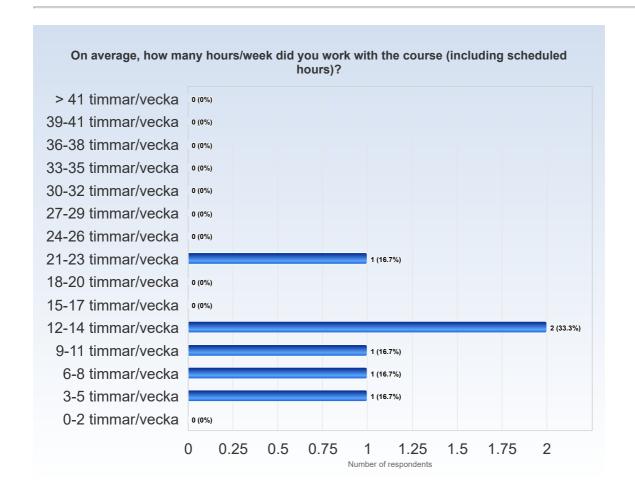
ESTIMATED WORKLOAD



Comments

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

It was really interesting but I miss the wet labs.

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

I liked the course. It was very comprehensive and interactive.

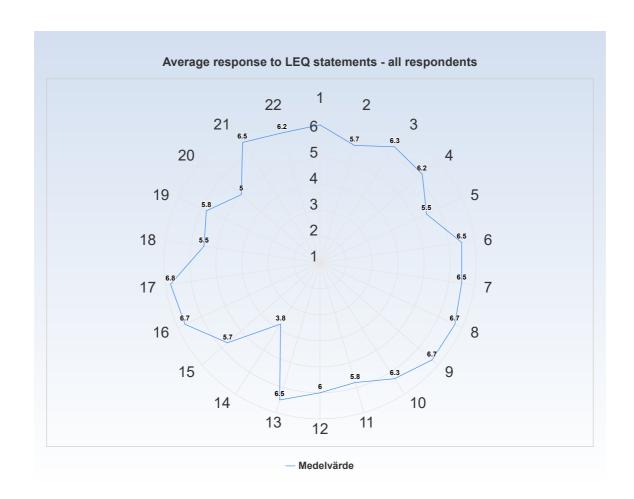
I think it was a reasonable workload, I could keep up and it felt like I kept learning during the whole course.

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.



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

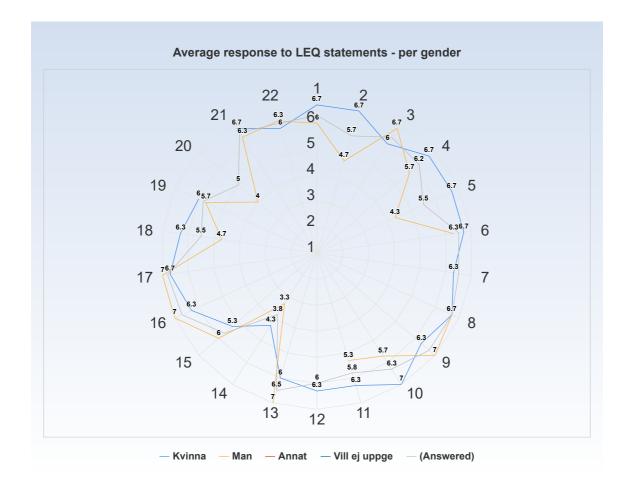
Bain, K. (2004). What the Best College Teachers Do, Chapter 5, pp. 98-134. Cambridge: Harvard University Press.

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.

