# ESTIMATED WORKLOAD

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

| Category | Respondents |
|---|---|
| > 41 timmar/vecka | 0 (0%) |
| 39-41 timmar/vecka | 0 (0%) |
| 36-38 timmar/vecka | 0 (0%) |
| 33-35 timmar/vecka | 0 (0%) |
| 30-32 timmar/vecka | 0 (0%) |
| 27-29 timmar/vecka | 1 (11.1%) |
| 24-26 timmar/vecka | 0 (0%) |
| 21-23 timmar/vecka | 0 (0%) |
| 18-20 timmar/vecka | 0 (0%) |
| 15-17 timmar/vecka | 0 (0%) |
| 12-14 timmar/vecka | 1 (11.1%) |
| 9-11 timmar/vecka | 4 (44.4%) |
| 6-8 timmar/vecka | 3 (33.3%) |
| 3-5 timmar/vecka | 0 (0%) |
| 0-2 timmar/vecka | 0 (0%) |

Number of respondents

**Comments**

Comments (I worked: 9-11 timmar/vecka)
Depends a lot on the week
It was more of a practical coursework and hence the work hours were expected to be high.
ok

Comments (I worked: 12-14 timmar/vecka)
Most of the work comes from the project.

Comments (I worked: 27-29 timmar/vecka)
A lot of own work has to be done. But was expected since it is a project course.
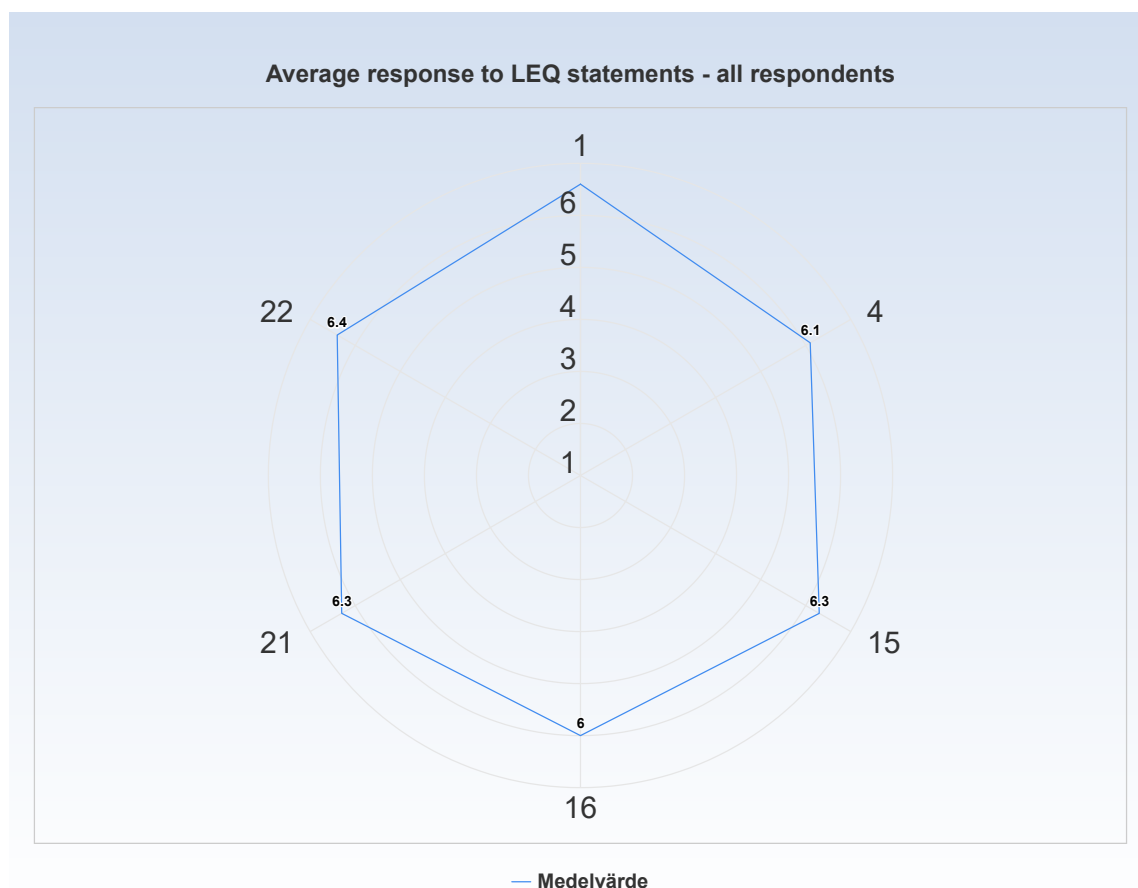
# LEARNING EXPERIENCE

