

Kursanalys

Kurstitel: Miljötoxikologi	
Kurskod: BB2015	Högskolepoäng: 7,5
Kursen ingår i programmet: Industriell bioteknologi	
Termin: VT22	Läsperiod: 2
Kursansvarig: Ines Ezcurra	Examinator: Ines Ezcurra
Antal registrerade studenter: 43	Antal godkända vid sista kursdatum: 43
Svarsfrekvens kursvärderingsenkät (%): 44% (19/43)	

1. Beskrivning av genomförda förändringar till detta kurstillfälle

2021: Ny kursansvarig. Införande av flera online resurser "Environmental Toxicology, an open online textbook", av Vrije Universiteit Amsterdam, 2019, plus flera korta online föreläsningar från en öppen online Toxikologikurs av Yale University. Införande av ett antal korta Canvas online övningar som gav bonuspoäng till tentamen. Ny lärare från LNU, ny-disputerad yngre expert. Fokus på Östersjön.

2022: Förbättrad Canvas interfas med online bok, online lektioner, videor, övningar/quizes & reflektioner. Tydligare hänvisningar till online litteraturen som finns i kursens Canvas. Ny lärare från KI, yngre expert angående nanopartiklar. Kontinuerlig examination: Canvas online reflektioner för varje föreläsning som gav poäng till slutbetyg. Även online lektioner & övningar gav poäng till slutbetyg. Några inspelade föreläsningar och zoom-undervisning. Kontinuerlig examination. Hemtentamen med quiz-del och essäfrågor-del. Litteraturprojekt med student peer-review.

2. Sammanfattning av studenternas kursvärderingar

Intressanta föreläsningar, experter i sitt ämne, intressant aktuellt ämne. Canvaskursen. Kontinuerlig examination.

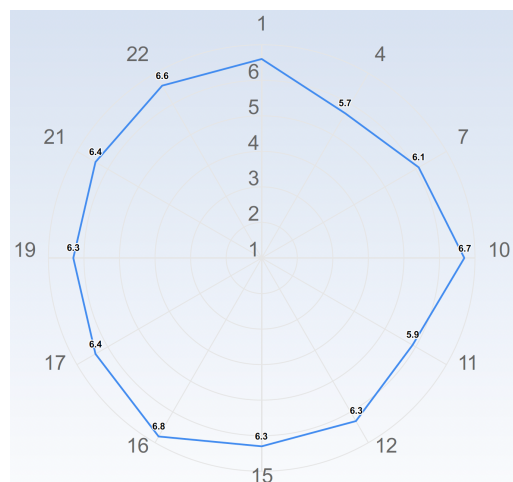
"Very interesting to hear different guest speakers, and the reflections/quizzes were really good! Recorded lectures are golden when studying for the exam."

"It was really nice that the course was well structured, and you could always find information about what each activity was gonna be about and what was expected from you."

"The course had so many interesting guest lecturers and relatable concepts. It made me care even more about using science for environmental applications. Also I liked that we were encouraged to write reflections after every lecture. This helped me review and remember the concepts, as well as think more deeply about how they relate to me."

"Jag uppskattade upplägget på kursen!"

"I was happy about each lecture which was given on site, which were quite a few."



3. Reflektioner kring kursens genomförande och resultat

a. **Kursens styrkor:** Intressanta föreläsningar, experter i sitt ämne, intressant aktuellt ämne. Canvaskursen. Kontinuerlig examination.



b. Kursens svagheter:

En del föreläsningar inspelade, andra via zoom. Några studenter efterfrågade fler face-to-face föreläsningar.

4. Förslag till förändringar för kommande kurstillfälle

- Flera fysiska möten med övningar och diskussioner
- Uppmana lärare att komma till KTH (svårt)
- Informera studenterna om att distansundervisning med externa lärare tillåter de bästa experter, vilket är ett privilegium

5. Övriga synpunkter

Bilagor:

1. Kursvärdering

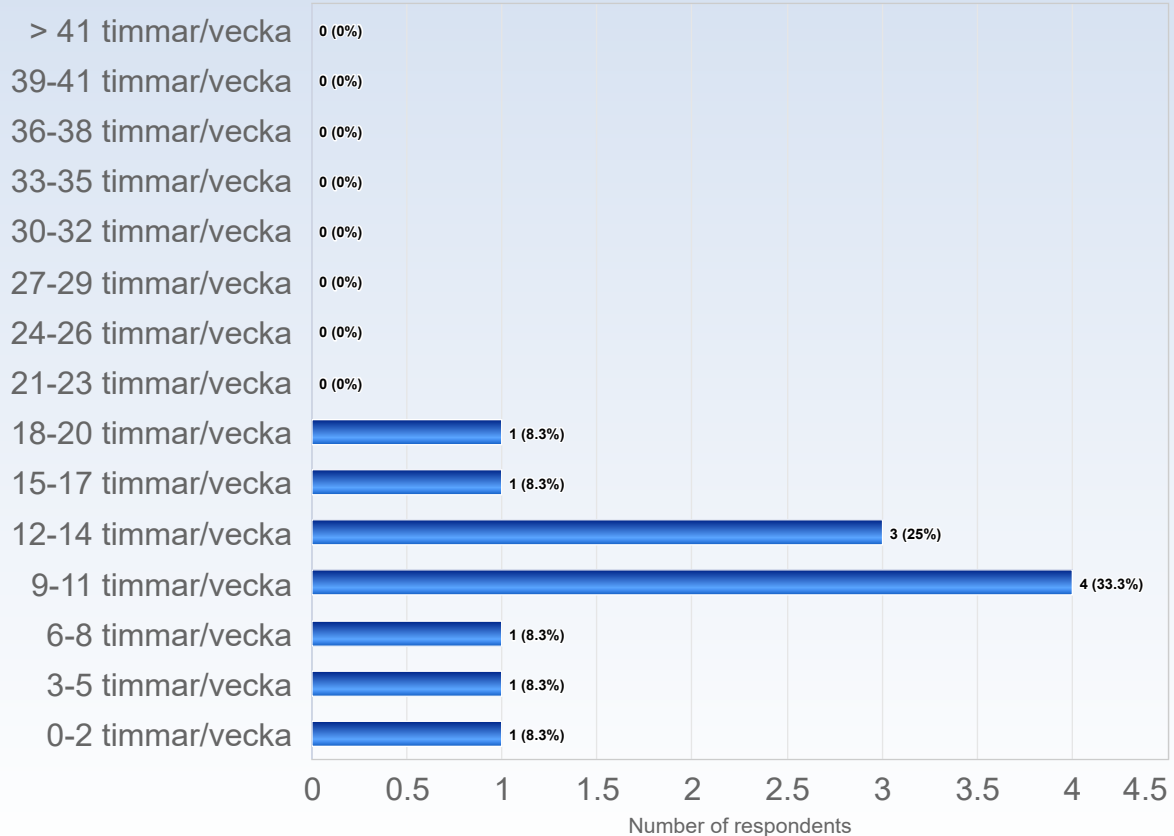
BB2015 - 2022-06-15

Antal respondenter: 44
Antal svar: 12
Svarsfrekvens: 27,27 %

Ytterligare 7 studenter svarade i separat enkät, liknande resultat. 12+7=19 svar

ESTIMATED WORKLOAD

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



Comments

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

The time necessary to spend on the course was very straightforward and I chose to partake in all lectures and then spend some time reviewing lectures right after to write a reflection to turn in.

It was a perfect balance of workload.

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

Actually the course was pretty good and I have learned whatever I intended to learn from this course. The workload was very much balanced, personally I felt so easy doing this course

The course is arranged nicely thanks to the lectures and reflections. It makes us students repeat the material immediately after each lecture which I think is good for learning. The course wasn't that heavy time-wise.

