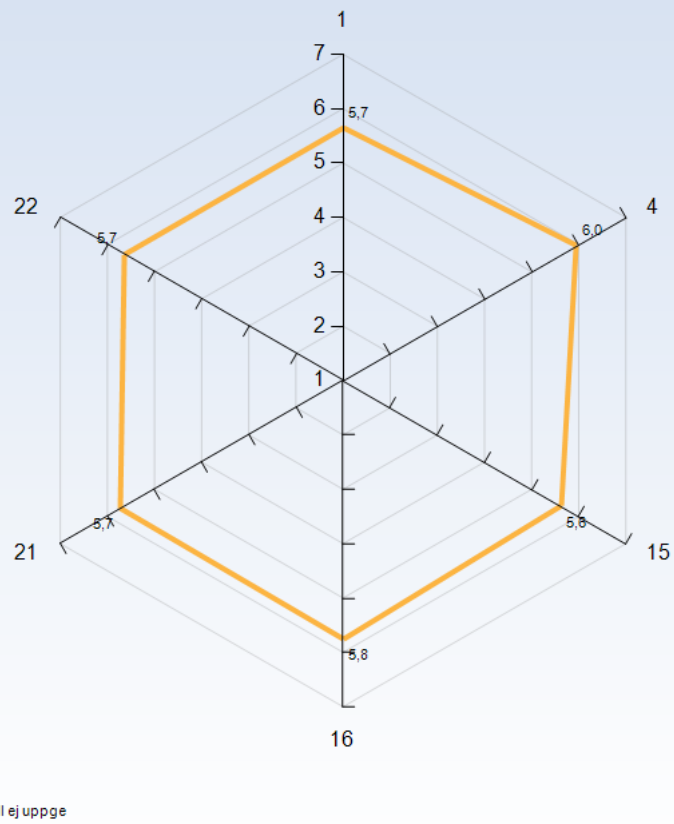
Comments (I am: Svensk student i årskurs 1-3)

It is absolutely essential that students taking this course have a good understanding of the concepts in the Algorithms and Data Structures course to have a chance of getting a few points on the exam, let alone passing the course.

Comments (I am: Annan typ av student)

Bachelor student at KTH (year 1-3), however not swedish.

Average response to LEQ statements - per disability



Comments

Comments (My response was: Ja)

Väldigt hög tröskel kodmässigt, från att inte kunna något till Huffman.



GENERAL QUESTIONS

What was the best aspect of the course?

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

Ett helt nytt programmerings sätt.

The lectures were very interesting and the syntax of Elixir is EXTREMELY intuitive to the point where the transition from pseudo-code to real code is almost unnoticeable. The programming questions on the exam were fun and challenging.

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

Montelius gives great lectures. The seminar tasks were interesting tasks in themselves.

Learning about functional programming and concurrent programming as its a bit different from object oriented programming

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

The labs were helpful in understanding how the concepts we learned really work in real life.

Lära sig ett helt nytt sätt att tänka på programmeringsmässigg.

Good lecturer, fun exercises.

Det som var bäst(men kanske även sämst) var att det inte några obligatoriska examinationer utöver tentamen. Vdet var skönt eftersom vi läste kursen parallellt till IK1203 som hade väldigt många obligatoriska moment. Men detta kan även vara jobbigt ifall man inte har så bra egen disciplin.

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

Att jag fick lära mig ett helt nytt programmeringsspråk och nytt tänk.

Concurrency.

Seminarierna

Interesting over all. It was a sensible gradual increase in the difficulty.

Subject of concurrency, the teacher and the intro into a new way of programming

What was the best aspect of the course? (I worked: 30-32 timmar/vecka)

when I saw some youtube videos about Elixir and conferences, I really got interested about Elixir and functional programming but the teacher really killed that feeling for me. after the first week I did not know what is the next , what should I learn in this part of the course. you lost me sir there. That was the best aspect of the course.

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

No labs that one need to struggle and meet deadlines with.

worst course ever. The material was bad and not related to course



What would you suggest to improve?

