## Report - ID1019 - 2024-04-10

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 Montelius johanmon@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.

Studenterna har inte valt några kursrepresentanter så de synpunkter som studenter har haft har givit direkt till mig under och efter föreläsningar. Jag har sampla inte in någon information om vilken könstillhörighet studenterna har så dess aspekter har lämnats därhän. Studenter med speciella behov har fått sedvanlig hjälp antingen direkt eller via FUNKA.

#### **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.)

Informella diskussioner efter föreläsningar

#### **COURSE DESIGN**

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

Kursupplägget var som förra året men en revidering av uppgifterna gjordes innan kursen. Kopplingen mellan E-uppgifter och uppgifter för högre betyg var detta året bättre.

#### THE STUDENTS' WORKLOAD

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

Kan man hoppas. Med 14 svar av 136 deltagare så är kursenkäten inte mycket stöd.

#### 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?

Mycket bra, i stort sett så klarade alla kursen som följde kursen, En handfull studenter har inte gjort något moment under kursen och de kan inte räknas

### STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

Se bifogad kursenkät

### SUMMARY OF STUDENTS' OPINIONS

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

Se bifogad kursenkät.

### 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.

Helt klart en av KTH:s bästa kurser. Detta var dock sista gången den gavs vilket är lite synd med tanke på att kursen fyller en viktig position i utbildningen.

### **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?

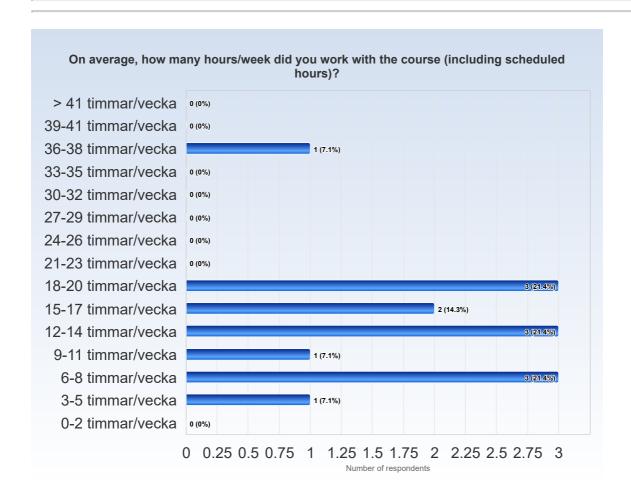
Jag för inte bok över könstillhörighet inte heller vilken nationalitet studenter har. Studenter som har svårt att skriva en fyrsidig rapport har haft större problem än övriga.

### PRIORITIZED COURSE DEVELOPMENT

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

Detta var som sagt sista kursomgången.

### **ESTIMATED WORKLOAD**



### Comments

### Comments (I worked: 3-5 timmar/vecka)

Most of the time I spent were doing the assignments and writing reports. This does not include attending lectures since I basically attended none

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

Föreläsningar + uppgifter + rapporter

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

I was generally faster at solving the given problems than other students.

I did two other courses at the same time as this one. And I was not able to spend as much time on this course as i would have liked. I also missed quite a few of the lectures. But spending three / two days on each exersice was enough to pass, usually. Sometimes it was quite stressful.

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

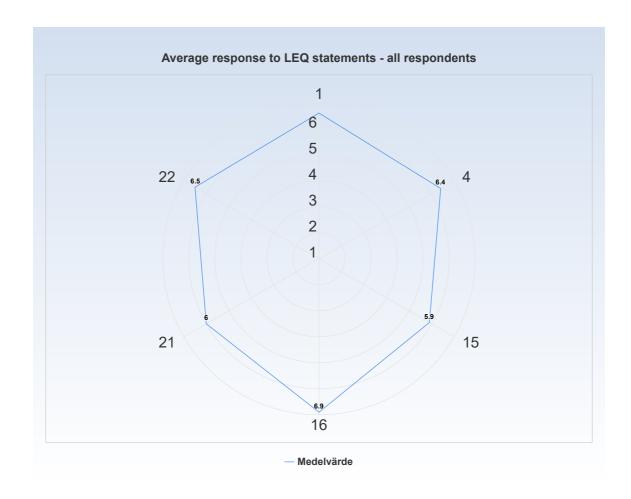
Well formed course, a bit hectic during a few weeks, yet still well laid out, especially due to the forgiving attitude to late assignments.

