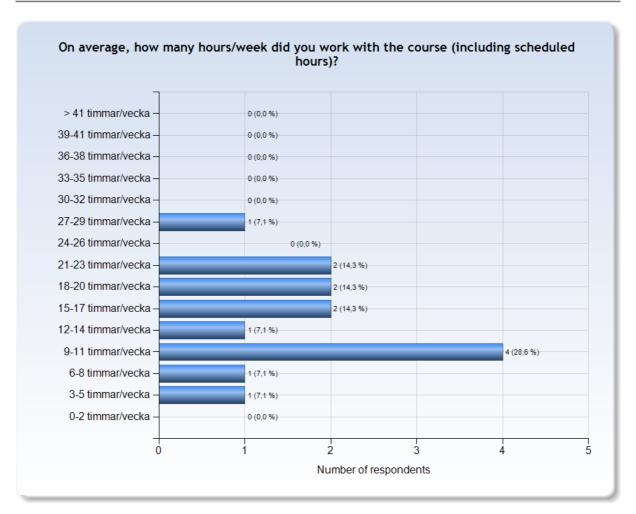


# ID2204 - 2018-06-28

Antal respondenter: 52 Antal svar: 14 Svarsfrekvens: 26,92 %



## **ESTIMATED WORKLOAD**



#### Comments

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

I followed most of the courses, which are very interesting. And if I couldn't the courses are registered online which is perfect! I lost a lot of time trying to install Gecode. And the code part was very long for me as I'm not use to C++.

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

The course material was good and easy to digest, which made for a good balance.

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

Most of the time were spent on trying to figure out how gecode works.

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

Most of the time used to resolve the homework.



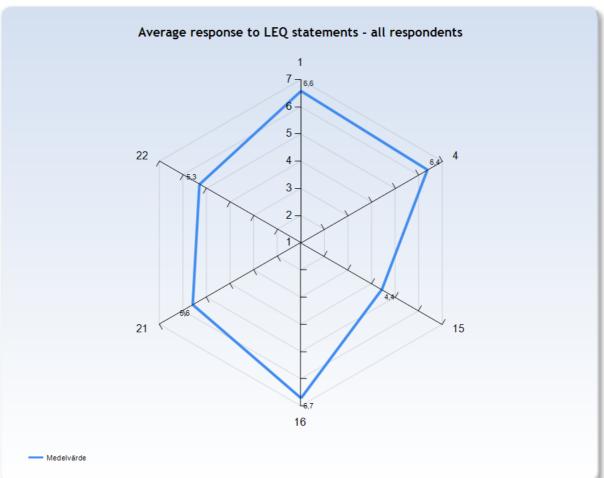
## LEARNING EXPERIENCE

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.

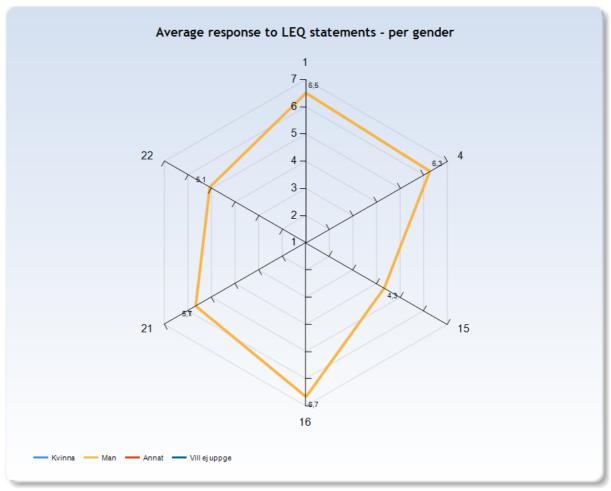
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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.

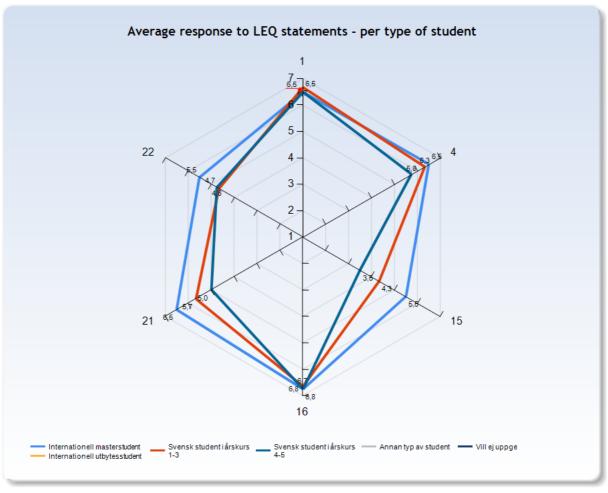




Comments (I am: Kvinna)

There is not a lot of women in the course, but they're not shy and spontanious. So no problem at this level.