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

I introduction dokumentet förtydliga att det sista kodraden som exekverar i en funktion som skrivs ut i shell. Förtydliga varför funktionell programmering behövs. Föreläsningarna synkar inte lika bra med tentan som förra kursomgången.

Hålla sig till kursen under föreläsningarna och inte sväva ut i massa andra saker.

Gå igenom mer hur man gör själva programmeringen och inte bara teori.

Övningar där man går igenom mindre uppgifter och inte bara inför seminarium då de uppgifterna var väldigt stora och krångliga.

I don't think there were any faults with the course that can't be traced back to my own shortcomings, but I got stuck on how to work with lists early on in the course which set me back quite significantly. Maybe the explanations for how to work with lists need to be "dumbed down" a bit? Try to really convince students that working with lists in Elixir(head, tail) is no different than working with a linked list implementation in Java (value, next) for example.

E Gränsen är mycket , Vi måste ha 8 av 10 är mycket tycker jag .

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

Add a lab section to the course. At the moment I am in a math course that tests us each week, it is great for getting students to start coding early.

Seminar 2, writing your own language, was very interesting, but maybe too difficult. The coding itself was not that bad, but operational semantics was in itself one of the most difficult things with the course. Maybe add an exercise lecture just dedicated to operational semantics before the seminar might be very helpful.

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

The lectures and exercises as it felt that we missed or skipped 20% of them.

Obligatoriska moment som kanske är en del av kursen i form av att man måste få x antal poäng för att få skriva tentan eller i form av bonuspoäng till tentan.

Det skulle kanske vara bra ifall någon del av seminarium var obligatoriska med betygssskalan P/F. Det skulle kanske garantera att fler hänger med. Men jag förstår även att det skulle bli mer att rätta.

Some more basic obligatory assignments that are tied to the key subjects, the assignments we had now were too much to be feasible for me at least

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

Föreläsningarna kändes lite poänglösa. Jag kom dit utan att förstå något och lämnade ut att förstå mycket mer. För mycket fokus läggs på Powerpoints som man som student som ser något för första gången har svårt att hänga med. Jag skulle rekommendera att mer tid och kraft läggs på att skriva saker på tavlorna. Då kommer man student lättare kunna hänga med då man skriver anteckningarna samtidigt som föreläsaren skriver på tavlan.

I think the seminars should be mandatory. Also, I don't see why we need to learn the lambda calculus and operational semantics they seem very random in the course and not very useful in real life.

Föreläsningarna känns bitvis ganska tagna ur luften, t.ex. segmenten som behandlade "vårt egendefinierade språk" kändes ofta som om de inte hade någon (tydlig) koppling till det övriga materialet.

Seminarerna kändes som de hade en direkt koppling till tentan, föreläsningarna lite mindre så.

Nothing I can come up with at the moment. I have to admit that some seminar questions are pretty hard.

Record the lectures. It is not uncommon in KTH. It would be really helpful as Johan is very good in explaining things and it would be of tremendous help to go back to lectures and check again when you are actually starting to understand deeper.

What would you suggest to improve? (I worked: 30-32 timmar/vecka)

teaching how to code in elixir lectures or at least just in the exercises, seminars were very hard and out of context. Lectures content was hard to apprehend and understand, feels like they were for students who already knew a lot about the subject.

it would be revolutionary for the course, because of lack of interest to change anything from the teacher's side, there is no chronological order to follow the course, you do not know which book to read for every part.

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

More openness in the course, a safer environment to ask questions.



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)

Koda så mycket du kan, om möjligt, gör seminarierna och gå på dem.

Try to solve the seminar tasks, work together with others, and go to the scheduled exercises if you ever get stuck. Practice lots on exam questions about functional programming very early on since they're small problems that are a good starting point to gain further knowledge and to solve larger problems such as those that are discussed in the seminars.

Read the book.

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

Object oriented programming is garbage and leads to brain degeneration, please learn functional programming. exercism.io has good exercises, go there for practice.