### 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 (I)

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
- I) 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

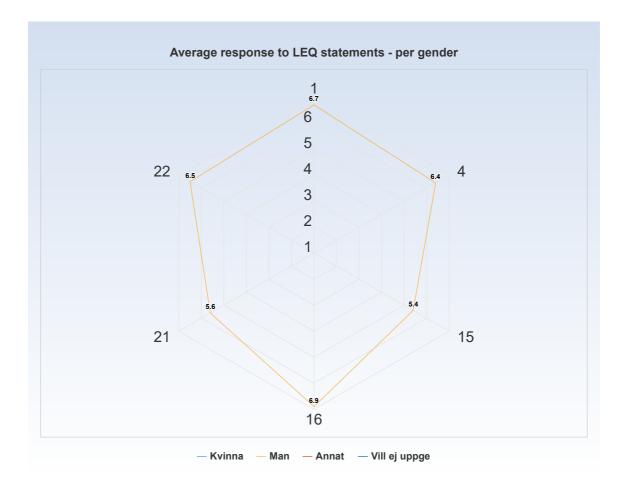
Bain, K. (2004). What the Best College Teachers Do, Chapter 5, pp. 98-134. Cambridge: Harvard University Press.

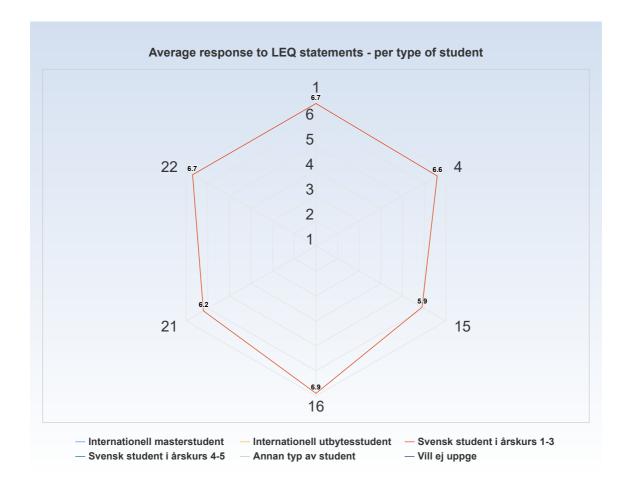
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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.



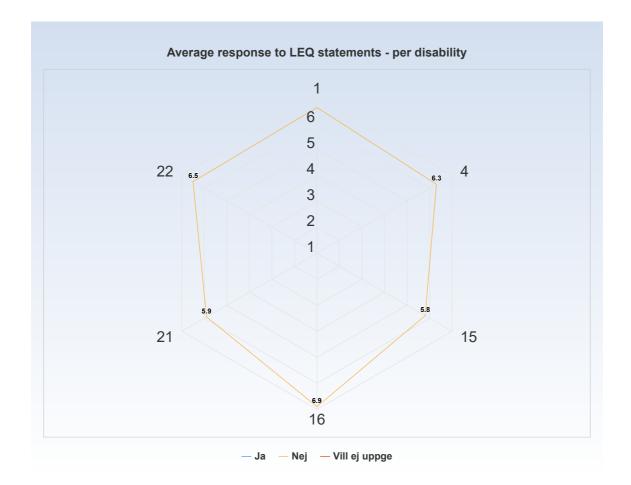


Comments (I am: Svensk student i årskurs 1-3)

Reasoneble difficulty

Im an international student doing a swedish kandidat and even in this case the course was easy to follow.

Comments (I am: Annan typ av student)
International bachelor's student



Comments (My response was: Ja)

Dyslexia

### **GENERAL QUESTIONS**

What was the best aspect of the course?

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

The assignments. They were fun and gave a feeling of progression. Each week the assignment was a bit more difficult than the last. The programming language used was a good language and helped me dive into a field of programming that I had previously ignored.

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

Informativa och roliga föreläsningar & seminarier. Bra och rättvis betygsystem. Intressanta och nyttiga uppgifter och bra struktur på kursen.

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

The nature of the tasks, and that we learnt different things by making a " mini project".

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

Fun problems! Great teacher!

Föreläsningarna är givande och läraren är komisk

The interpretor assignment was very useful and interesting. Overall very interesting exercises. The problems that were more "real" problems were the most fun. Like mandelbrot and interpretor raytracer.

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

Plenty of coding, serier knowledge from seminars

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

Amazing teacher and a fun subject.

Det bästa med kursen var definitivt Johans föreläsningar. En grym föreläsare som vet hur man håller en föreläsning intressant och levande.