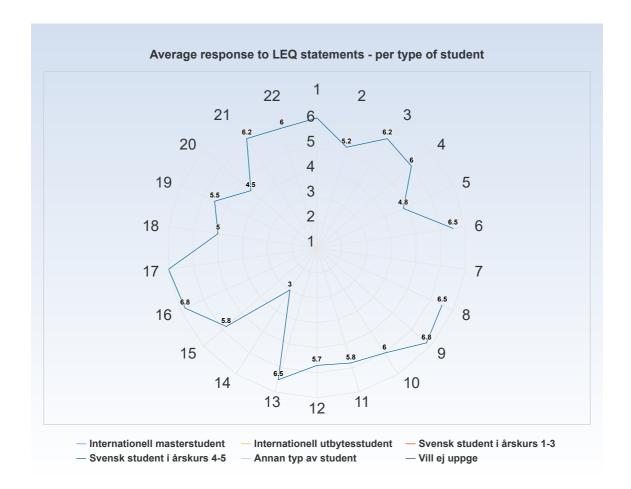
Kember, K. & McNaught, C. (2007). *Enhancing University Teaching: Lessons from Research into Award-Winning Teachers*, Chapter 5, pp. 31-40. Abingdon: Routledge.

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



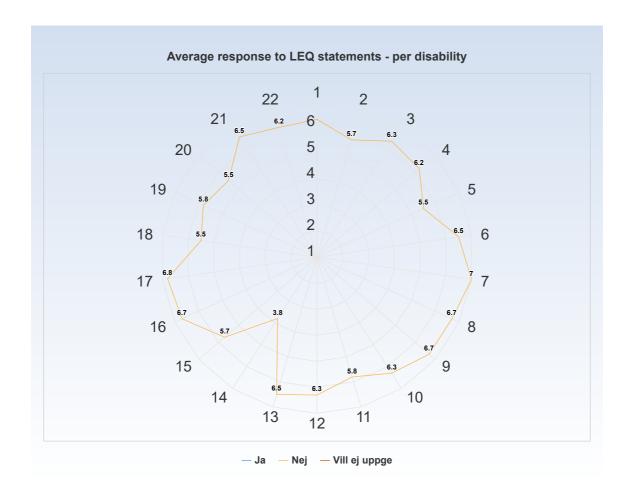
Comments (I am: Man)

I didn't notice anything to comment on



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

It had a good level of difficulty and reasonable expections on us students. It could go expect us to know more basics (mainly aimed towards the first and second modules) but overall a course on the level I desire and expect from a master course



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 variety of subjects that was brought up.

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

Having different teachers since each has a different project by their own and different things to teach us.

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

group project
The breadth of teacher and how after most sections our knowledge and understand of that part was tested without being graded.

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

I think that the different examples and papers we read during the course was interesting, since it gives a good illustration of what is happening

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

Less text in the (some) slides. Module 4, for instance, had a lot of text and when studying for the exam, it gets overwhelming.

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

Maibe it will be a good idea to do some wet labs in this subject. Also to remove from the final exam the lessons that had been already asked in

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

nothing really. As for me, it was a good course. well design and articulate

Have all sections test our knowledge, and clearer guidelines on how a good/great result on the lab looked compared to an okay result.

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

It would be nice to be able to get bonus points through the different activities (e.g. the KS, the different presentations, labs).

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)

Put effort for and pay extra attention during the seminars. A lot of valuable information is brought up here.

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

Don't be stressed with the high amount of content that the subject has

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

Be attentive, take active part.

Participate as much as possible and do the things that are meant to be done.

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

Go to the lectures and do the presentations, since they also come up during the exam.

Is there anything else you would like to add?

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

If you are going to include mandatory participation as a course credit, you should also add some kind of attendance check. Otherwise, (some) people won't show up anyway. Though in my opinion, lectures should not be mandatory.

