

## **Course evaluation DD2365, spring 2024**

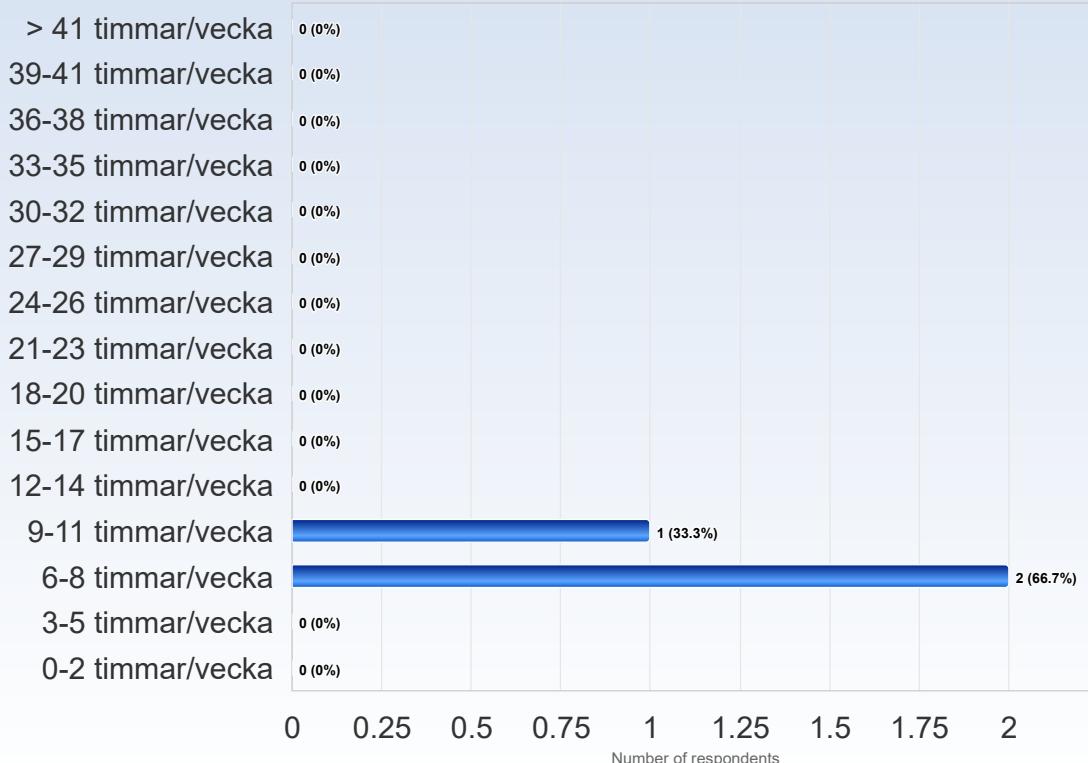
The first half of the course consists of a set of laboratory assignments, which provide tools for the second half of the course in the form of individual projects. (This year there were too few students that responded to the course evaluation questionnaire to generate statistics.)

No big changes were made for this year.

This year there were too few students that responded to the course evaluation questionnaire to generate statistics so instead the questionnaire from 2023 is included.

## 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)

It really depends which part of the course it is. During the personal project I was working a lot, and at other moment a bit less.