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.
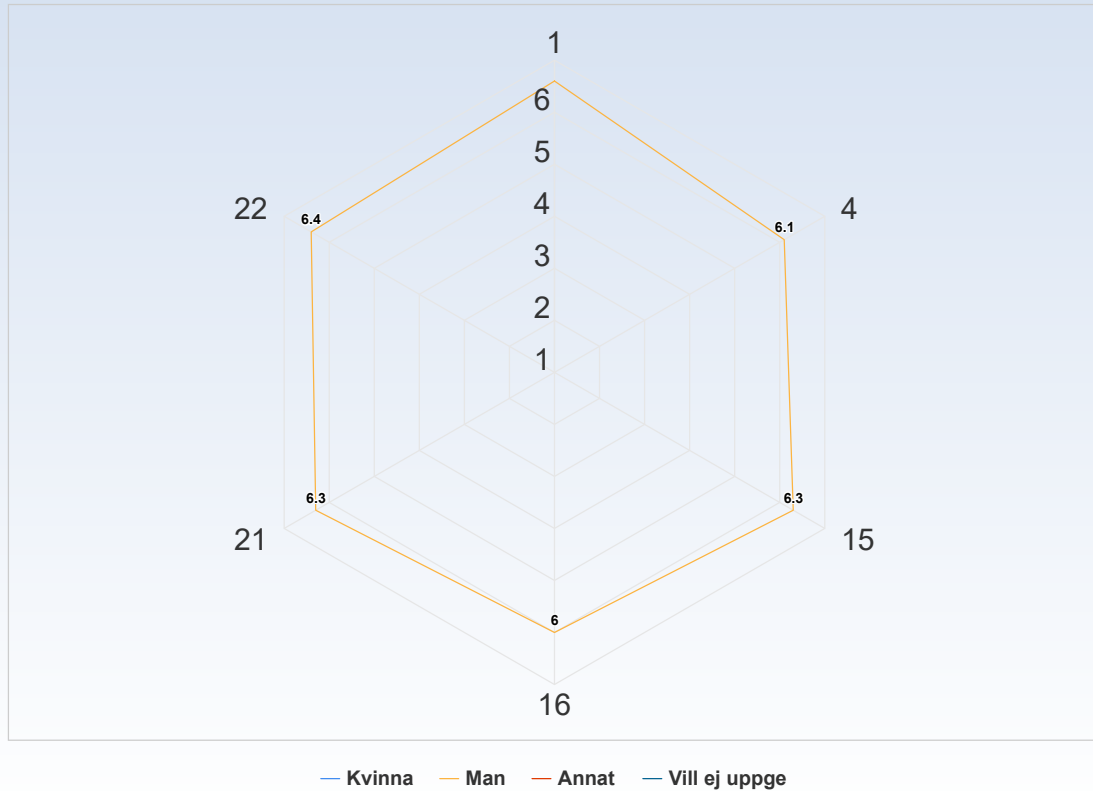

Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.


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.
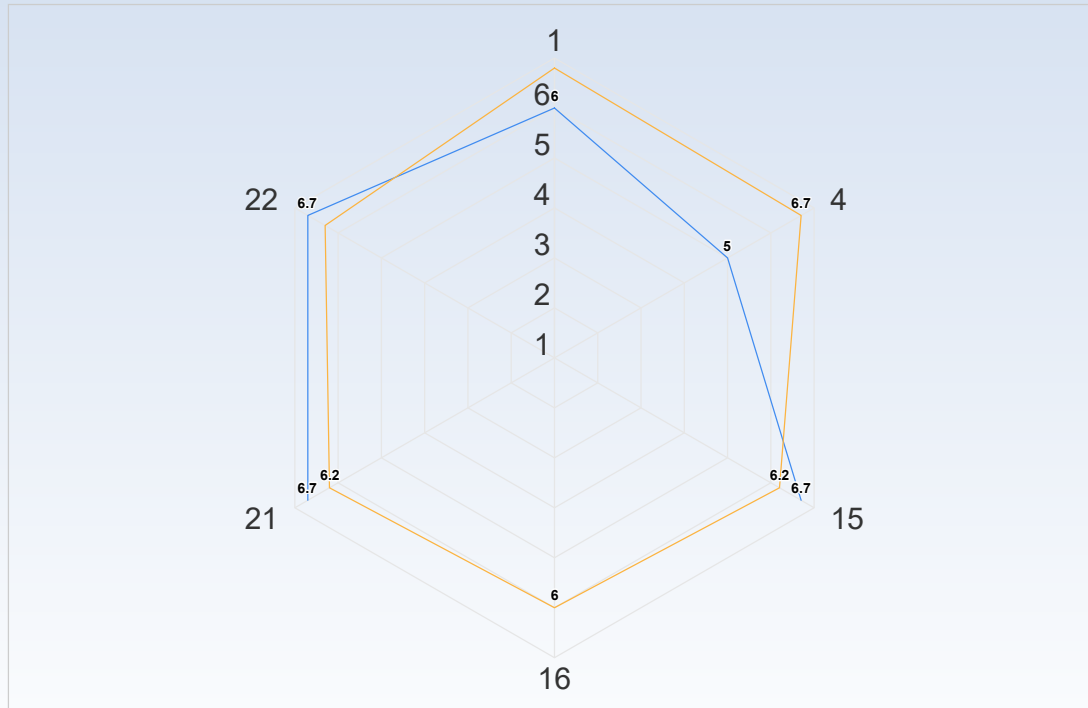
# Average response to LEQ statements - per gender