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

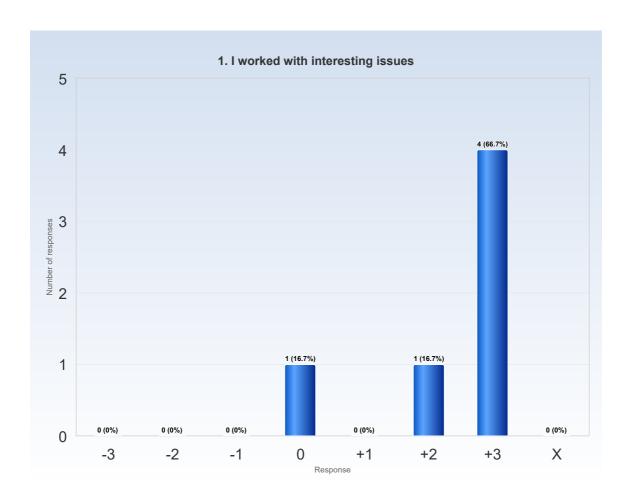
SPECIFIC QUESTIONS

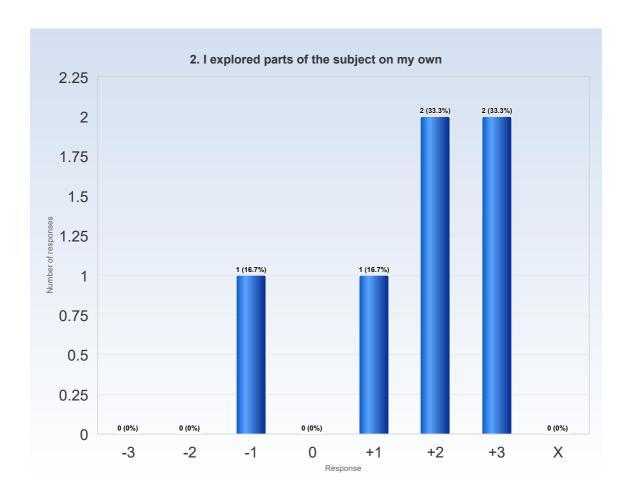
RESPONSE DATA

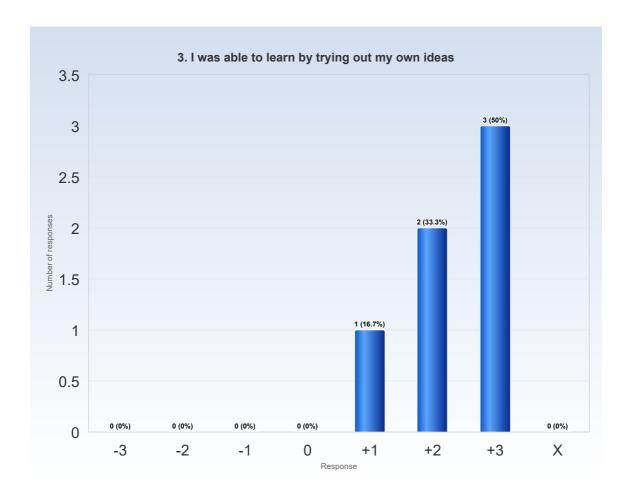
The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:

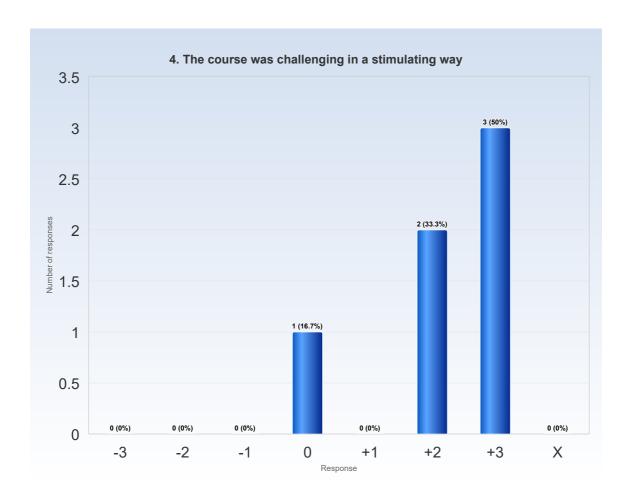
- -3 = No, I strongly disagree with the statement
- 0 = I am neutral to the statement
- +3 = Yes, I strongly agree with the statement

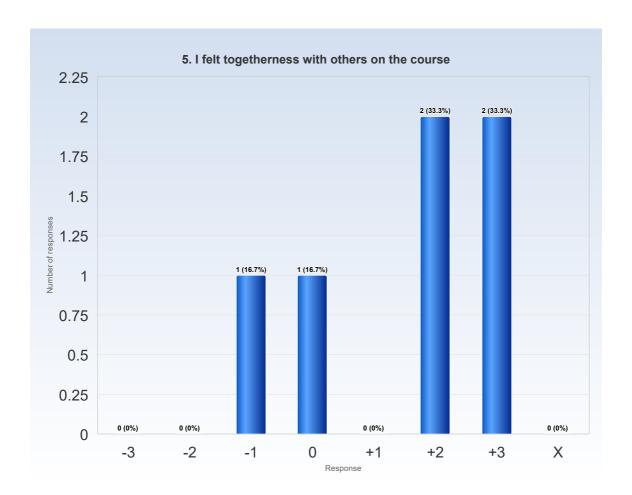
X = I decline to take a position on the statement