The reflections after each lecture was a very good way of following along the course, and you learn more by doing so. This made studying for the exam much easier.

LEARNING EXPERIENCE

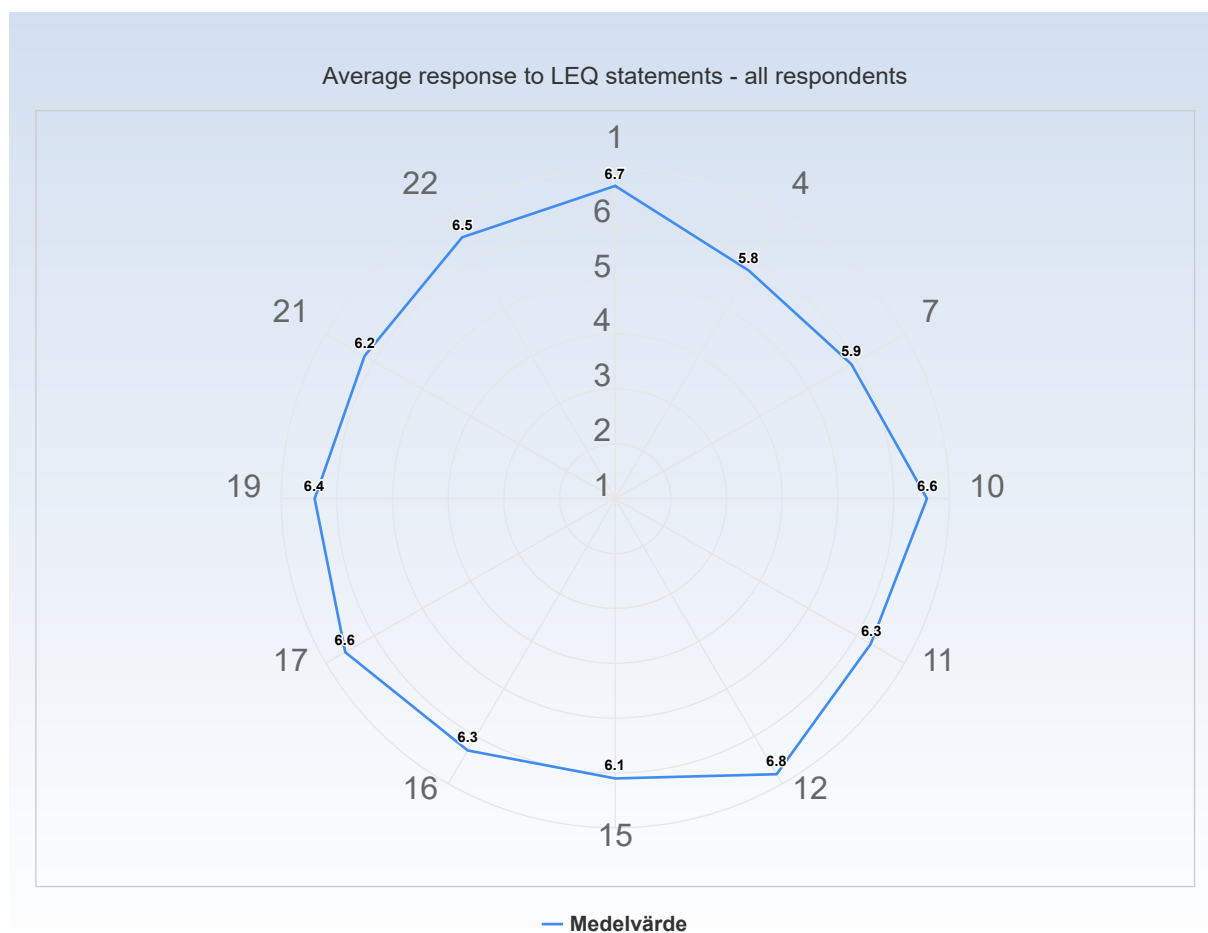
The polar diagrams below show the average response to the LEQ statements for different groups of respondents (only valid responses are included). The scale that is used in the diagrams is defined by:

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 (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.

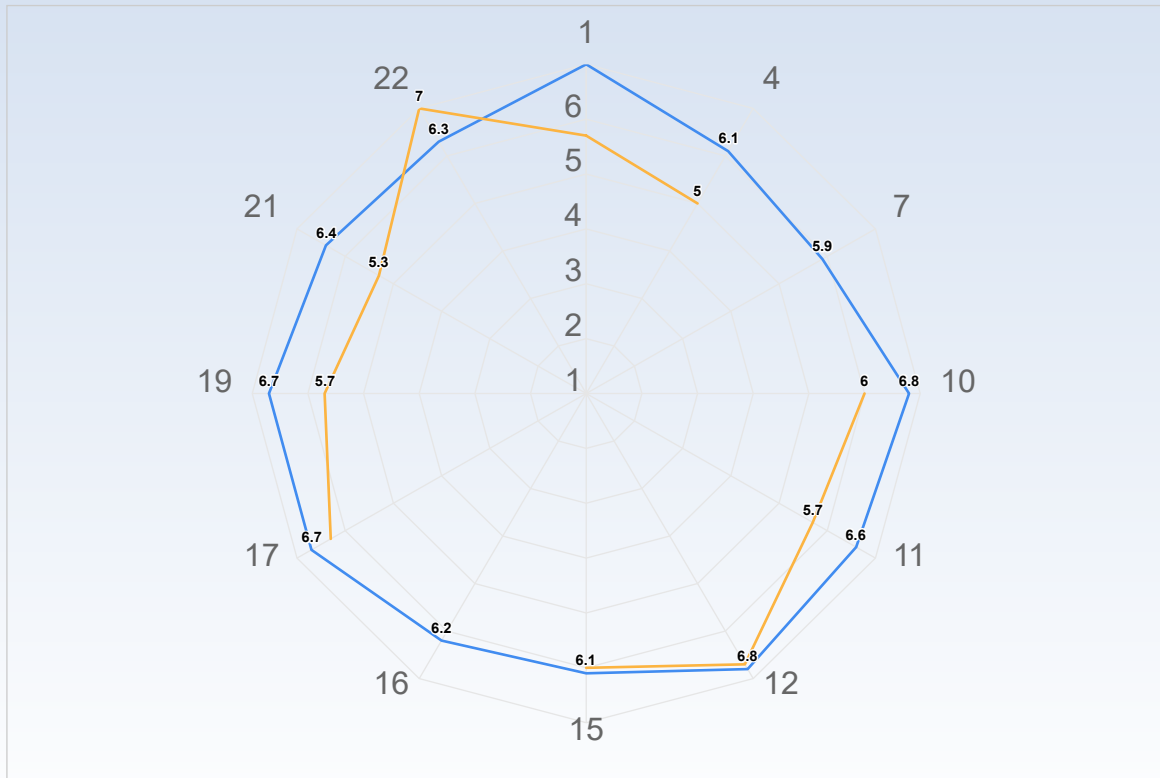
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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