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

Covered practical examples which seem to be a good stepping stone for later advanced programming.

Also covered an interesting language, not as common as the major languages, in the functional programming domain. Which gave a nice taste for a different way of programming than what may be mostly common.

What would you suggest to improve?

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

Ingenting

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

fewer problems but problems that requires more work.

Gärna om läraren kunde jämföra med språk som studenterna redan kan, t.ex. hur skulle en tupel eller atom kunna jämföras med datastruktur i java, skillnader och likheter.

Clearer guidelines on what exactly i am expected to do on some assignment. Sometimes i felt that i did not exactly what to write about. And in how much detail.

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

The interpreter task was a lot gardet than the rest of the higher grades

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

Möjligtvis om man hade minimerat antalet inlämningar, framförallt eftersom kursen som gick parallellt också hade många obligatoriska moment utöver de uppdelade tentamen momenten som var lagda under kursens gång och inte vanliga tenta tillfällen i slutet av tenta perioden, så var det stundvis svårt att hinna med alla moment i båda kurserna.

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

Nothing

What advice would you like to give to future participants?

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

Kursen avveklas ju..

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

Att vara mån om att funktionella språk skiljer sig mycket från objektorienterade språk

Google and read about the subject before reading the assignment itself.

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

Advent of code is fun and Will help

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

Make sure you understand the basics. Otherwise, you'll waste time.

Gå på föreläsningarna och utnyttja att ni har en entusiastisk lärare som brinner för att lära ut.

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

Really allocate time to the assignments the first three weeks. Complete them early. Do not overthink stuff. Go to the lectures and seminars!

Is there anything else you would like to add?

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

Johan är väldigt duktig, hoppas att han ger en ny kurs som man kan välja!

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

Johan Montelius is amazing.

Gärna hjälp med Visual studio code av läraren om man behöver det, eftersom de flesta använder det.

Could be clearer about what happens when you miss a deadline. And a structure for comlementing missed assignments. Like a extra deadline at end of course. Where you can turn in 1/2/3 old assignments.

Is there anything else you would like to add? (I worked: 36-38 timmar/vecka)
I really enjoyed this course! A+