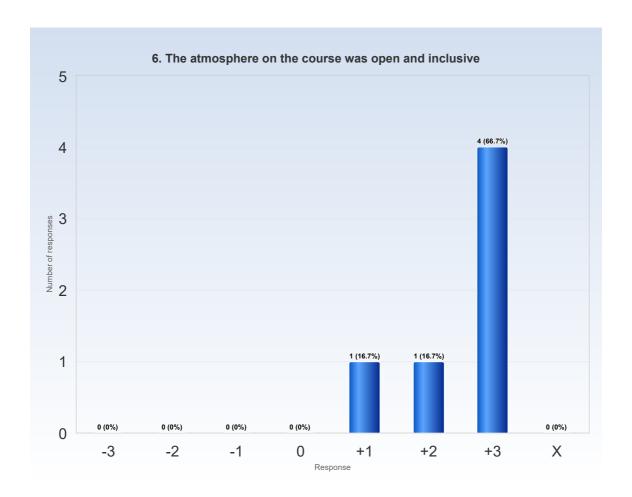


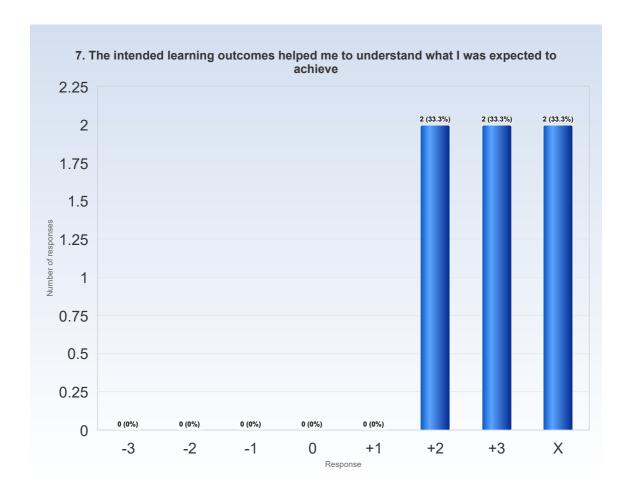




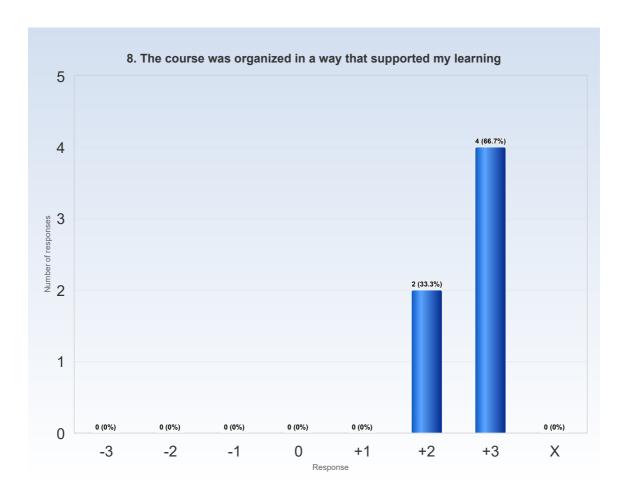


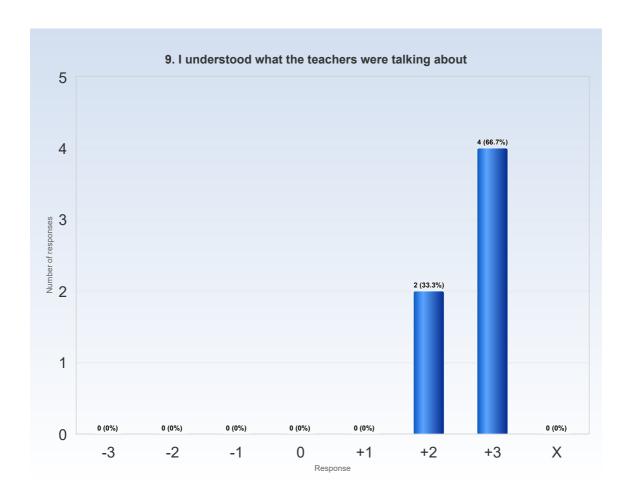


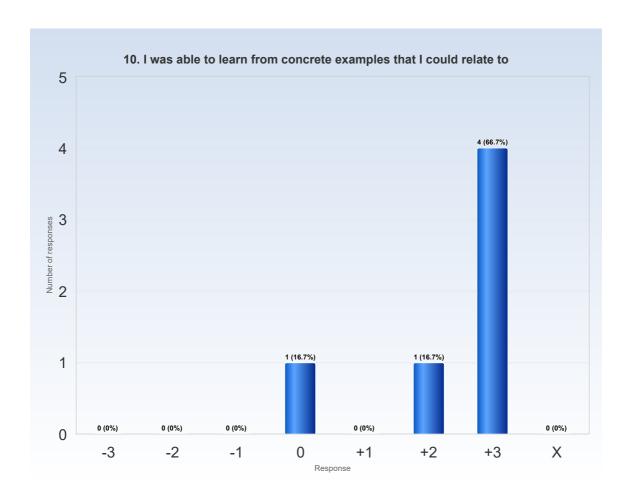


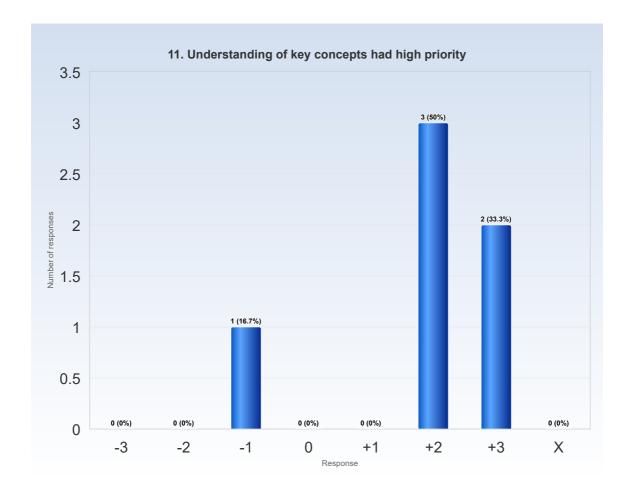


Comments (My response was: X)