## LEARNING EXPERIENCE

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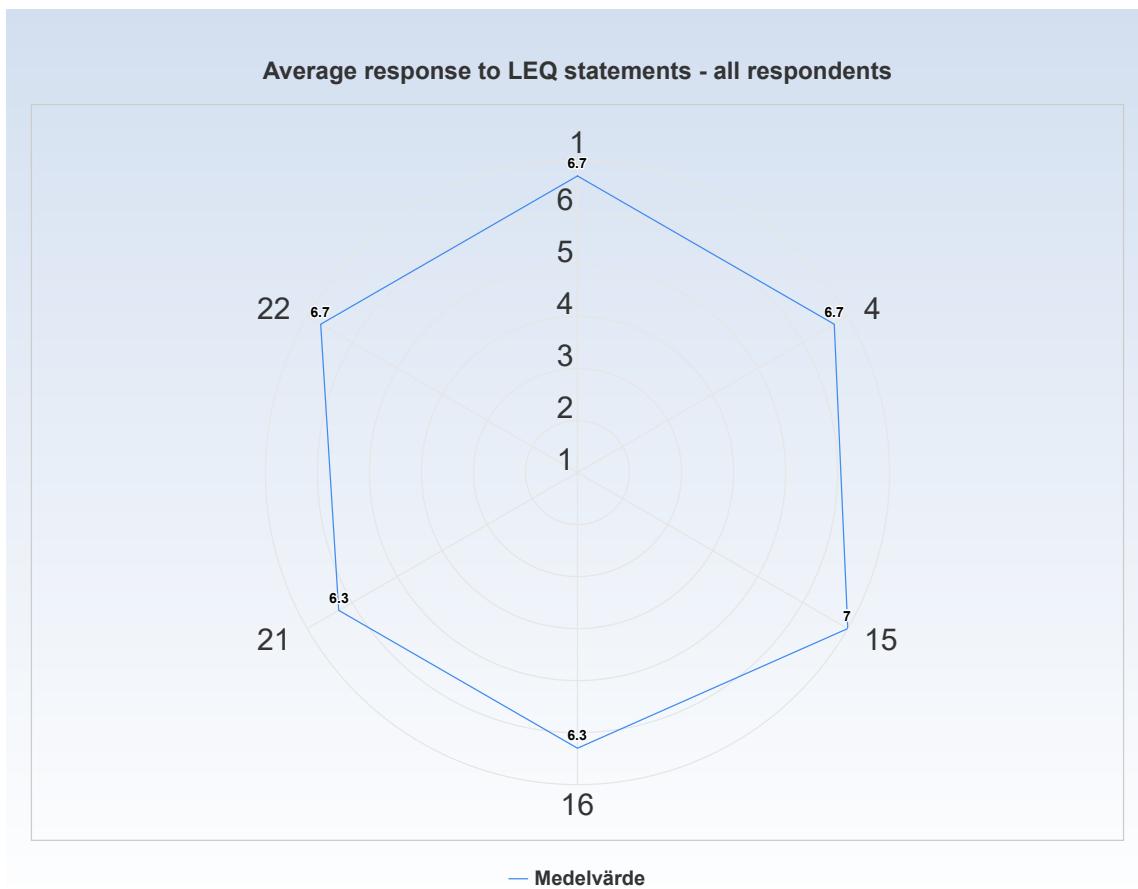
The polar diagrams below show the average response to the LEQ statements for different groups of respondents (only valid responses are included). The scale that is used in the diagrams is defined by:

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.

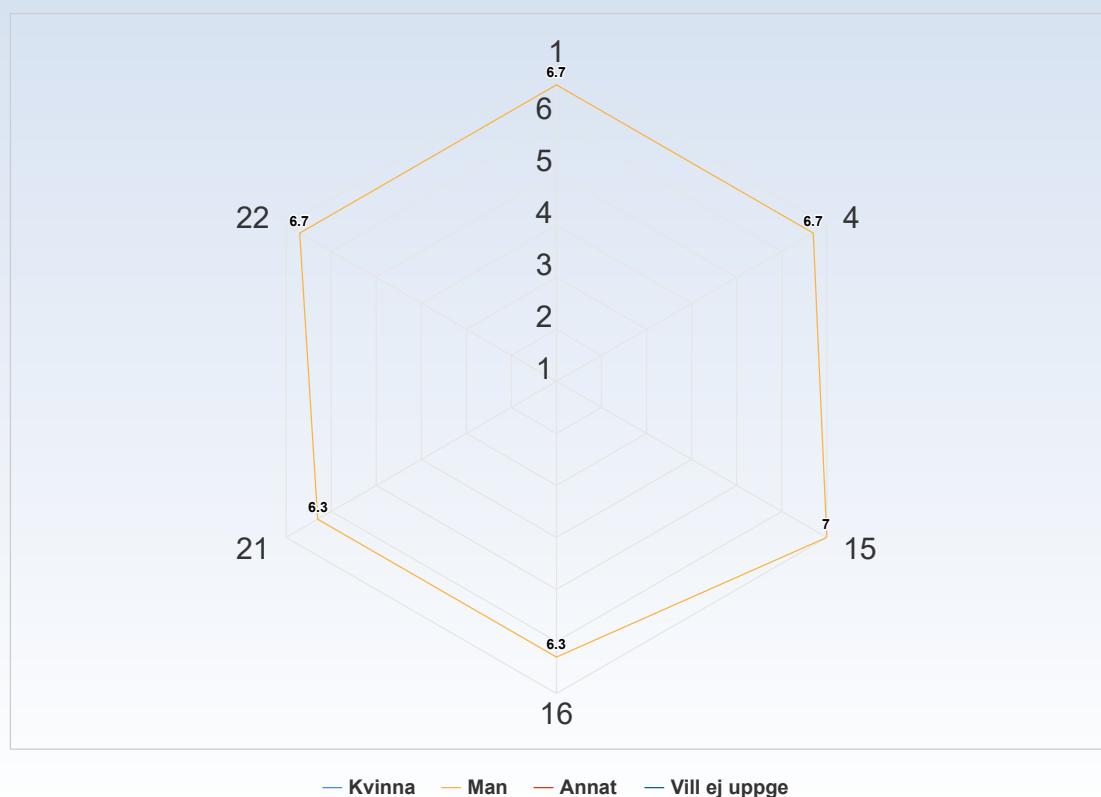
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