— Kvinna — Man — Annat — Vill ej uppge

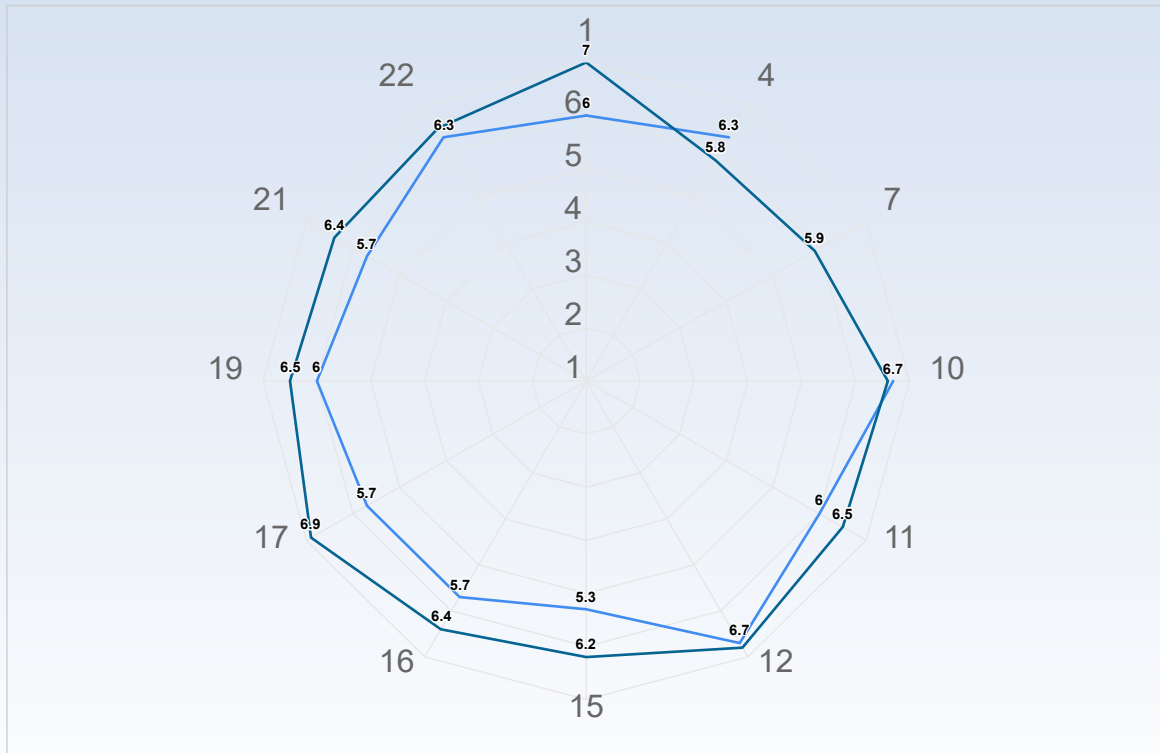
Comments

Comments (I am: Kvinna)

My sex did not affect my learning experience.

Great!

Average response to LEQ statements - per type of student



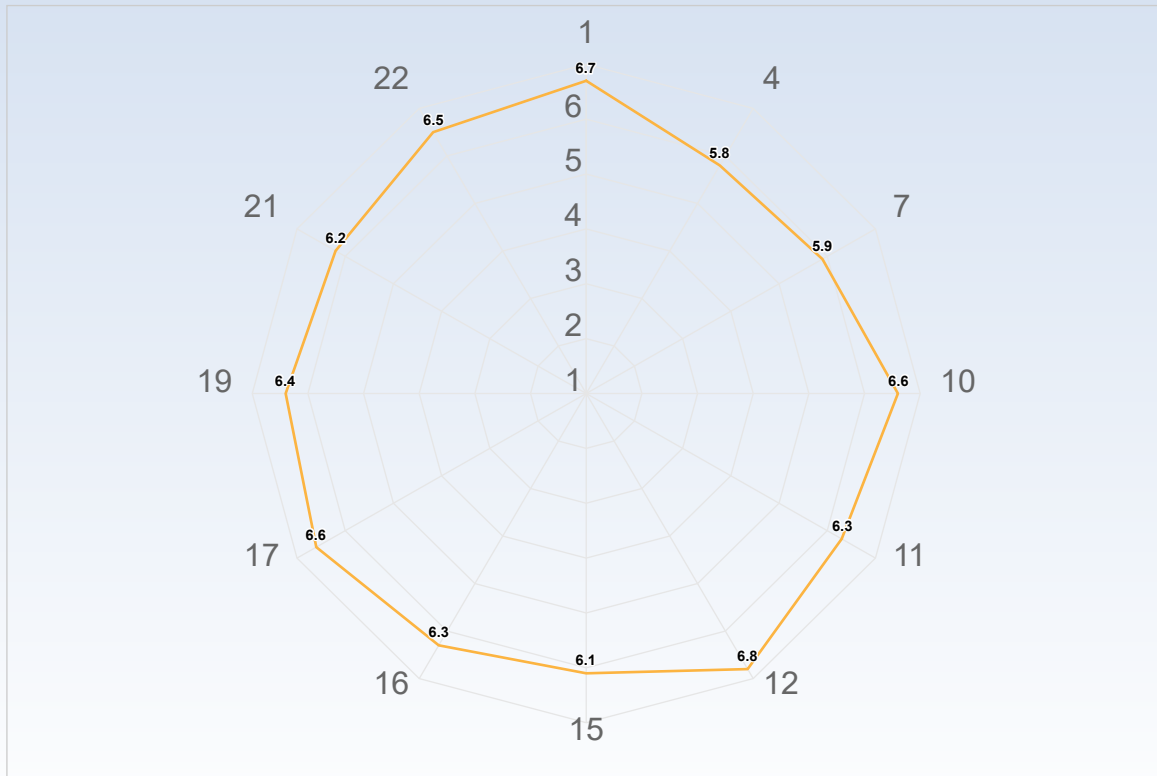
- Internationell masterstudent
- Svensk student i årskurs 4-5
- Internationell utbytesstudent
- Annan typ av student
- Svensk student i årskurs 1-3
- Vill ej uppge

Comments

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

I think it is particularly easy to follow the course having a Swedish background, since many of the lectures are tied to the Swedish environment
Great!

Average response to LEQ statements - per disability



— Ja — Nej — Vill ej uppge

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 lectures were interesting and

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

Different teachers giving a a fie in to different topics

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

I really liked the interactive aspects of the course which made it easier to stay on track and follow along. Really liked the project.

The variety of topics discussed during the course was very interesting. It was also nice to have an open book home exam for the final.

I enjoyed the lectures which were given in person as well as writing the reflections.

The project and presentations. This is where I learnt the most because I got to implement the knowledge I had gotten from the lectures.

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

I like that we had different guest lecturers for the topics. It's nice getting to hear people speaking of their specific areas of expertise.

Very interesting to hear different guest speakers, and the reflections/quizzes were really good! Recorded lectures are golden when studying for the exam.

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

Jag uppskattade upplägget på kursen!

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

the best part of the course was writing reflections after every lecture. this gave me some time to think about what i had learned, review it, and consider how it relates to my own life and future line of work. it was also great that there were so many different guest lecturers, all of whom held interesting talks about subjects that are relevant and important!

What would you suggest to improve?

What would you suggest to improve? (I worked: 3-5 timmar/vecka)

The exam was too loosely connected to previous lectures. Since the home exam was so long with access to the whole internet then theoretically you could pass the course just by finding good references.

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

Some lectures had very overlapping elements, each guest lecturer often started with a broad introduction in their lectures which often contained the same information. This is both good for repetition but also tedious to spend time on.

The number of given lectures in person was very low. It is clear that holding lectures online is very convenient for teachers as well as for students, however, the quality of teaching suffers greatly. I would be nice to have the teachers back on campus so they can do their job of teaching properly.

I really liked everything so I have no suggestions here.

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

It could be nice to have more lessons. Since the questions are mixed as opposed to the reflections, it makes one put more consideration into it.

I think the home exam was really good, but using just 200 words per question was sometimes a bit tricky. Also the level of the lectures was overall really good, but varied for some of them.