I did not look over those.
Forgot about them

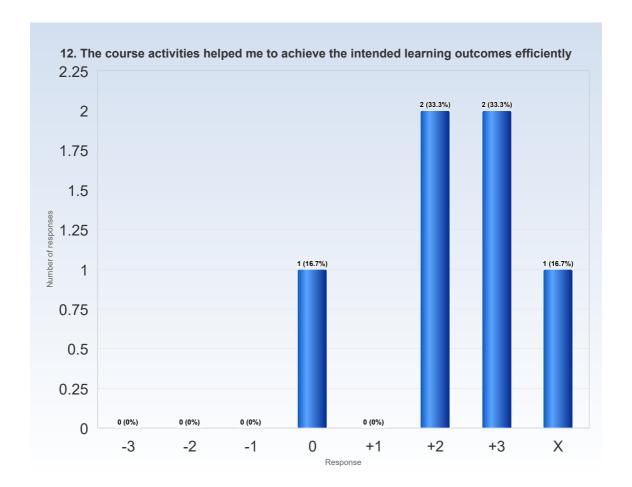




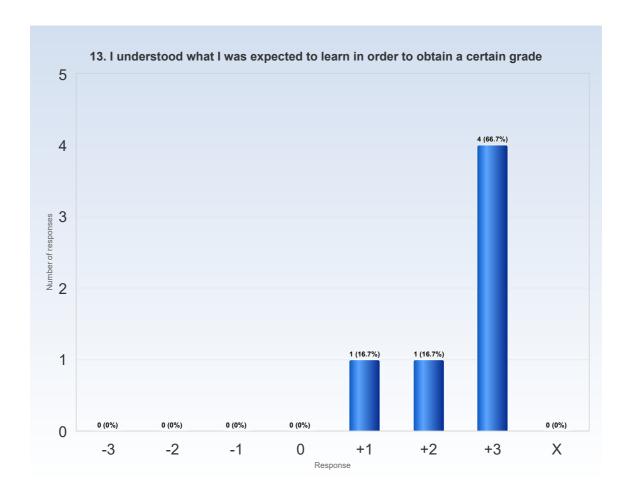


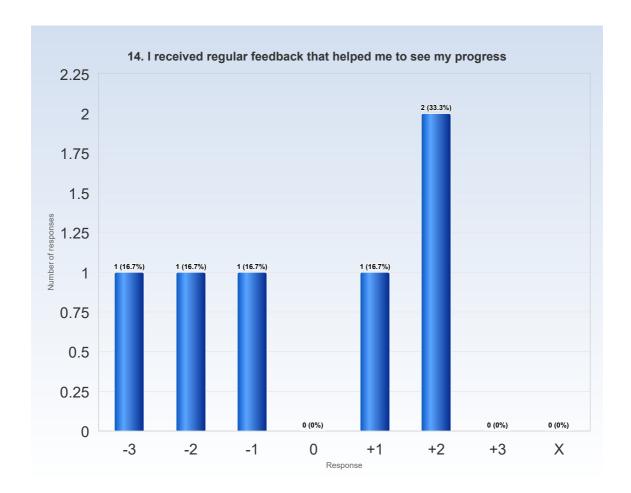


Comments (My response was: -1)
At times I felt it was unclear what was actually important

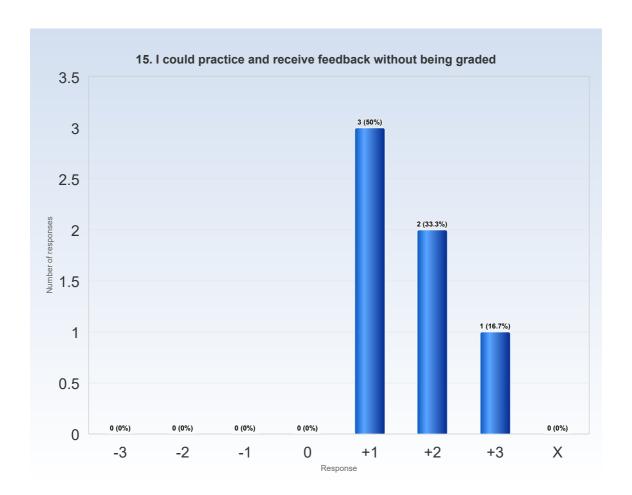


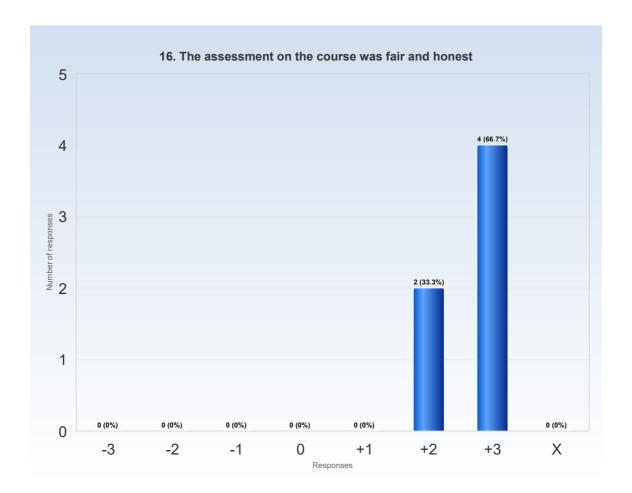
(My response was: X)
Don't know, don't remember the course objectives





Comments (My response was: -3)
Wasn't really necessary either





Comments (My response was: +3)
Haven't been assessed much yet but I think and hope so