Elmgren, M. & Henriksson, A-S. (2014). *Academic Teaching*, Chapter 3, pp. 57-72. Lund: Studentlitteratur.

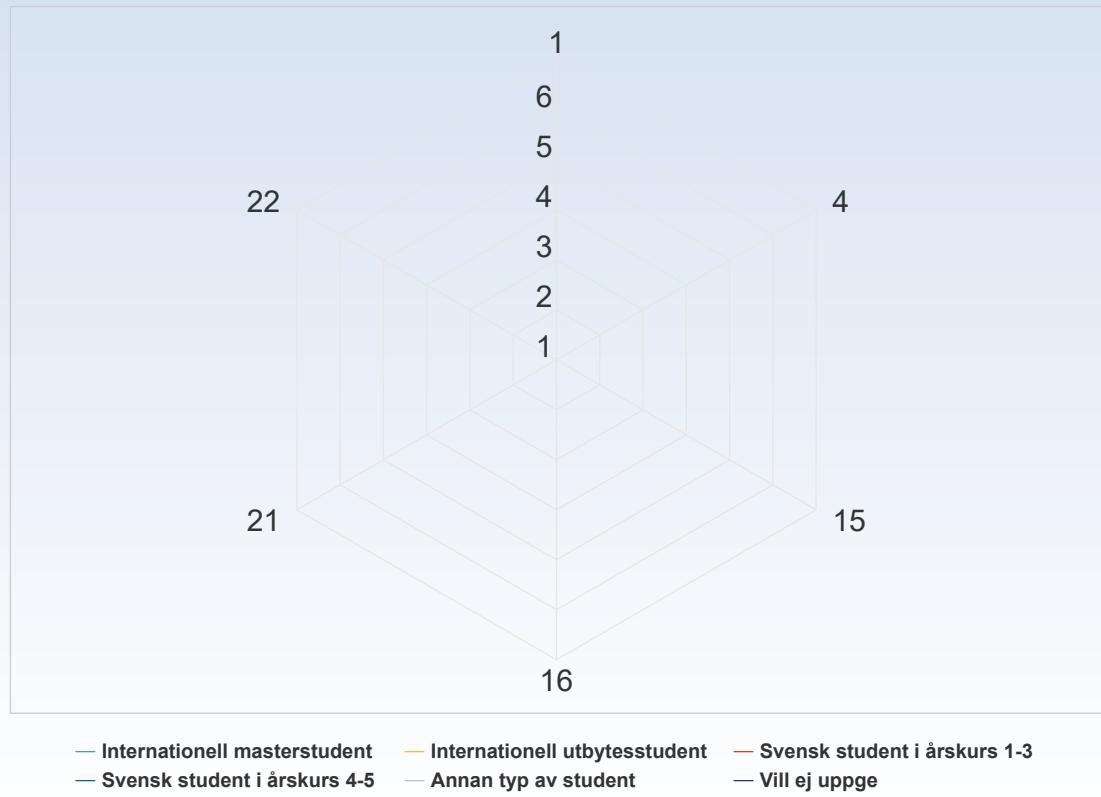
Kember, K. & McNaught, C. (2007). *Enhancing University Teaching: Lessons from Research into Award-Winning Teachers*, Chapter 5, pp. 31-40. Abingdon: Routledge.