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

since i found the reflections to be the best part, i would suggest that they are made mandatory. additionally, having some time to discuss the reflections and / or the project presentations with my classmates would have been fun and useful. although this was likely mostly hindered because of the online form of teaching, more discussion among classmates is always fun!

What advice would you like to give to future participants?

What advice would you like to give to future participants? (I worked: 3-5 timmar/vecka)

Do the project as early as possible

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

be open to different contents.

there is not so much connection between the lectures, which i personally is a nice thing, but is hard for some people to enjoy.

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

Look up info on the lecture topics online by yourself to get the info in other words!

Don't be afraid of asking questions. Be interested and participate.

Enjoy and take the opportunity to do some extra reading because this is an interesting topic and there are alot if things to discuss during class!

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

Keep up with the course, go to lectures, write your reflections. The lectures are only vaguely connected and thus if you miss one you miss an entire topic.

Do the reflections and quizzes!

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

write the reflections! if you are interested in this subject, this course will be lots of fun and doing the reflections adds an extra level of insight as well as hopefully something useful for yourself to remember in the future.

Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 3-5 timmar/vecka)

It was really fun

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

-

I really enjoyed the topics covered in this course.

This was a great course! Thank you!

SPECIFIC QUESTIONS

RESPONSE DATA

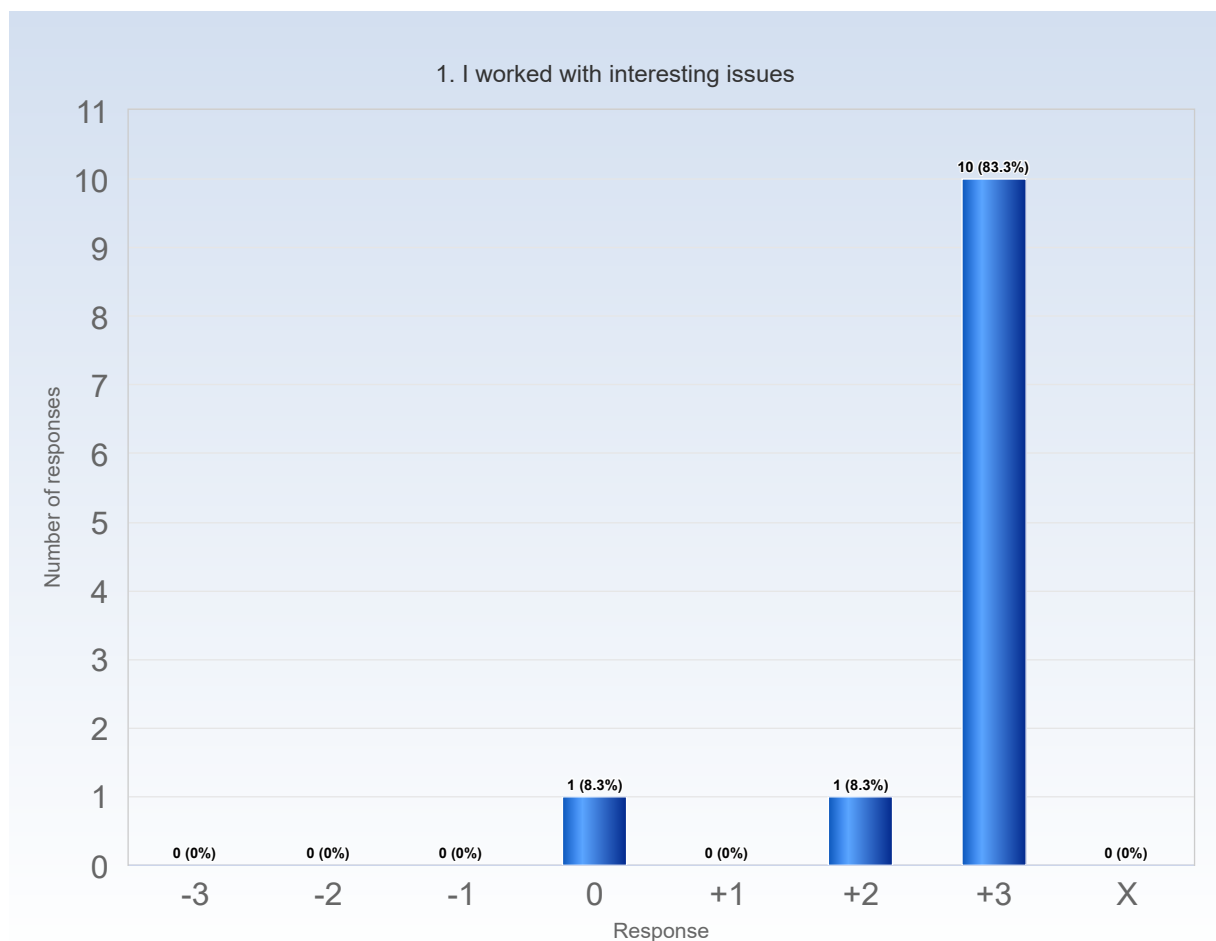
The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:

-3 = No, I strongly disagree with the statement

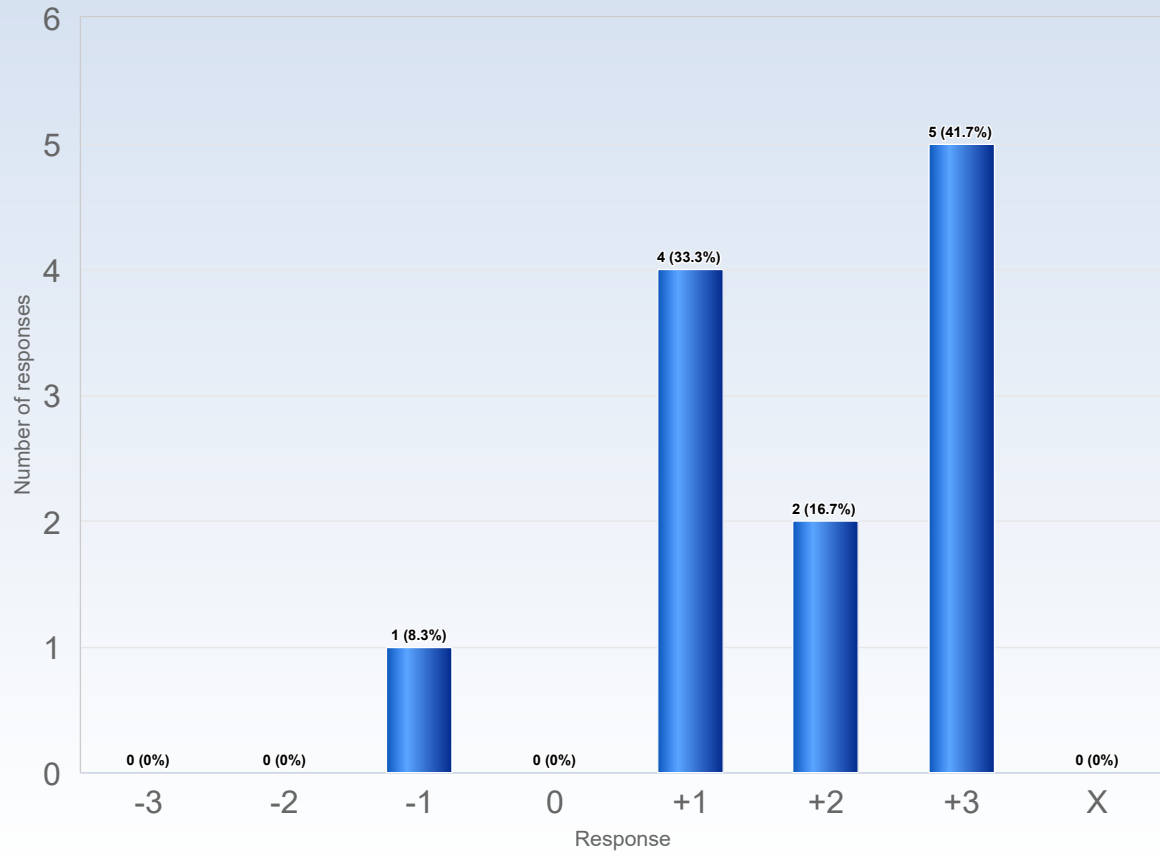
0 = I am neutral to the statement

+3 = Yes, I strongly agree with the statement

X = I decline to take a position on the statement



4. The course was challenging in a stimulating way

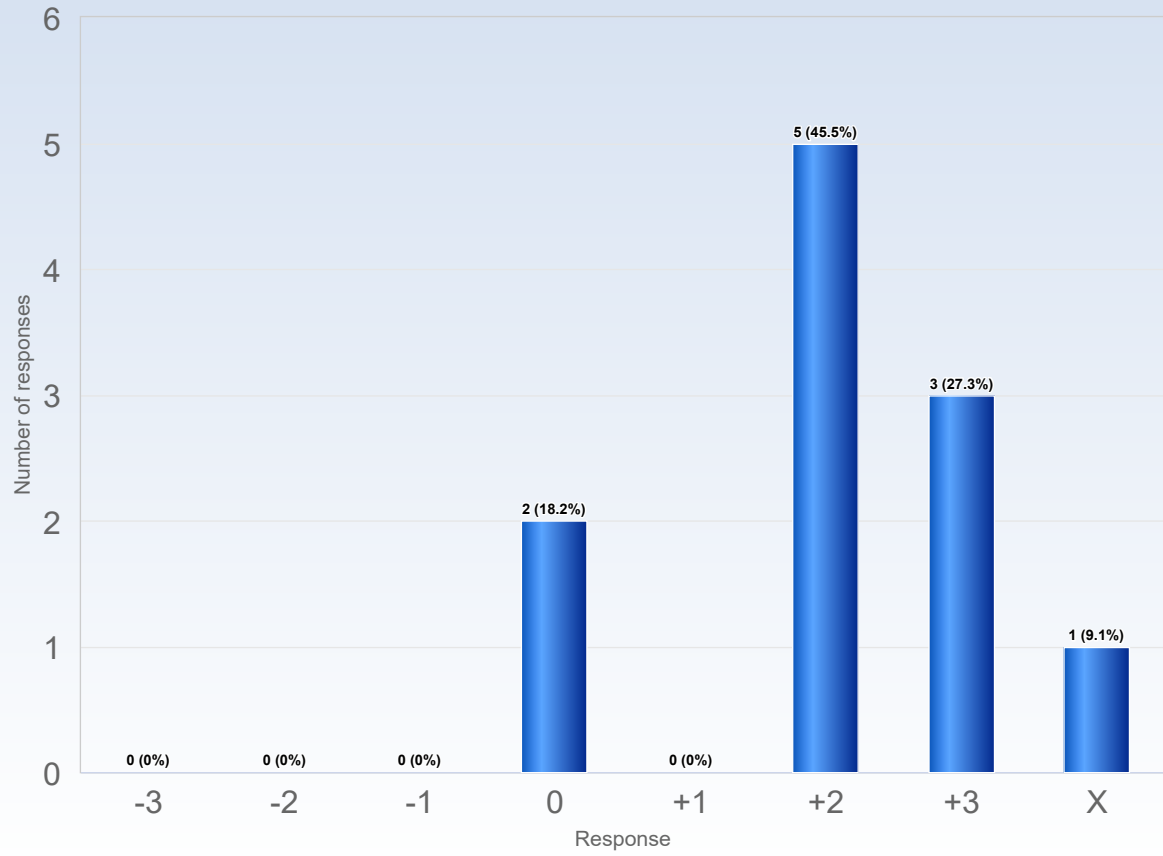


Comments

Comments (My response was: +1)

It was not super challenging but it was definitely stimulating and interesting!