| | 1 | |
| --- | --- | --- |
| | 6 | |
| | 5 | |
| 22 | 4 | 4 |
| 6.4 | 3 | 6.1 |
| | 2 | |
| | 1 | |
| 6.3 | | 6.3 |
| 21 | 6 | 15 |
| | 16 | |

— **Kvinna** — **Man** — **Annat** — **Vill ej uppge**

**Comments**

Comments (I am: Man)
no comments

## 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: Internationell masterstudent)
no comments

## Average response to LEQ statements - per disability



Legend: Ja — Nej — Vill ej uppge

Radar chart values: 1 → 6; 4 → 6.1; 15 → 6.3; 16 → 6; 21 → 6.3; 22 → 6.4
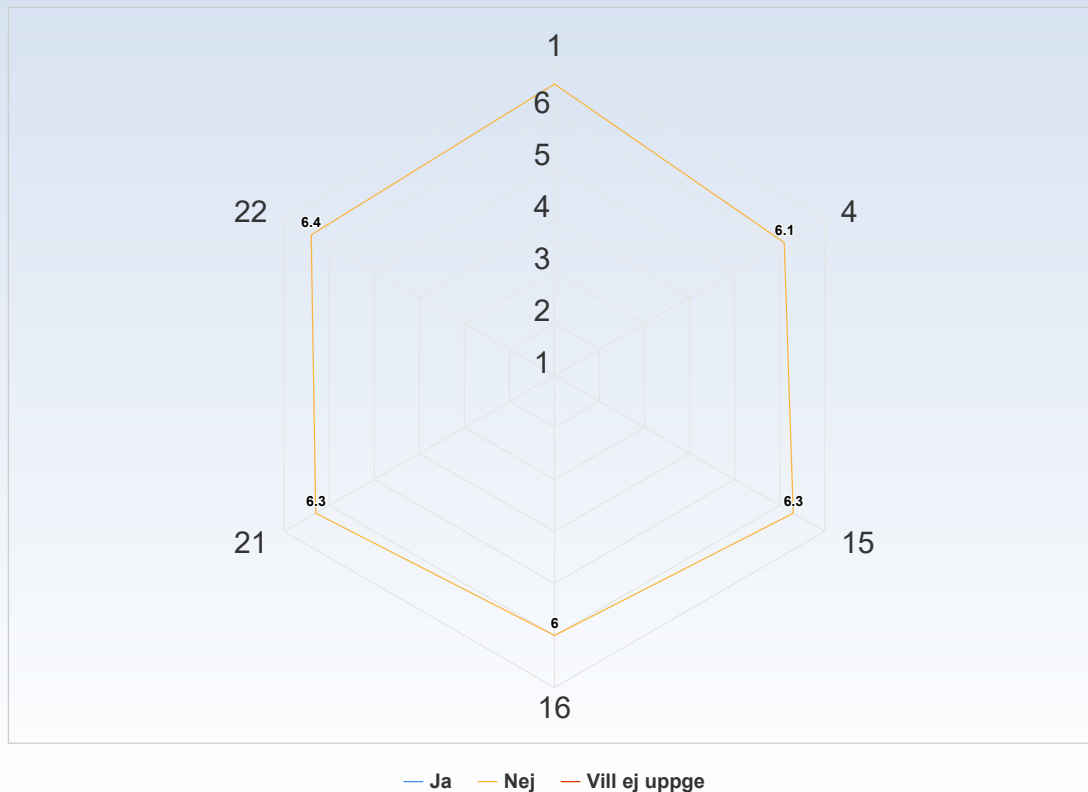
# GENERAL QUESTIONS

What was the best aspect of the course?

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

That is a good project to practice. However, project group is not suitable for on online course because someone didn't do anythings. I cannot contact him.

Interesting Project in Team Work

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

Learnin a new software

Consistent application of theoretical topics

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

Each team has a different project and a supervisor to help them if they have questions.

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

Great project topics!

**What would you suggest to improve?**

What would you suggest to improve? (I worked: 6-8 timmar/vecka)
I would you like to improve the group project to single project.

What would you suggest to improve? (I worked: 9-11 timmar/vecka)
Spend more time explaining how to use Fluent
Open source tools would be better rather than using commercial software as an individual might not be able to access/buy commercial software. Though learning the software might be helpful in an industrial setup.
distribute more and start earlier the projects, doing the work in parallel with the theory

What would you suggest to improve? (I worked: 12-14 timmar/vecka)
Try to improve some lectures so they can be linked more easily to the project. Sometimes, it wasn't clesr how we could use what we learned in a lecture.