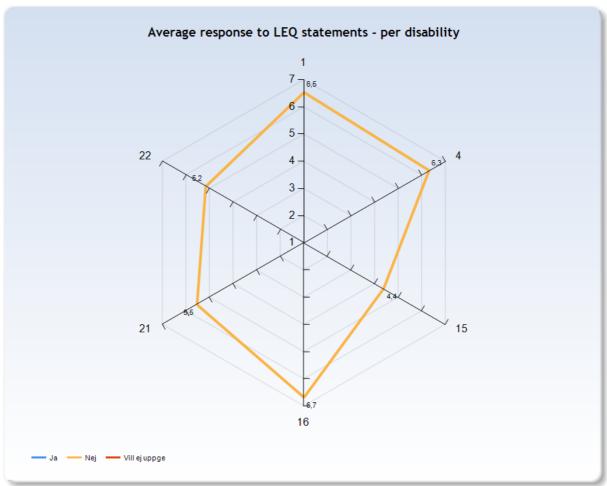


Comments (I am: Internationell utbytesstudent)
It was easy to find a lab partner throught canvas.

Comments (I am: Svensk student i årskurs 1-3)
A little hard to understand the math in the presentations.

# Comments (I am: Svensk student i årskurs 4-5) third year student





Comments



### **GENERAL QUESTIONS**

#### What was the best aspect of the course?

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

The interest that the professor brought, using example problems to express relevant way of research.

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

The theory was very interesting

Interesting to learn a new way to solve problems

Very good lecturer who made the lectures interesting and educational.

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

The first two lectures were the best lectures I've ever had at KTH during my time here. Christian is an awesome lecturer and speaker.

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

Best aspect of the course: Christian Schulte

You are a great teacher Christian!

Having a professor whose research field the given course is about.

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

Interesting problems!

It really showed how modelling and using the right tools for the task can help you solve very complex problems really trivially.

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

Completely new field and paradigms for me

Real world problem and the best way to solve it

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

The lectures were really good.

#### What would you suggest to improve?

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

I would suggest that there are labs where we can do exercises on constraint programming. It was sometimes hard to do the assignments without any practise.

We really need some course materials. If there was some simple course material like the presentations but with more explinations and examples, that would be perfect.

Perhaps some more amount of exercise on the labs. Instead of 4 theory questions there could be some simpler exercises that guides the student through Geocode to get more familiar with it.

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

Help more with how to setup gecode.

Grade assignments in time.

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

The questions in the exam felt a little bit off from the course work/lectures.

Earlier feedback for the homework

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

Gecode exercises with an assistant

The lecture schedule (4hr Friday afternoons). It was nice that we got to leave earlier most of the time and catch up during the last extra lecture.

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

Maybe some way to test the output of the labs, sometimes it felt like you were just wandering in the dark not knowing what's going on Change the evaluation from written exam to project



#### 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)

Don't be scared about the theoritical part and get use to Gecode as soon as possible.

What advice would you like to give to future participants? (I worked: 9-11 timmar/vecka)

Do the assignments well on time.

Focus on theory, the practice is covered when doing labs.

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

Try to find people in the class that you can discuss assignments with.

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

Attend the lectures and do the homeworks.

Learn new and important concepts of a lecture before the next one.

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

Read MPG!

You need to have a solid understanding of discrete mathematics, especially all the different notations.

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

Start early, attend all lectures

#### Is there anything else you would like to add?

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

Really good lecturer in the course - many other KTH lecturers should learn from him.

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

This is definitely one of the more interesting courses I have attended at KTH. Modelling and using the right tools for the task is something that has been talked about before during my education at KTH, but this course really showed in practice why it is so important.

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

Christian is probably the best lecturer I've had at KTH

## SPECIFIC QUESTIONS



## **RESPONSE DATA**

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

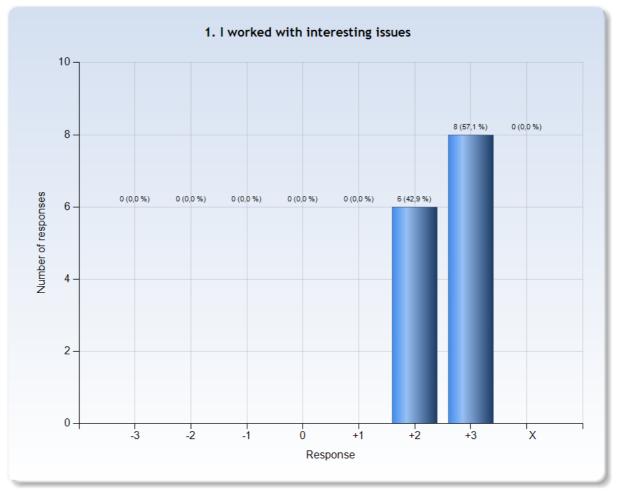
-3 = No, I strongly disagree with the statement