Ramsden, P. (2003). *Learning to Teach in Higher Education*, Chapter 6, pp. 84-105. New York: RoutledgeFalmer.

Average response to LEQ statements - per gender



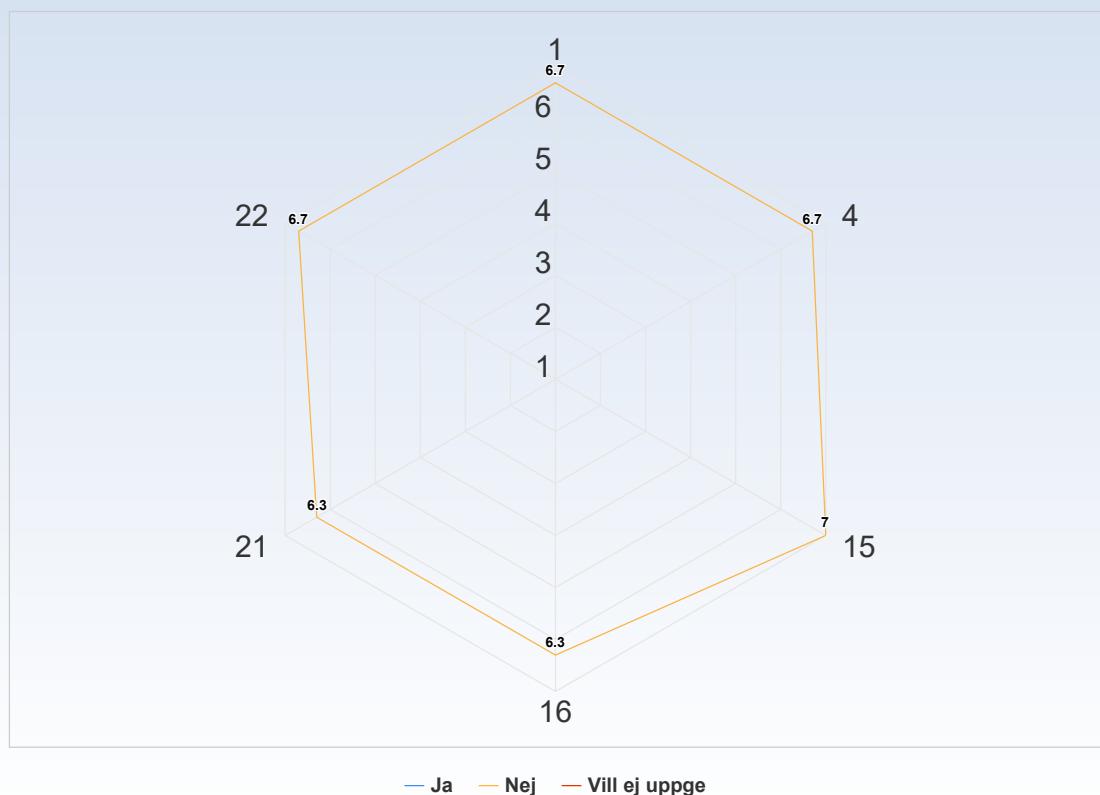
### Average response to LEQ statements - per type of student



#### Comments

Comments (I am: Internationell utbytesstudent)  
Double-degree student

Average response to LEQ statements - per disability



## GENERAL QUESTIONS

What was the best aspect of the course?

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

I really liked the two-phase approach (lectures and assignments before the project) and the continuous feedback during the project phase.  
Succeeding to learn something new and quite hard.

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

I liked that we could discuss the progress of the project weekly, see how others are doing and exchange ideas.

What would you suggest to improve?