What would you suggest to improve? (I worked: 27-29 timmar/vecka)
Better connection between lecture content and project content!

**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)
Please give more point in assignment than the project.

What advice would you like to give to future participants? (I worked: 9-11 timmar/vecka)
Spend time on Fluent
Reporting the CFD simulations is more important than carrying out additional tasks.

What advice would you like to give to future participants? (I worked: 12-14 timmar/vecka)
Start the project early and ask questions.

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

Is there anything else you would like to add? (I worked: 6-8 timmar/vecka)
One day for tutorial is not enough.

Is there anything else you would like to add? (I worked: 9-11 timmar/vecka)
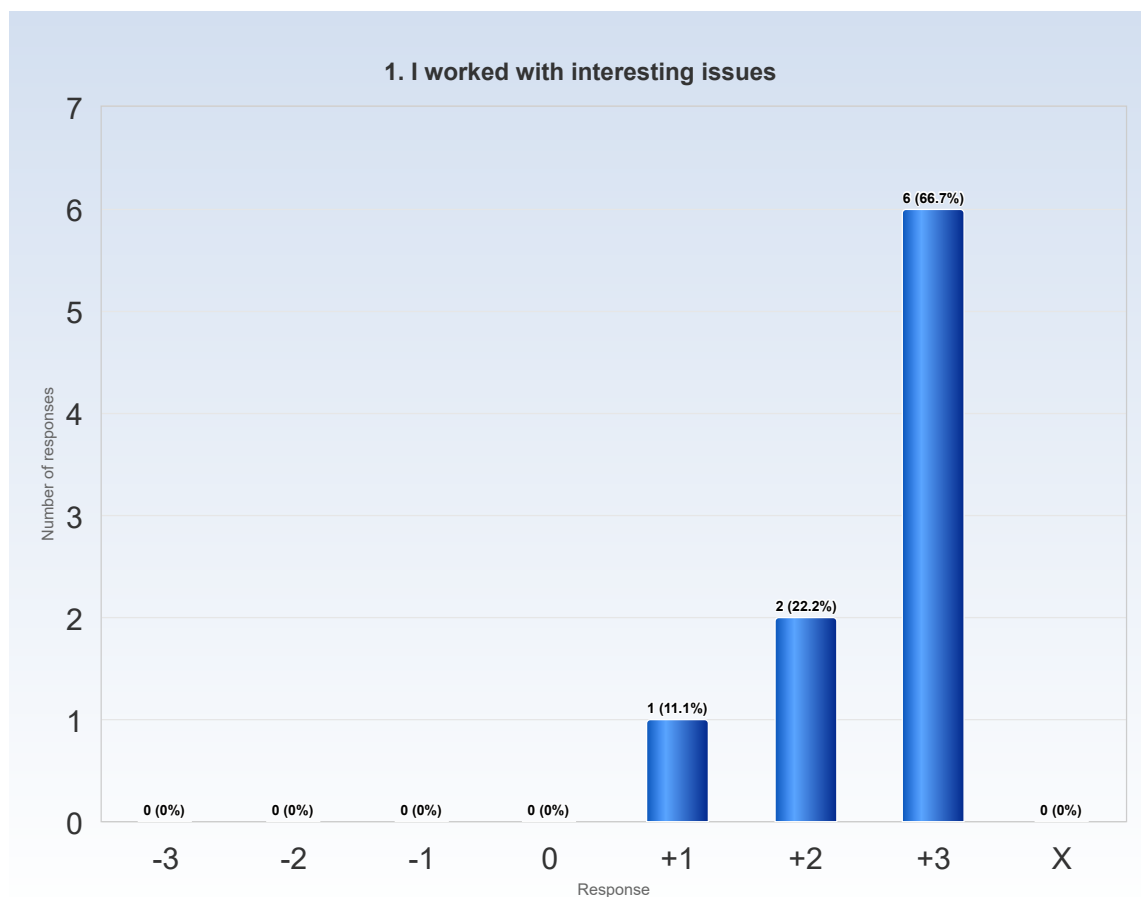No