You should treat the exercises and seminars as mandatory so that you keep programming regularly throughout the course as I found this to be an effective way to study for the exam and learn the content.

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

Start as soon as possible and look ahead through the slides.

Börja programmera tidigt. Gör om introduction övningen flera ggr så du förstår sen.

Learn recursion on trees etc by tracking the execution with paper and pen.

Följ seminarierna. Gör uppgifterna. Det mesta handlar om att få in det rekursiva tänket.

To try and focus on understanding the basics using the book and don't waste time on trying to solve problems that are too difficult to begin with

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

Börja programmera tidigt, och glöm inte bort att göra de övningar som finns tillgängliga.

Lägg ner mycket tid på att göra uppgifterna tidigt och var beredda på att tentorna ser väldigt annorlunda ut jämfört med de uppgifterna. Du måste först bli bekväm med att koda i Elixir. Därefter kan du börja plugga tentor.

Do all the seminars and start them early.

Gör seminarierna och så många övningsuppgifter som möjligt.

Program early. Practice trees.

Functional programming is a well invested time. It is not so uncommon as you think and it is well paid if you work with it in the industry.

What advice would you like to give to future participants? (I worked: 30-32 timmar/vecka)

It is very hard to google stuff about elixir, just hope for a pass.

I would recommend them to find good tutorials elsewhere and write many programs, go ask his majesty and get a philosophical answer to your problem, he might not even understand your question and he is afraid of saying that, but he runs brute force algorithm and tests every possible solution to get what you meant in the first place which is really hilarious.

The first seminars are ok but you will see and feel that it gets way too boring and many student not even show up in the so called *seminars* and exercise sessions.

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

I hadn't Time to go to the lectures, read and wrote and tried all code in the given course book. Make flashcards and code. DO OLD EXAMS!



Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 0-2 timmar/vecka)

I think the exam grading was harsh. With only 2 out of 10 points to spare to even pass - deducting an entire point for a small mistake seems excessive.

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

One of the most fun courses so far.

I felt like the lectures were sometimes not very structured, and it was hard to keep track of what was being asked as the teacher was always moving forward and never repeated the same thing again, which would've been necessary for my at least to follow

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

The new tentamen structure is much better the old had way too many questions.

MYCKET bra att erlang ersatts av elixir!

Good course. I am not sure if mandatory assignments would be a plus but it is a suggestion

Is there anything else you would like to add? (I worked: 30-32 timmar/vecka)

Exam was very hard, 60% should be enough to pass i think.

if there were competition for being a teacher in KTH, someone like his majesty would not be able to get the job, unfortunately being a teacher is not so lucrative for many I guess, if I were to take over this course I would better see the needs of the students and address it in a better way.