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

Tempo on the lectures is quite high, but that seems to be intended since some previous knowledge is required.  
Maybe at the beginning a link to fenics tutorials can help start the assignments.

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

Provide more examples with syntax. In the project examples from lab reports helped a lot but still sometimes it was the main challenge to figure out how to implement the idea. Maybe could add a task for next students taking this course to create a short description of how they solved their most challenging implementations, thus creating kind of a collection. Then extend it each year so students can attempt more challenging projects without getting stuck with the code syntax.

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)

Search a lot on internet to find tutorials and helps for the coding part.

Start early with the project to get valuable feedback along the way.

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

When working on the project make sure to take very small steps - start with almost a trivial version of the problem, make sure it works. Then gradually add to that.

## SPECIFIC QUESTIONS

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## RESPONSE DATA

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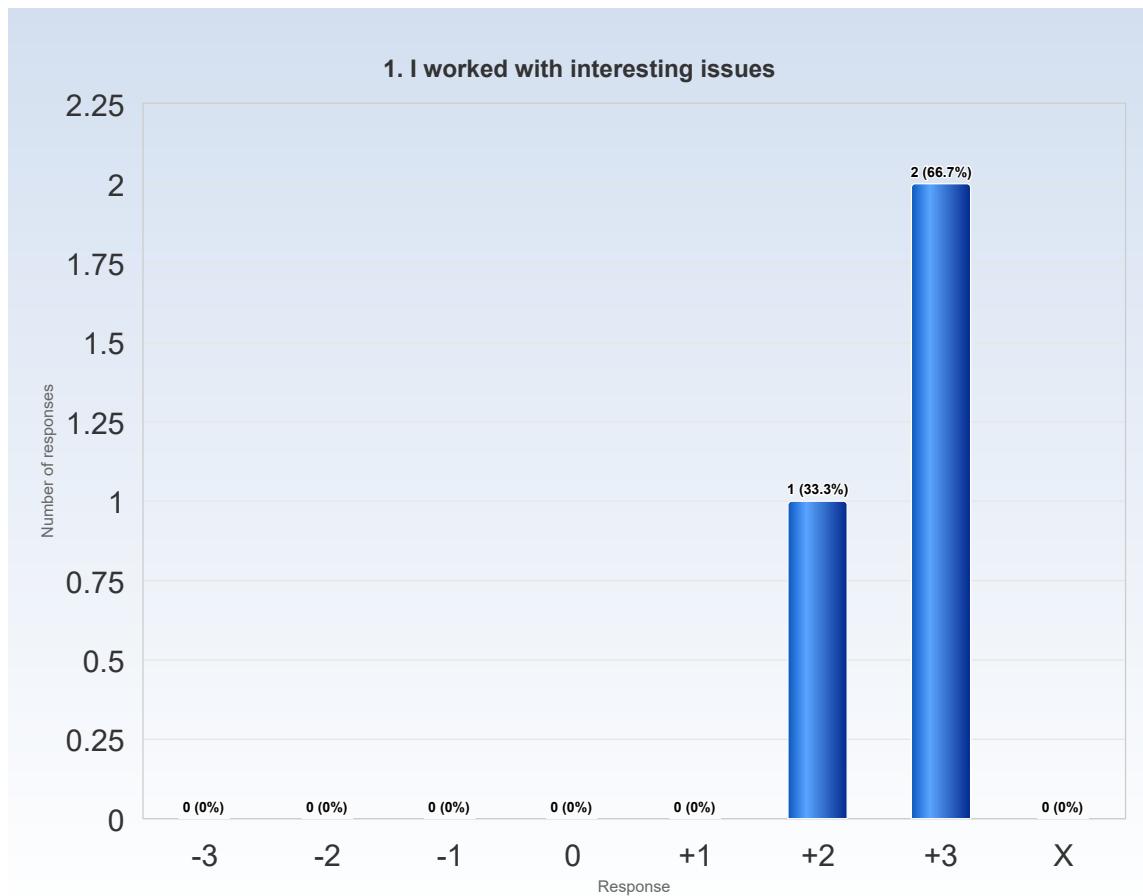
The diagrams below show the detailed response to the LEQ statements.  
The response scale is defined by:

-3 = No, I strongly disagree with the statement

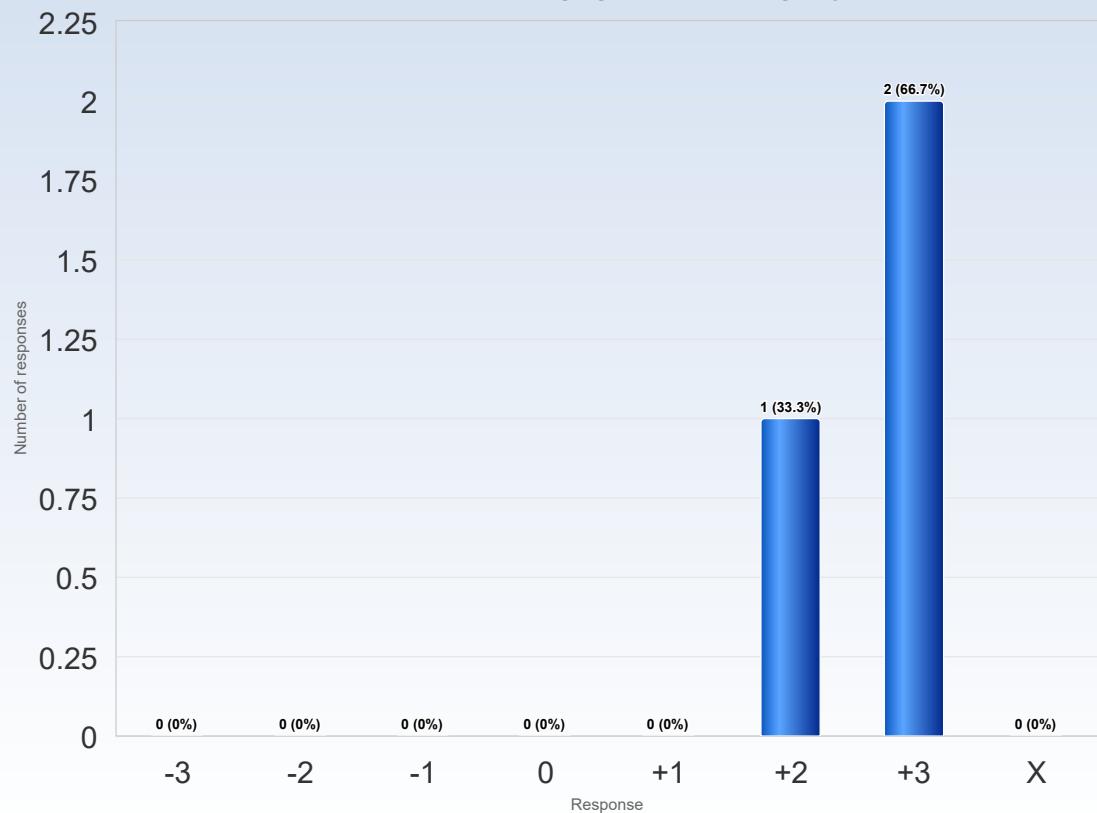
0 = I am neutral to the statement

+3 = Yes, I strongly agree with the statement