# SPECIFIC QUESTIONS

# RESPONSE DATA

The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:
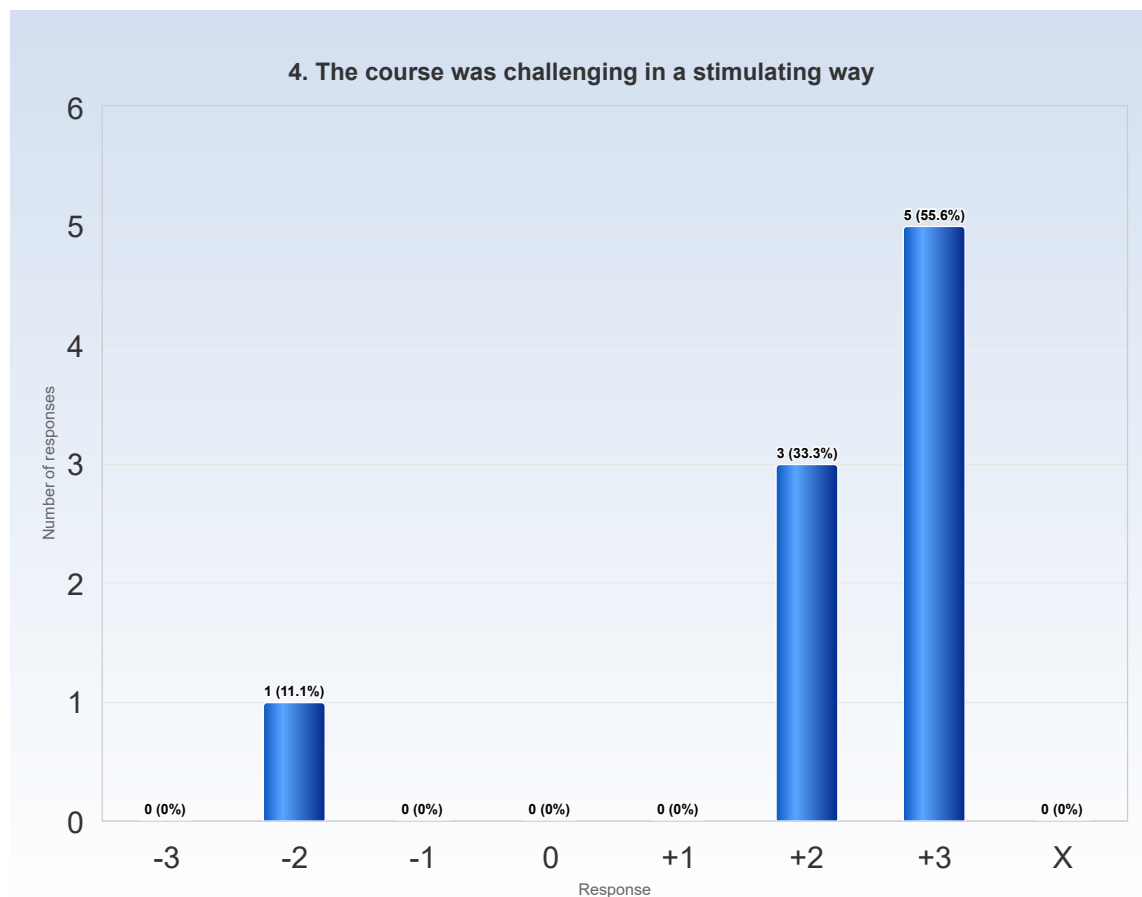
-3 = No, I strongly disagree with the statement
0 = I am neutral to the statement
+3 = Yes, I strongly agree with the statement

X = I decline to take a position on the statement
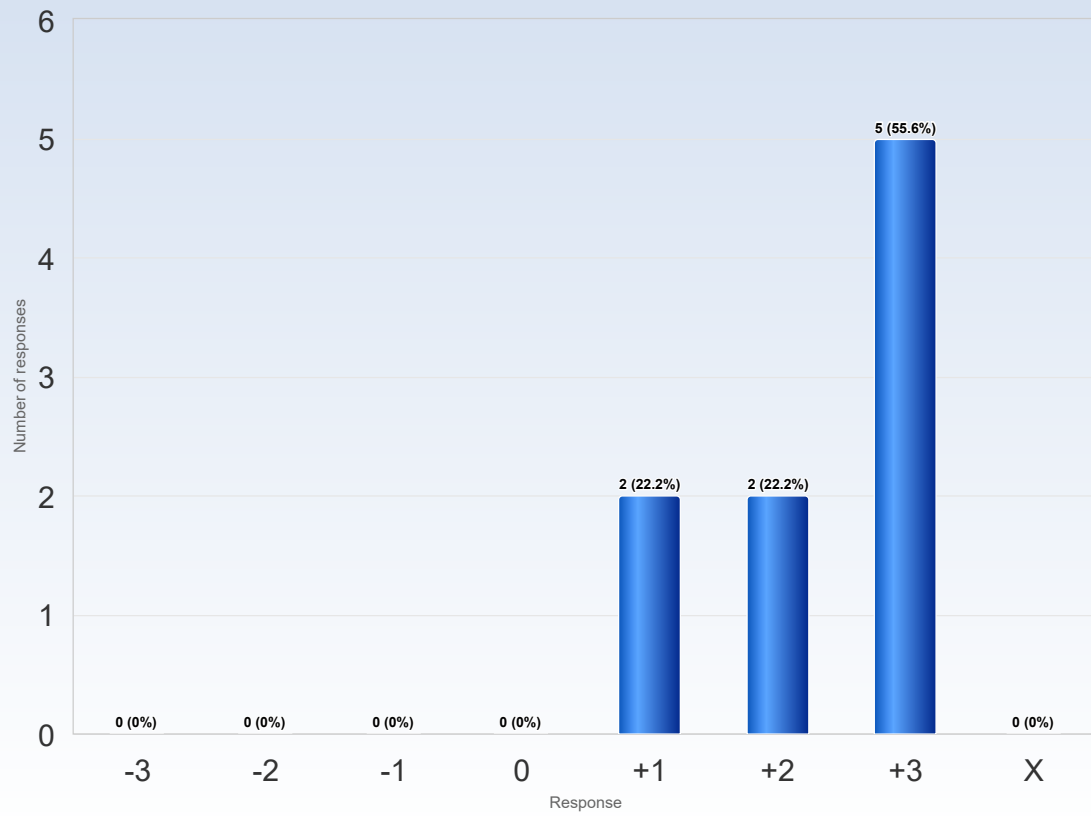
**1. I worked with interesting issues**