SPECIFIC QUESTIONS

RESPONSE DATA

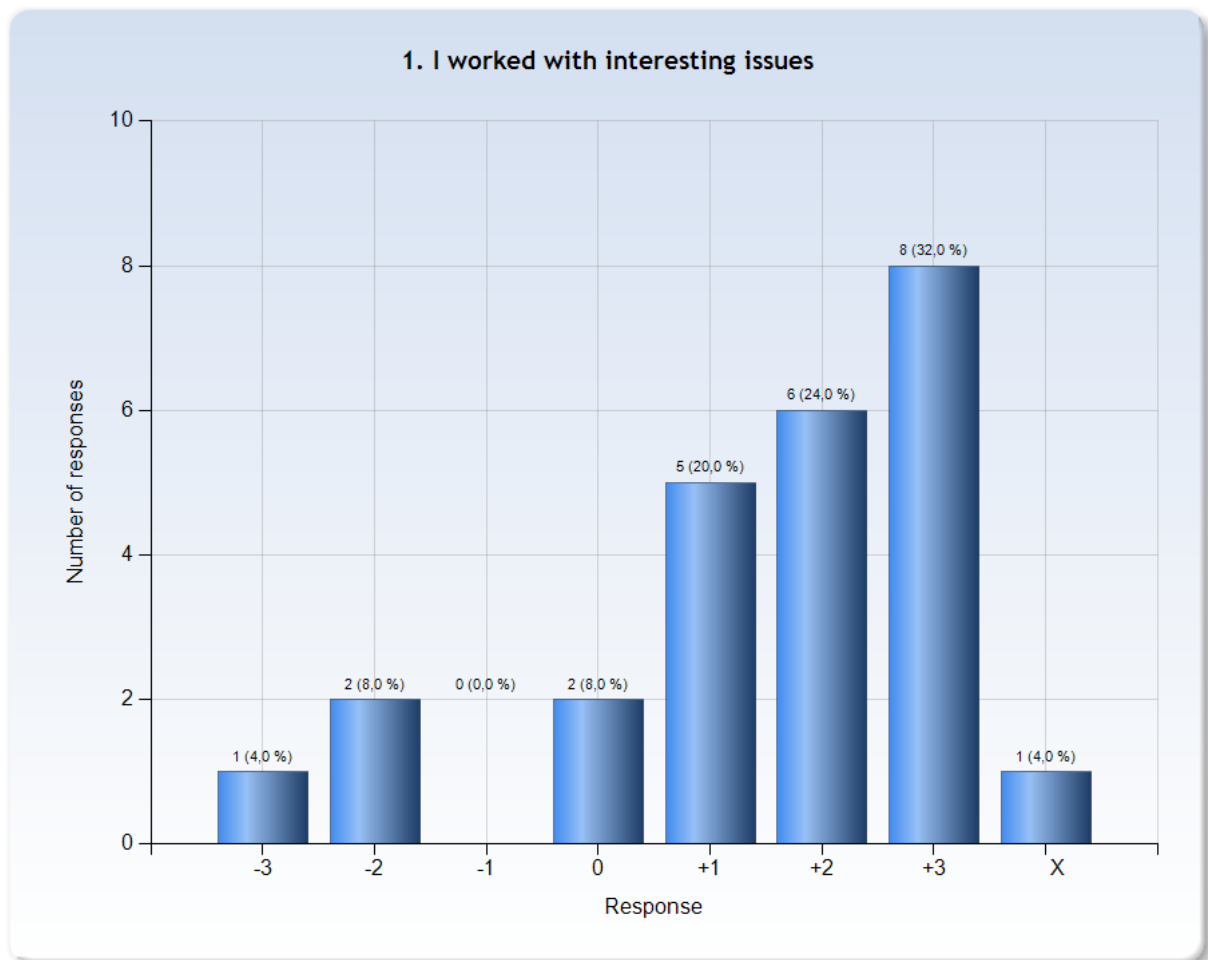
The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:

-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



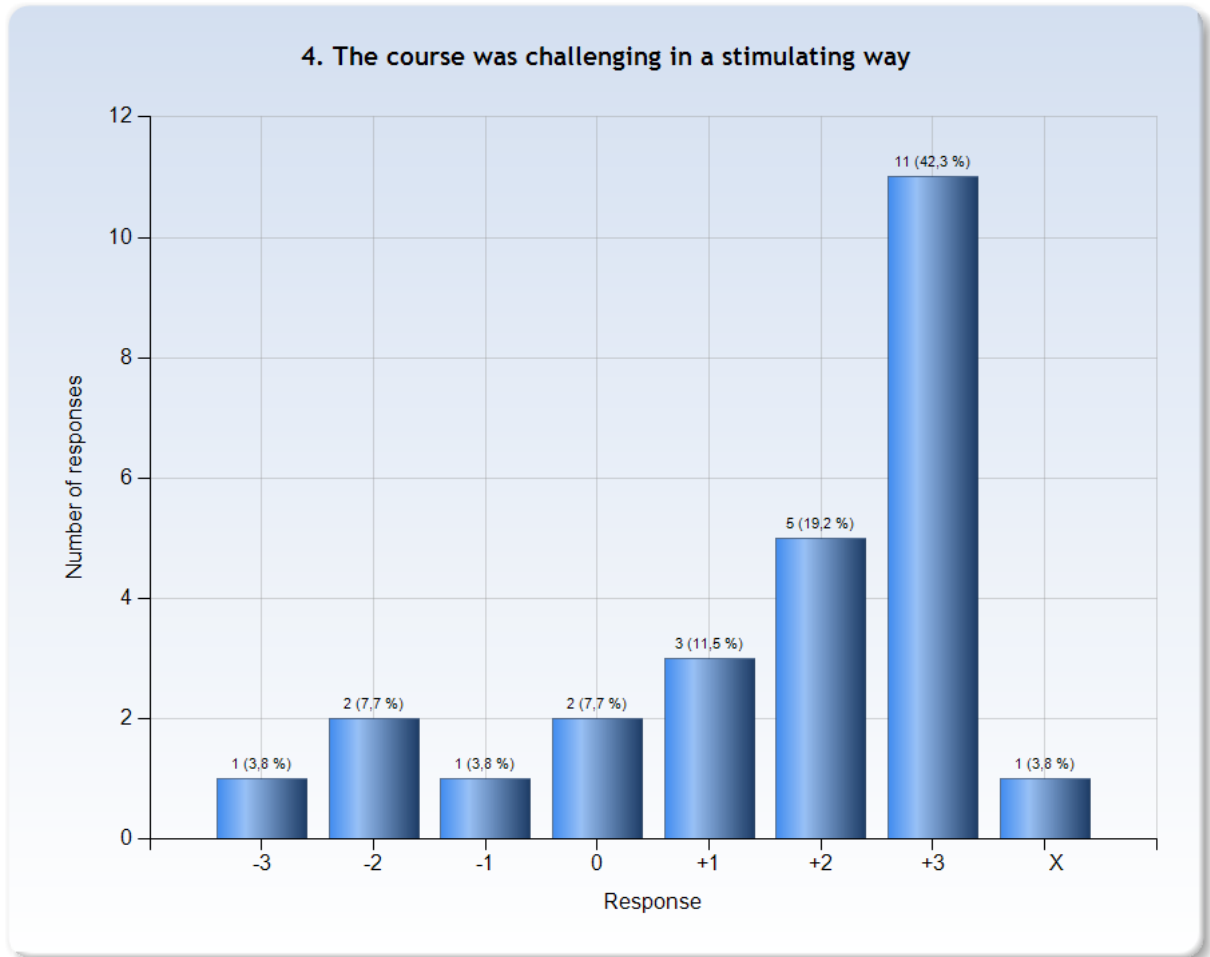
Comments

Comments (My response was: 0)

It was sometimes difficult to understand our assignments since they were quite abstract, it would've been nice with some more real life parallels

Comments (My response was: +3)