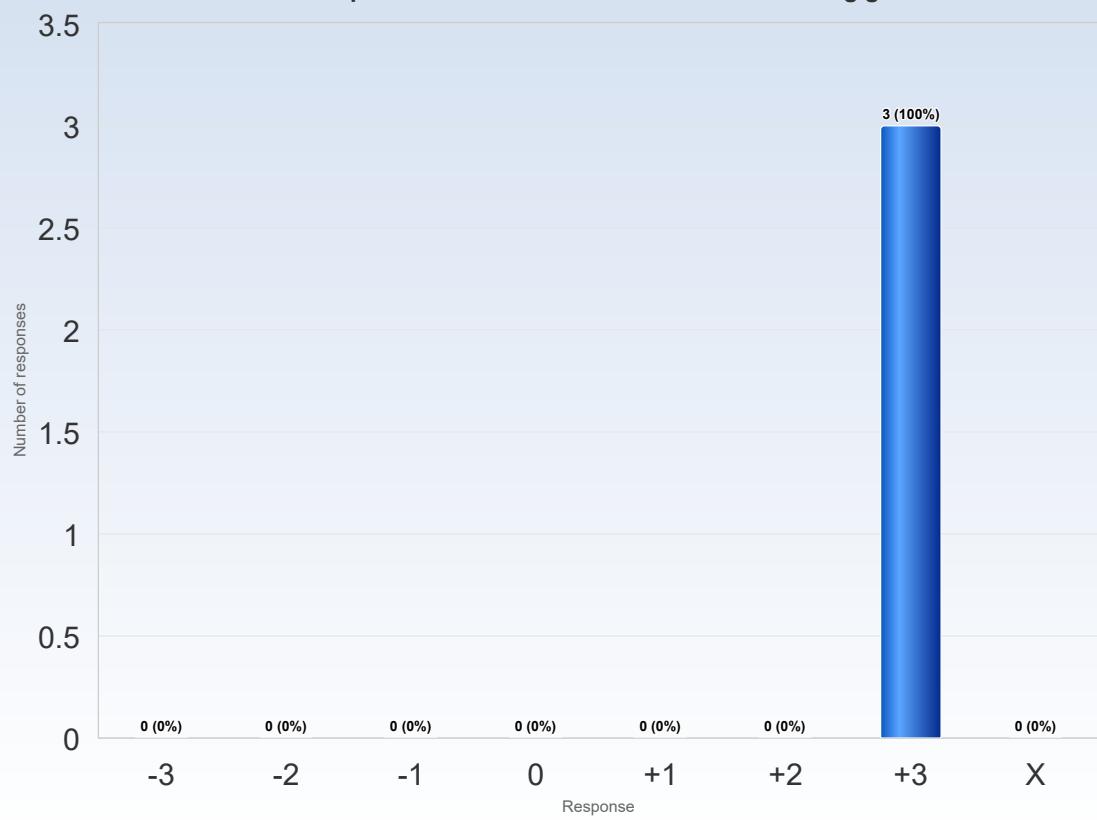
X = I decline to take a position on the statement



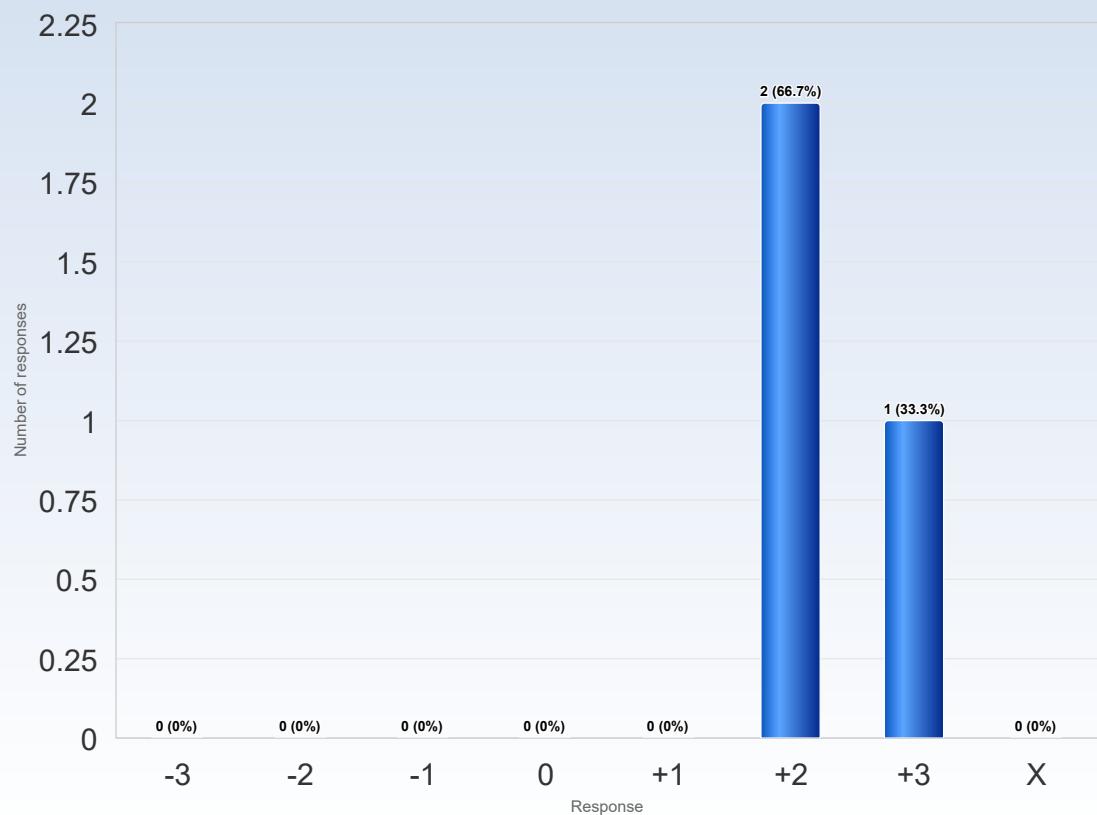
**4. The course was challenging in a stimulating way**