| Response | Number of responses |
|----------|---------------------|
| -3 | 0 (0%) |
| -2 | 0 (0%) |
| -1 | 0 (0%) |
| 0 | 0 (0%) |
| +1 | 1 (11.1%) |
| +2 | 2 (22.2%) |
| +3 | 6 (66.7%) |
| X | 0 (0%) |

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



Number of responses

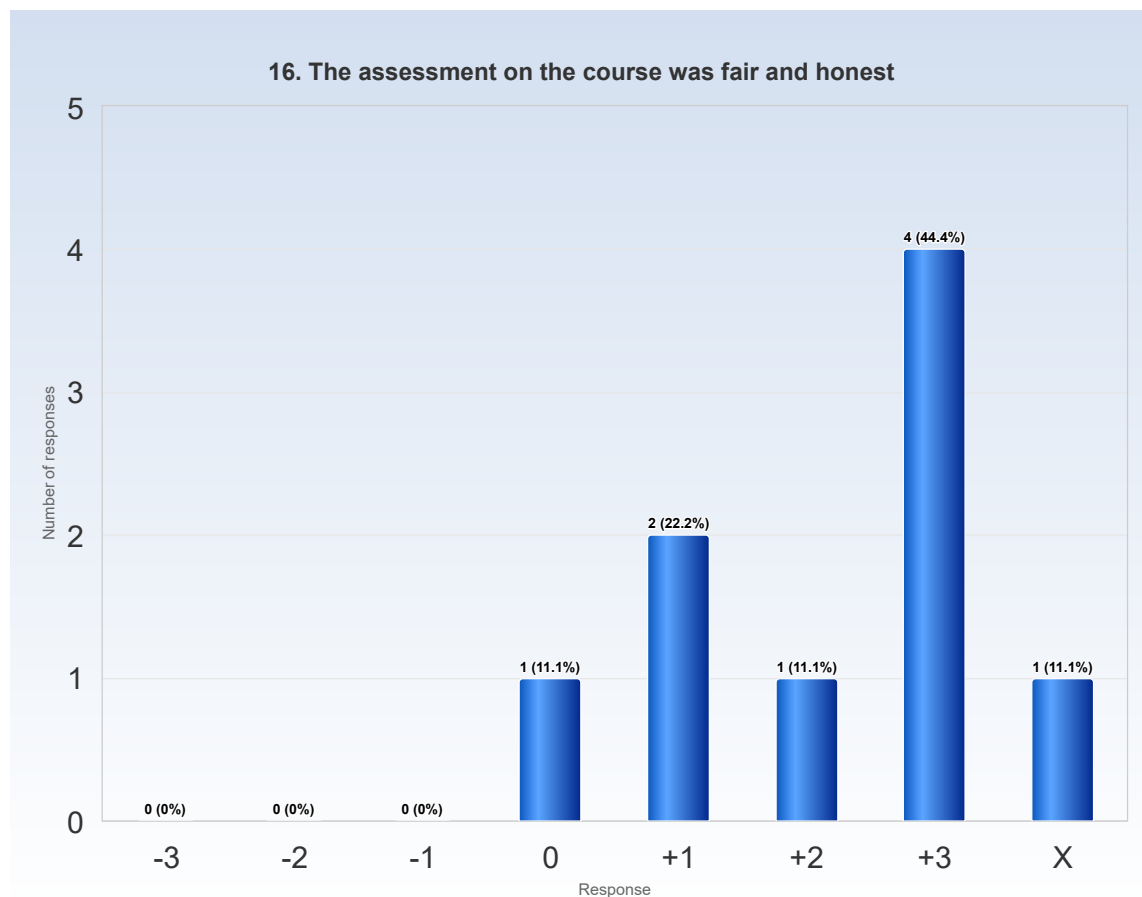| Response | -3 | -2 | -1 | 0 | +1 | +2 | +3 | X |
|---|---|---|---|---|---|---|---|---|
| | 0 (0%) | 1 (11.1%) | 0 (0%) | 0 (0%) | 0 (0%) | 3 (33.3%) | 5 (55.6%) | 0 (0%) |