The application of concepts



Comments

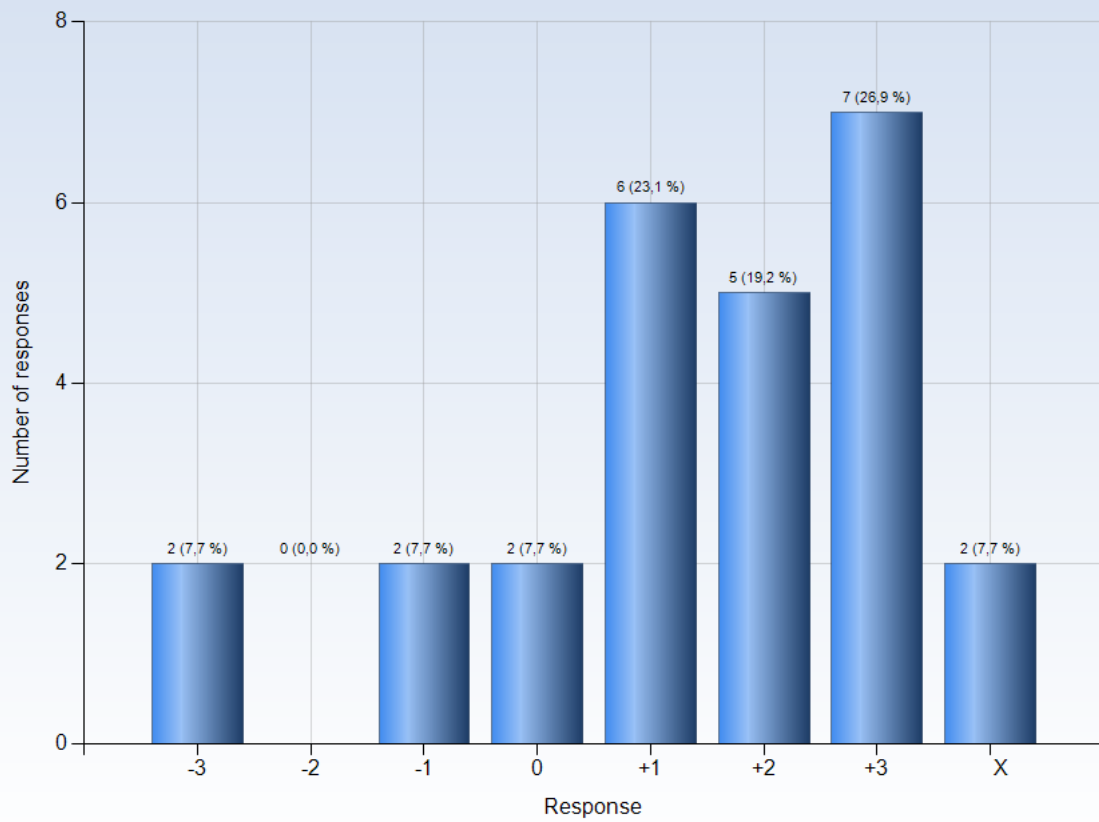
Comments (My response was: -2)

Seminarierna är svåra att hinna med

Comments (My response was: -1)

I found many of the problems to be too challenging, and since they were not obligatory it was hard to "force" myself to complete them, also due to the accompanying course having quite a heavy workload

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



Comments

Comments (My response was: +1)

Svårt att få feedback men lärarassistenterna var hjälpsamma

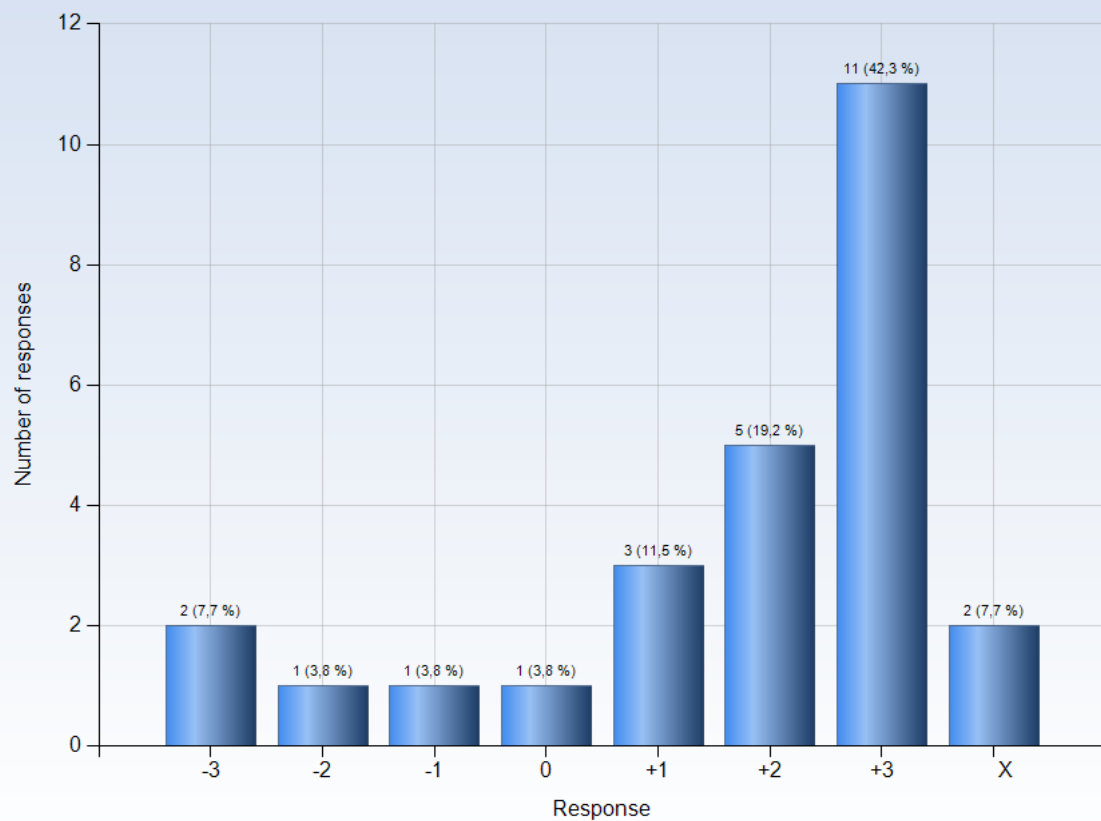
Comments (My response was: +2)