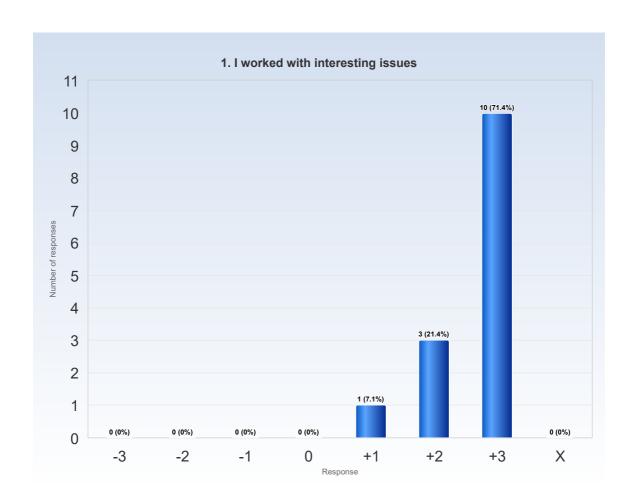
# **SPECIFIC QUESTIONS**

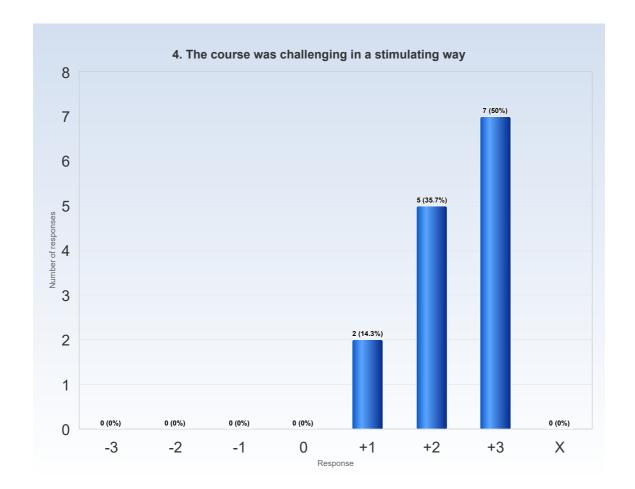
## **RESPONSE DATA**

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

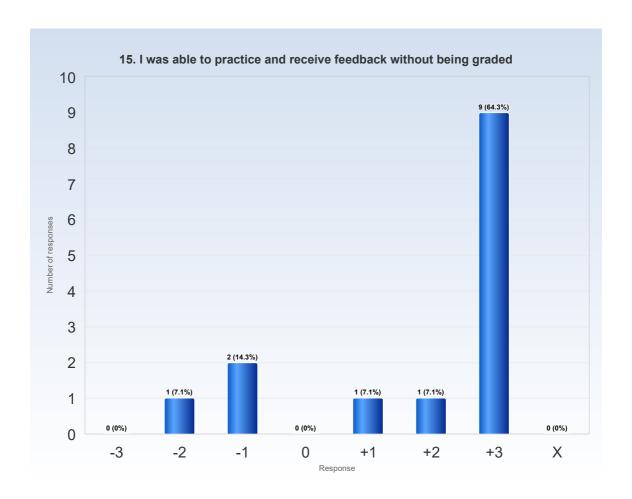
X = I decline to take a position on the statement

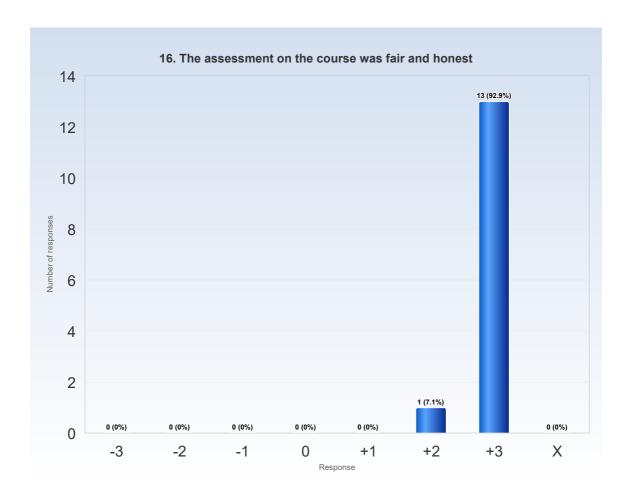


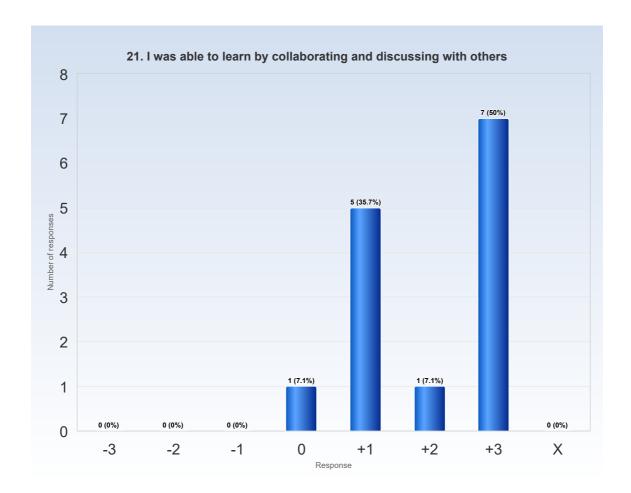


Comments (My response was: +1)

Course was fun but not challenging for me, per se

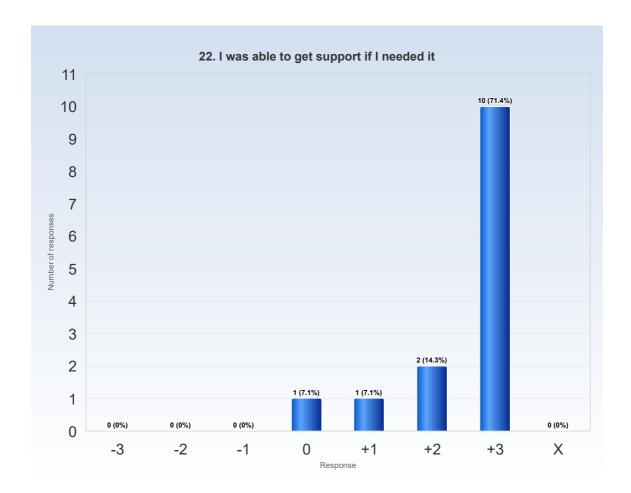






Comments (My response was: +1)

Didn't really need to plus the course didn't require much of that.



Comments (My response was: +2)
Didn't need much tbh

Comments (My response was: +3)
Väldigt närvarande och hjälpsam lärare som gärna förklarar om en elev fastnat!