7. The intended learning outcomes helped me to understand what I was expected to achieve

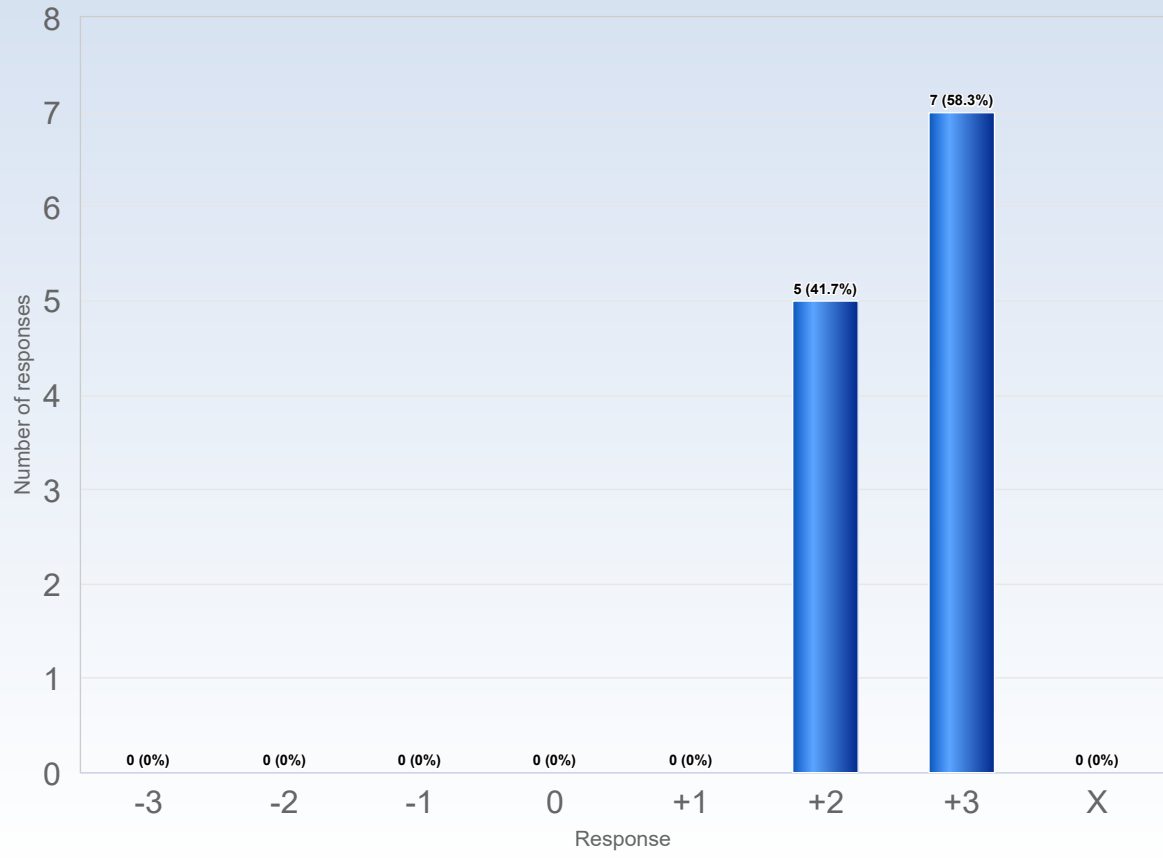


Comments

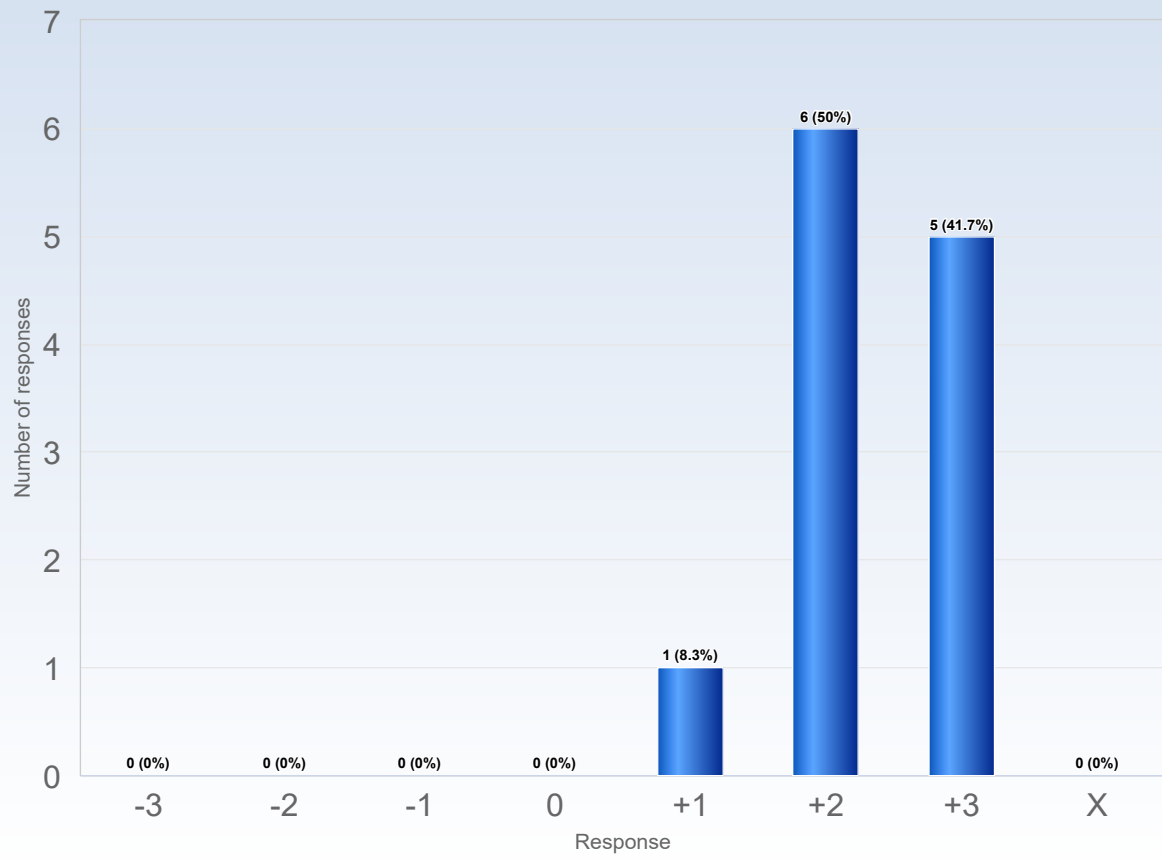
Comments (My response was: 0)

I honestly forgot to read them...

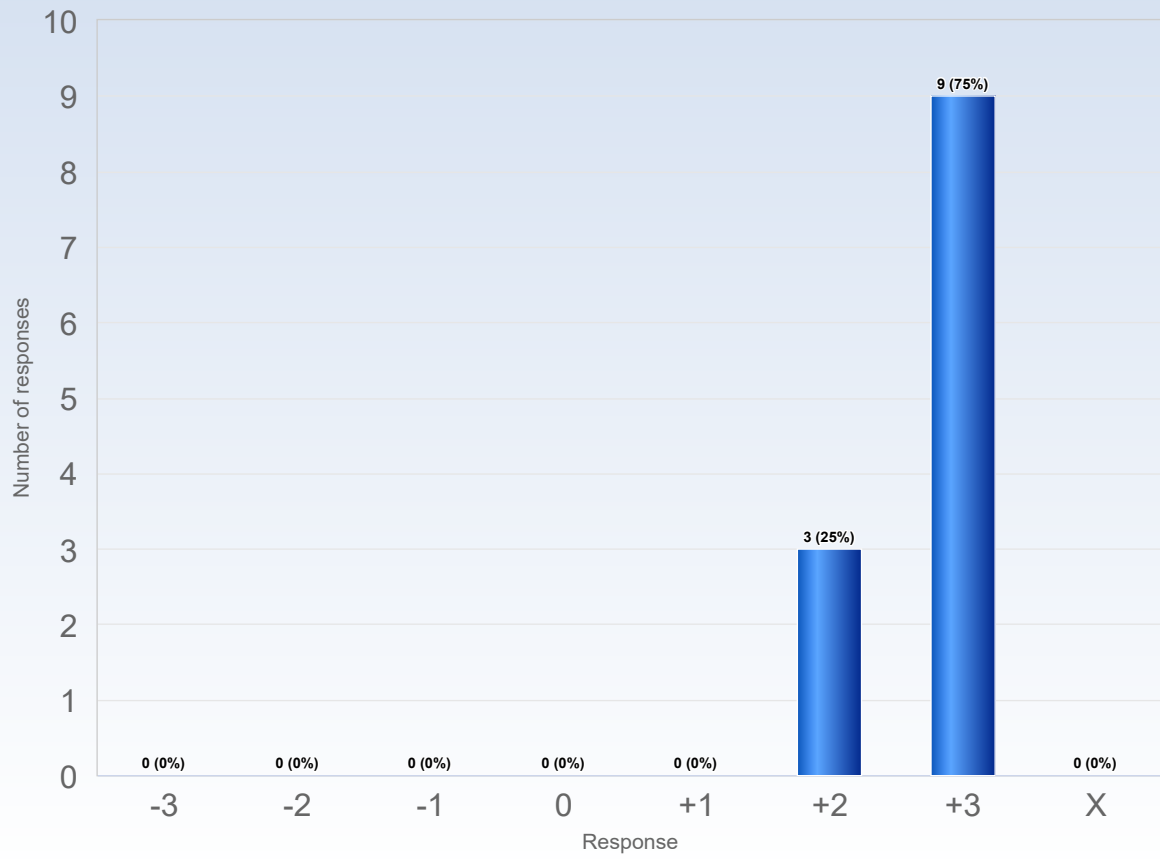
10. I was able to learn from concrete examples that I could to relate to