The exercises provide lots of practice.

Comments (My response was: X)

Deltog inte i handledningarna

16. The assessment on the course was fair and honest



Comments

Comments (My response was: -1)

binary is not a good way of evaluation, but ok!

Comments (My response was: +1)

Inte särskilt rättvis med så få poäng o ingen chans att få delpoäng

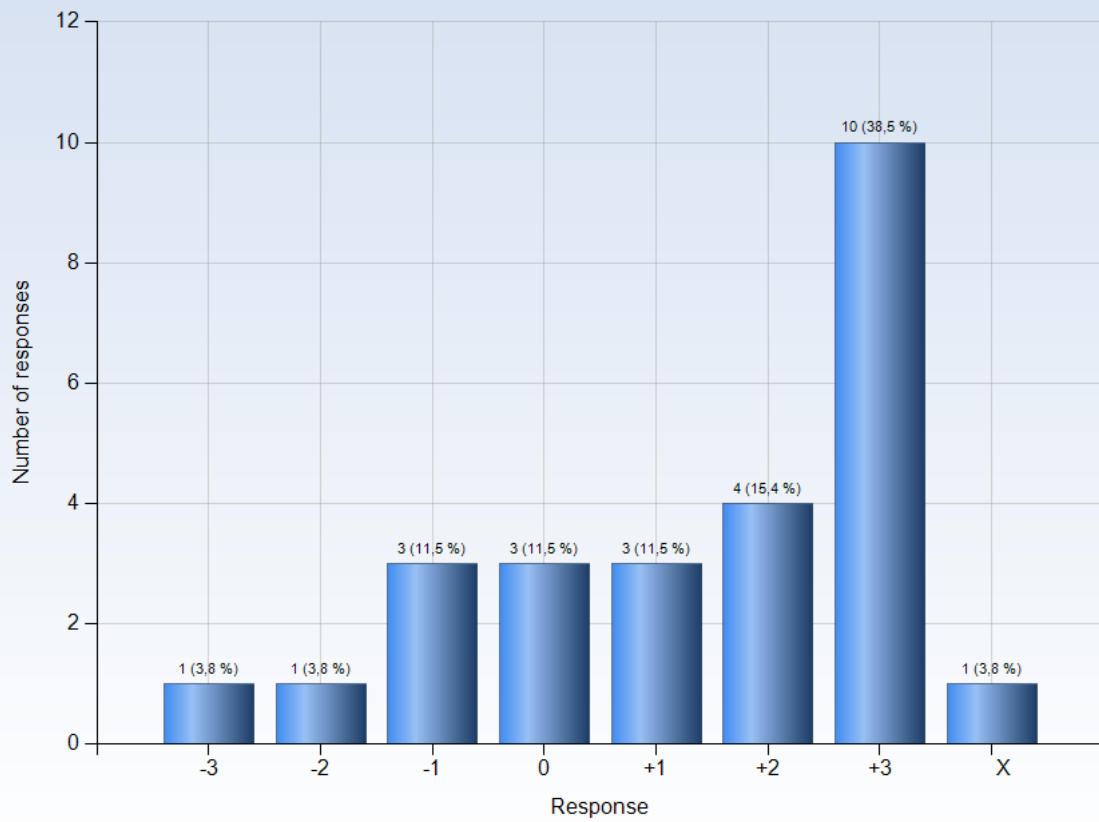
Comments (My response was: +2)