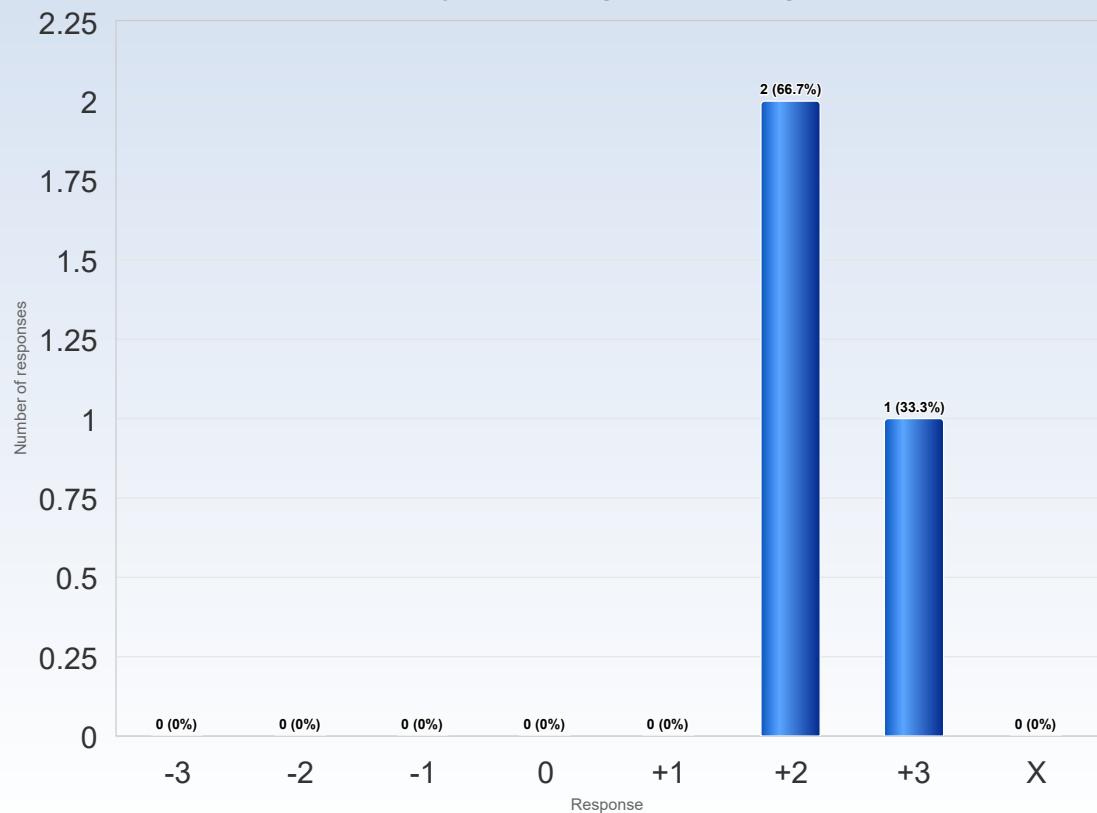
**15. I was able to practice and receive feedback without being graded**



**16. The assessment on the course was fair and honest**



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



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