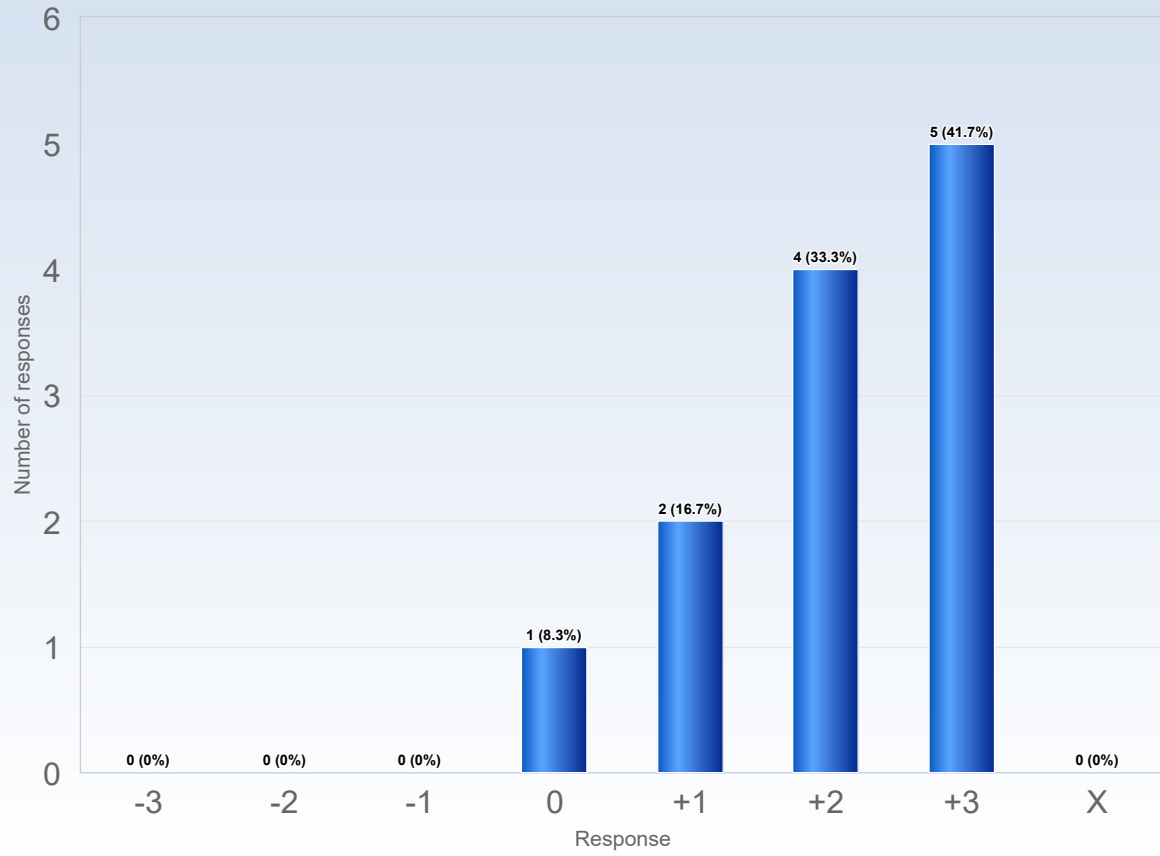
11. Understanding of key concepts had high priority



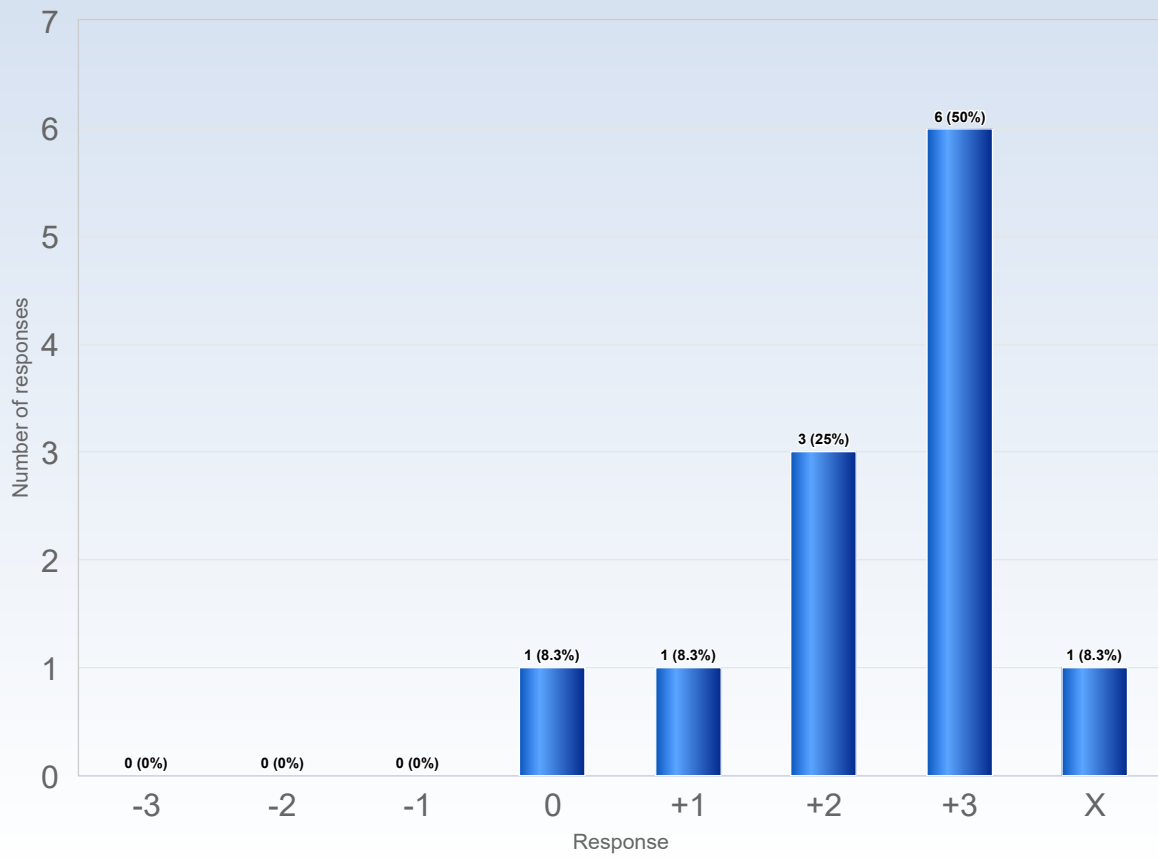
12. The course activities helped me to achieve the intended learning outcomes efficiently



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



16. The assessment on the course was fair and honest



Comments

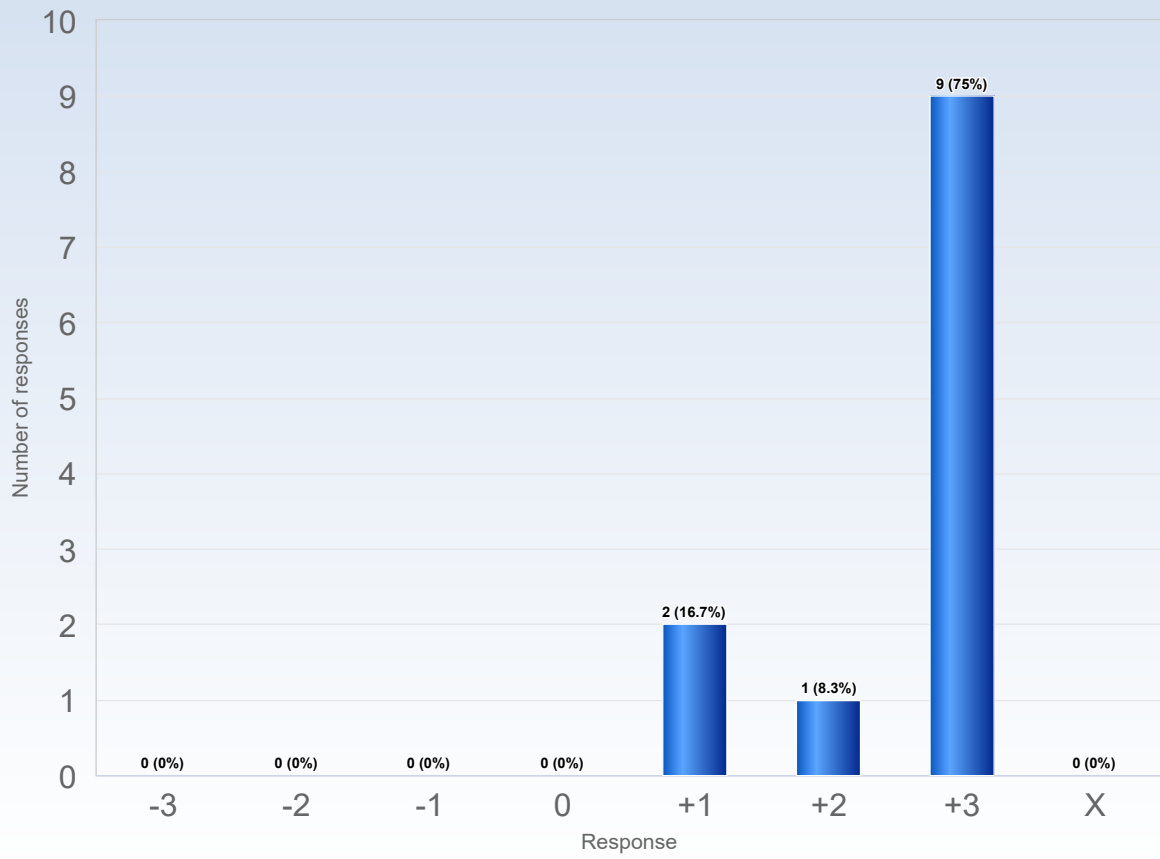
Comments (My response was: 0)

Have not received assessment yet.