However I will take the exam in June for the first time seriously. But i trust Johan in being both fair and honest

Comments (My response was: +3)

The assessment was hard, but fair.

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



Comments

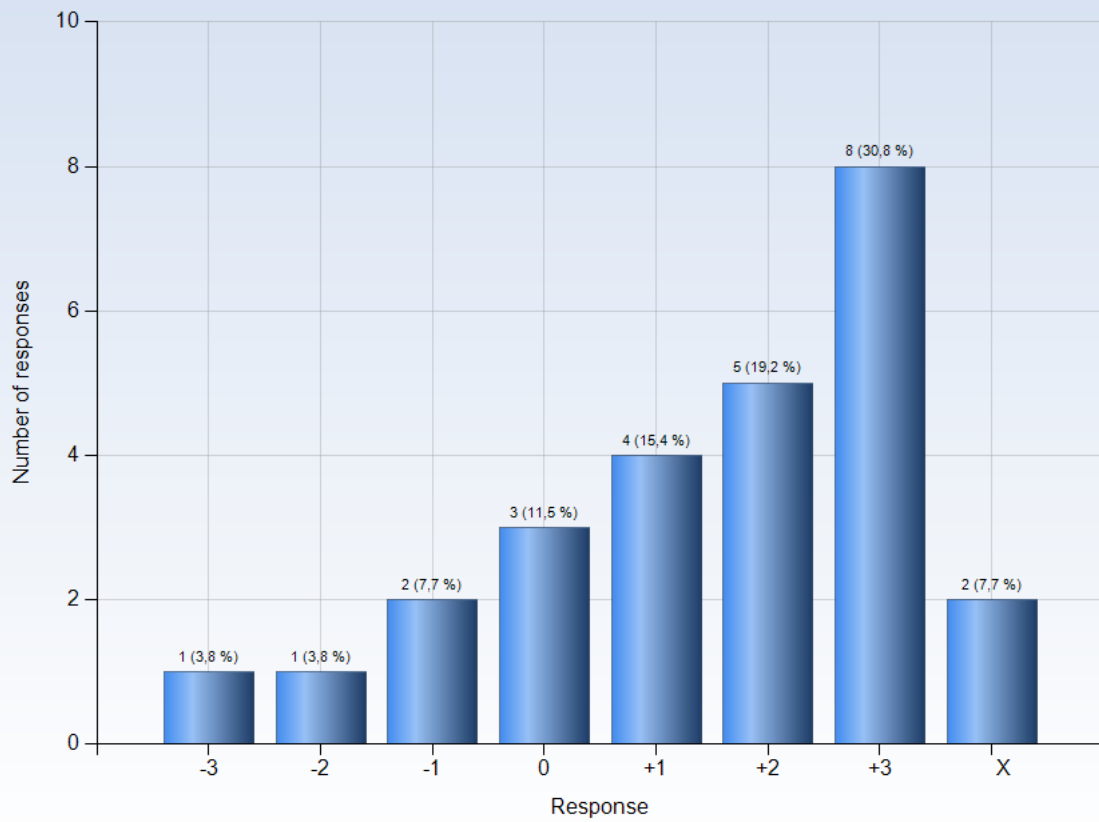
Comments (My response was: 0)

Tredjears student

Comments (My response was: +3)

Writing and discussing solutions with others is absolutely necessary.

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



Comments

Comments (My response was: -2)

the teaching assistant could not really help, because of lack of knowledge when discussing

Comments (My response was: +3)

Övningarna var super! Assarna kunde alltid hjälpa till.

Canvas