0 = I am neutral to the statement

+3 = Yes, I strongly agree with the statement

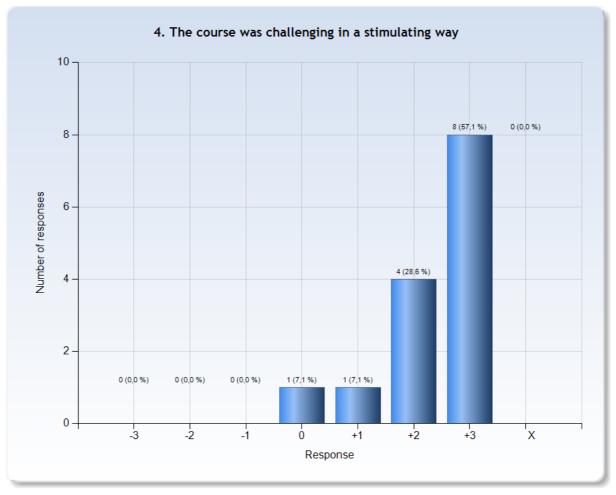
X = I decline to take a position on the statement





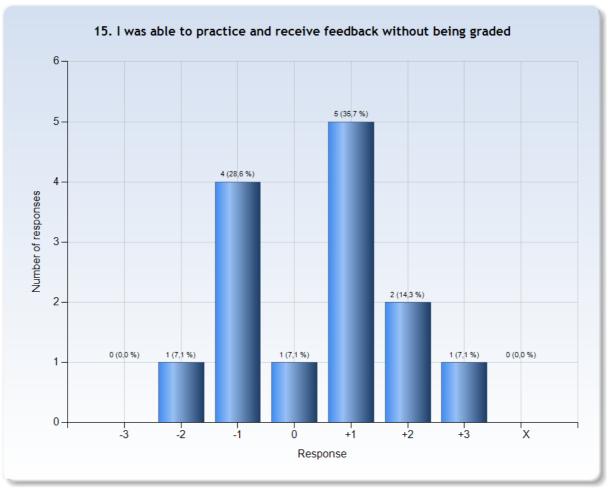
Comments (My response was: +2)
Most of the assignments were very interesting.





Comments (My response was: 0)
It was a bit too challenging just to understand how to configure something in gecode, instead of the constraint programming itself.

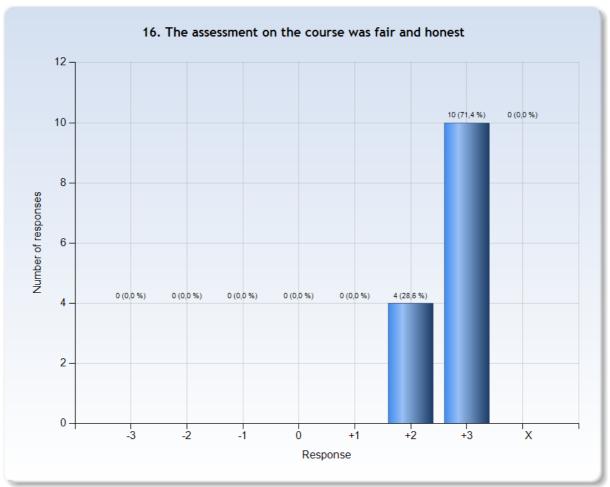




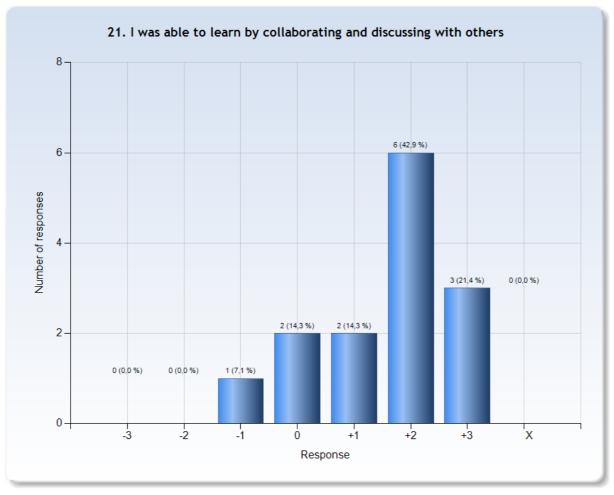
Comments (My response was: -2)
No feedback at all during the course.

Comments (My response was: -1)
All moments of the course were graded









Comments (My response was: -1)
This is mostly on me of course, I should have discussed with other classmates more.