**Comments**

Comments (My response was: -2)

The Ansys tutorial was not personal at all, a lot of talking and the guy was then correcting the tasks in 2 minutes without commenting what he was doing

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



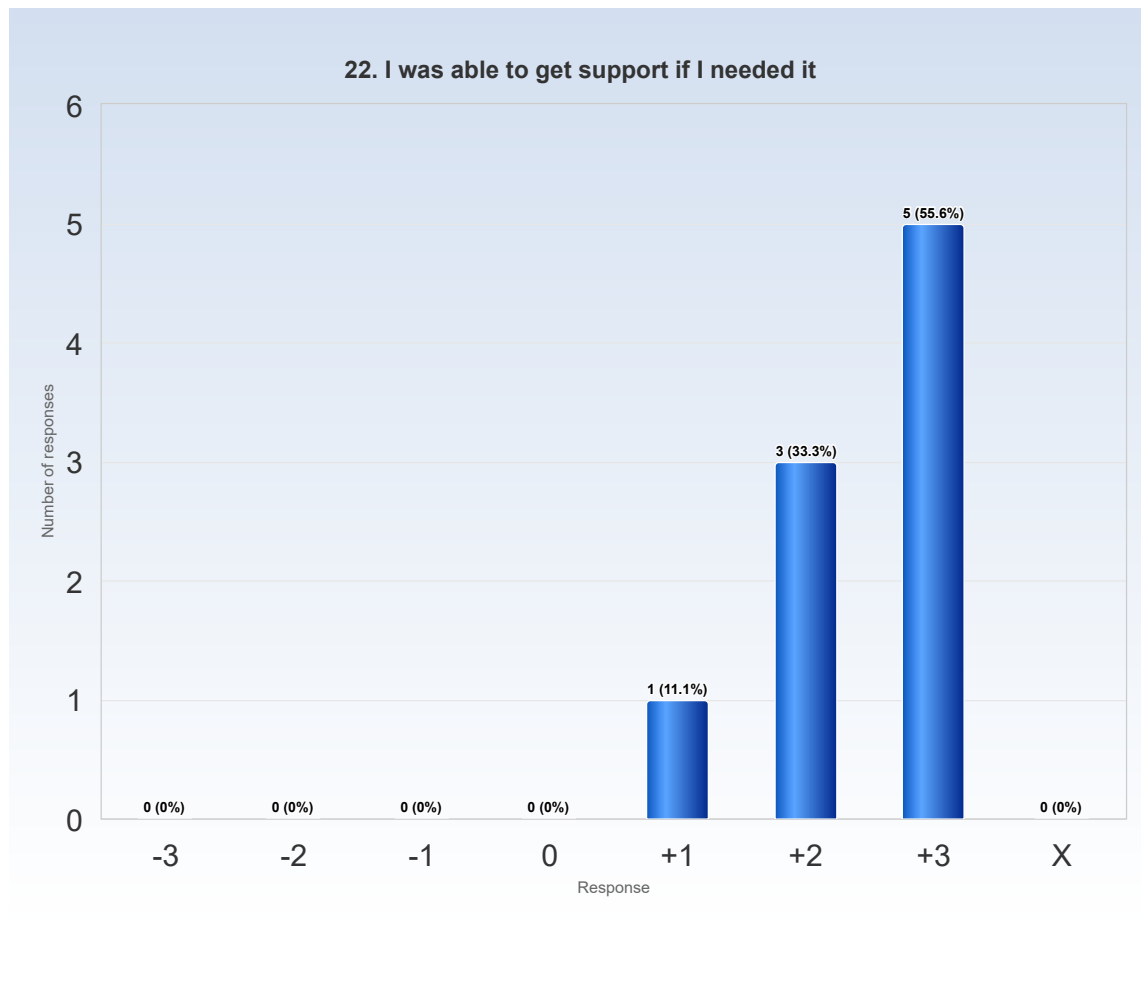Number of responses

| | -3 | -2 | -1 | 0 | +1 | +2 | +3 | X |
|---|---|---|---|---|---|---|---|---|
| | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (22.2%) | 2 (22.2%) | 5 (55.6%) | 0 (0%) |

Response

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

Number of responses

| Response | Count |
|----------|-------|
| -3 | 0 (0%) |
| -2 | 0 (0%) |
| -1 | 0 (0%) |
| 0 | 1 (11.1%) |
| +1 | 2 (22.2%) |
| +2 | 1 (11.1%) |
| +3 | 4 (44.4%) |
| X | 1 (11.1%) |