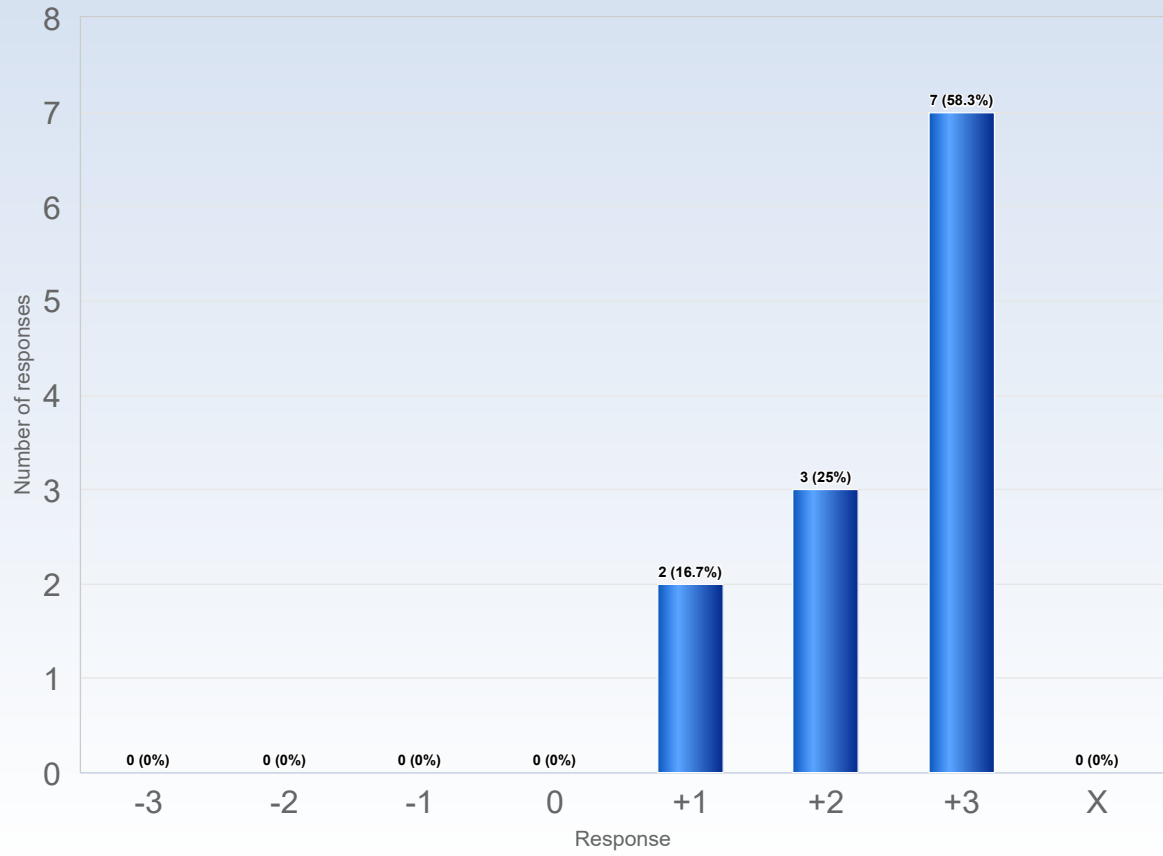
Comments (My response was: X)

I usually do these after the exams have been graded.

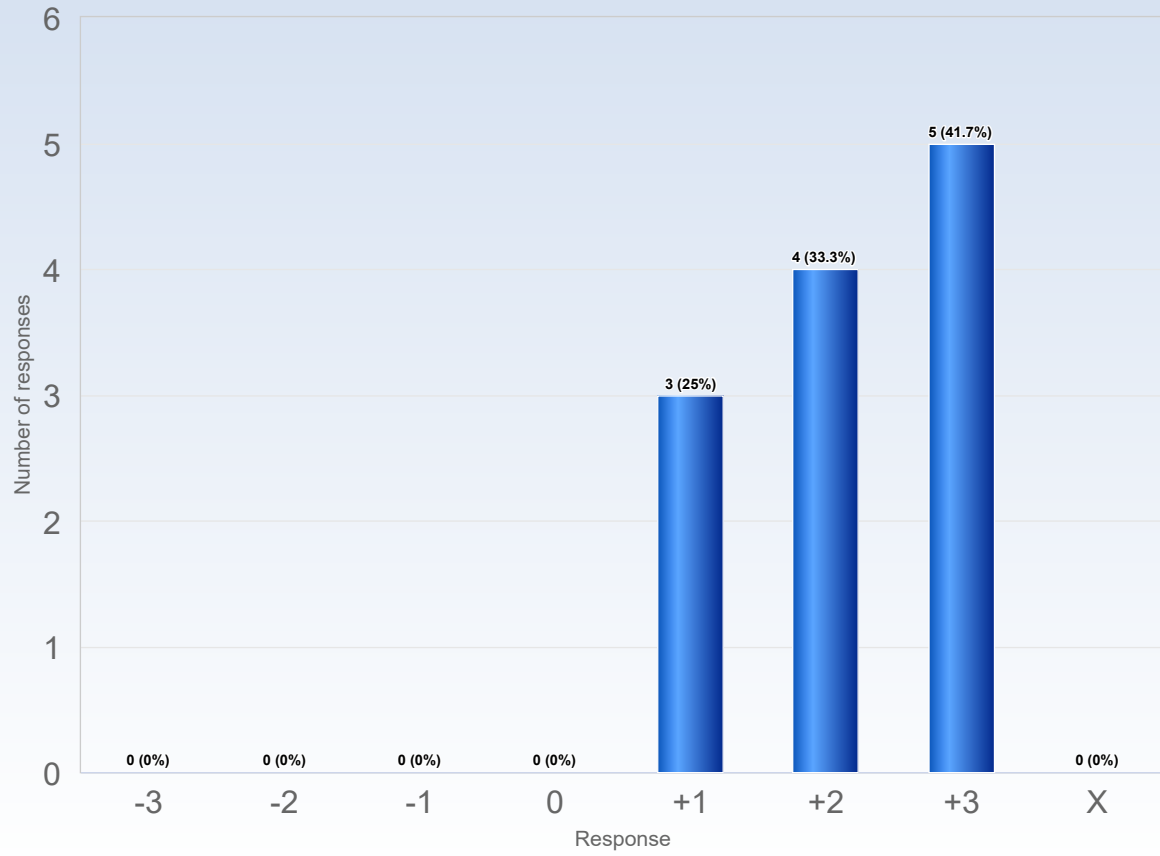
17. My background knowledge was sufficient to follow the course



19. The course activities enabled me to learn in different ways



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



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