Response

**Comments**

Comments (My response was:   X   )
No grades yet

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

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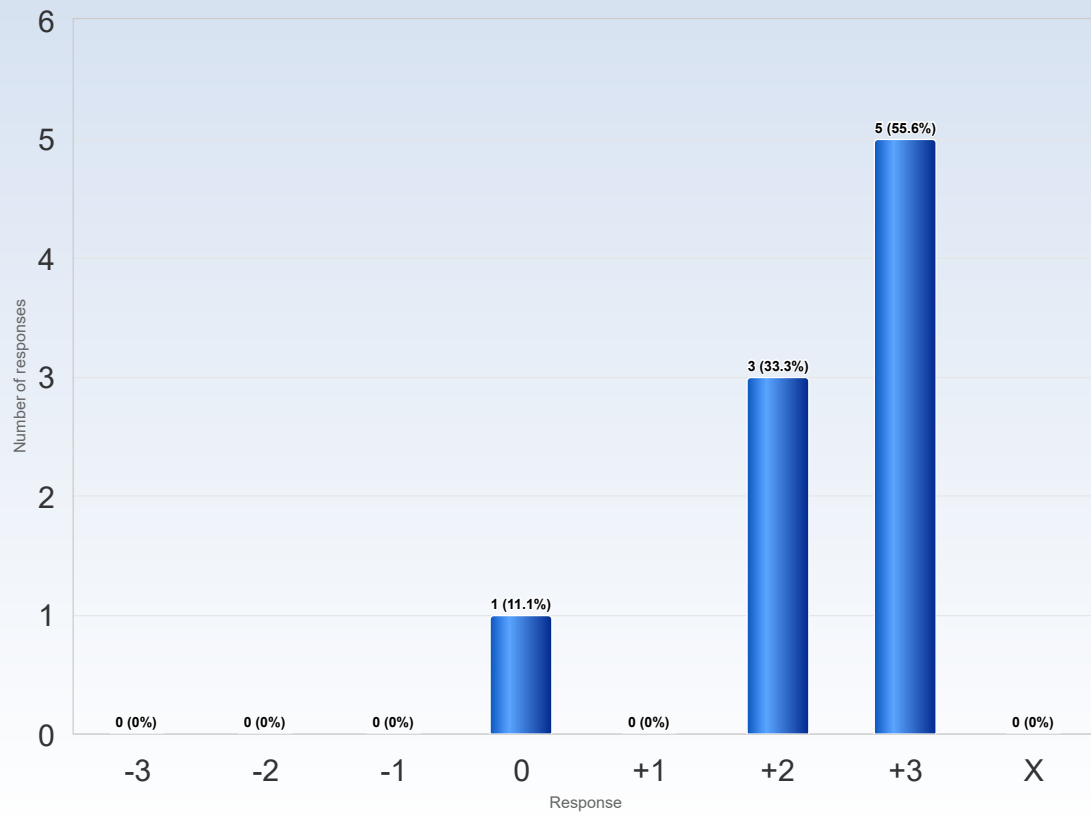


**Lektioner: Vad lärde du dig och vad saknade du?**

| Lektioner: Vad lärde du dig och vad saknade du? |
| --- |
| I learned about differents types of models, methods and other parameters in cfd. I missed some of the guest lectures |
| Learned what I expected to |
| I learned a lot about project collaboration. It is not to easy to manage a international project. |
| L: CFD simulation. |
| M:- |

**Fluent tutorial: Vad lärde du dig och vad saknade du?**

| Fluent tutorial: Vad lärde du dig och vad saknade du? |
| --- |
| I learned how to use fluent. |
| I missed an actual tutorial, showing and explaining. |
| The tutorial was very short and would be great if recorded material can be provided for future access. The session was short and felt a lot to grasp when the software platform is new. |
| It was a bit long, maybe it would be better to distribute it across more days to better digest everything. |
| L: Step for simulation. |
| M: Meshing technique. |

**Projekt: Vad lärde du dig och vad saknade du?**

| Projekt: Vad lärde du dig och vad saknade du? |
| --- |
| I learned how to setup a case, run it, analyse the results and do a quality check. |
| Team work, maybe  a first deadline would improve the spreadness of the work load |
| L: The real flow problem can be solved with ANSYS Fluent in simulation. |
| M: - |

# Hur upplevde du att kursen var online?

| Hur upplevde du att kursen var online? |
| --- |
| I was really useful considering the situation, but recorded course would have greatly helped since i had to wake up at 2 am or 3 am to follow them in Canada |
| Tough especially for the project |
| The provided support was very good. Moreover, online meetings allow more flexibility in the planning, hence this thing was positive. I feel distance learning has not been a limitation for the course, a part maybe from the fluent tutorial. |
| My experience has both advantage and disadvantage. The advantage is that it solves the problems encountered in flow simulation. The disadvantage is that my project group mates didn't help with this project at all. |