

DH2323 VT24 Course Analysis  
Computer Graphics and Interaction 6,0hp  
86 students (received credits), 38 respondents

DH2323 focusses on intermediate level computer graphics and interaction programming using C++ and libraries and game technologies, such as OpenGL and the Unity game engine. Students must pass labs (P/F: 3,0hp) and their final grade is then determined through their performance on a project (A-F, 3,0hp).

Summary of course changes

Substantial improvements to the clarity and structuring of instructions for the two rendering track labs. Created templates and solutions for the two rendering track lab reports in order to make reporting clearer and assist grading.  
 Created sample code for the first lab in Processing, a flexible software sketchbook and a language for learning how to code, for those wishing not to use C++. This can be used as a basis for subsequent labs. Extended attempts to improve the amount of feedback from students through the course survey.  
 Labs moved back to hybrid mode (both online and physical).  
 Conducted a drive to get more feedback via the course evaluation questionnaires.

Overview

Aspect	Feedback and action
Add recommended deadlines for the individual labs.	We will introduce this, although it might cause confusion since the recommended deadlines might be mistaken for submission deadlines. We will clarify this.
The labs were too easy.	As mentioned in class, if you are fortunate enough to progress quickly through the labs, it is a great opportunity to dedicate your time to creating an excellent project. The labs are really not that interesting and their function to provide scaffolding for those not already familiar with computer graphics. The project is an individual project that can be used as a foundation for a portfolio of your work for potential employers, etc.
The lectures felt hard to connect to the labs.	The labs cross the main areas of rendering (track 1) and animation (track 2). However, the main purpose of the lectures is not to provide information about the labs (the labs include substantial instructions), but to provide a broader background for the project.
This is by far the best course regarding feedback. Got feedback on both the labs and the project.  Honestly, out of all courses I have ever taken, this is probably the course where I felt most comfortable asking for feedback since gymnasium  This is one of the few courses that actually goes out of its way to allow this.	Thank you for the comments. Not everyone felt that they had adequate feedback however – and it is difficult to address since no comments were left. To address it, be aware that the course is set up in such a way that one needs to actively seek feedback (i.e. ask for feedback, attend the lab sessions, submit project proposals, use the other course opportunities, etc) in order to receive formative feedback. That is a fundamental concept in the course and Master-level work in general.

Details

This year, all LEQ scores fell within the range 4.1 to 6.6, with most scores between 5 and 6/7. The outlier and lowest scoring area was again (4.1/7) 5: *I felt togetherness with others on the course.*

Point 5, the sense of togetherness, reflects similar feedback from previous years of the course. The course is run in hybrid mode with lectures (and this year, labs) taking place both online and physically. Additionally, all course assessment (labs and project) allows for both group work and individual work. For these reasons, it is understandable that students who elect to attend online only and do course exercises individually will not feel as strong a sense of togetherness as those who attend physically and do course exercises in groups. However, they have opportunities to do so: in addition to the physical lectures, this year lab help sessions again took place physically. A special section was also created on Canvas to support matchmaking for lab and project groupwork. However, neither of these opportunities were really utilised by students. While enforcing attendance at physical meetings would be a simple way to resolve this issue, the costs of this approach in relation to removing agency from the students and allowing the course to be compatible with their diverse needs are deemed to outweigh the advantages of this approach.

In relation to the course survey, there were more respondents (38) this year to a drive we conducted in gaining feedback. This was mainly done via synchronising the lab submission with a request to do the course evaluation. We will continue to implement this method in future year to ensure we get adequate feedback from students.

LEQ Course evaluation data follows:

## **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)

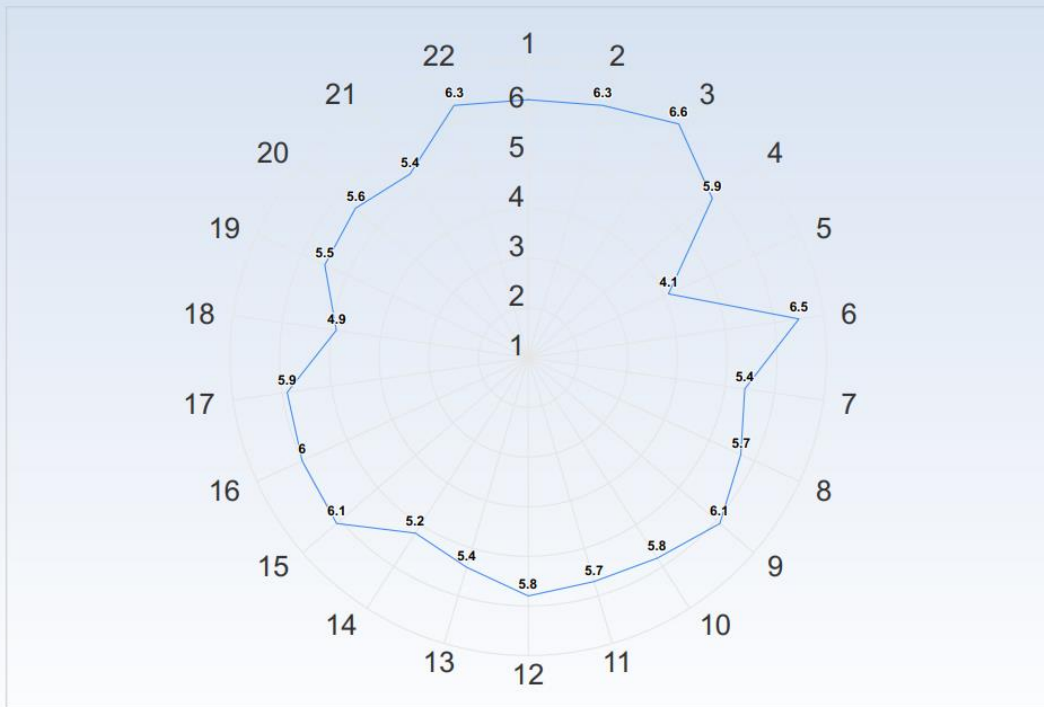
*Collaboration*

- 21. I was able to learn by collaborating and discussing with others (n)

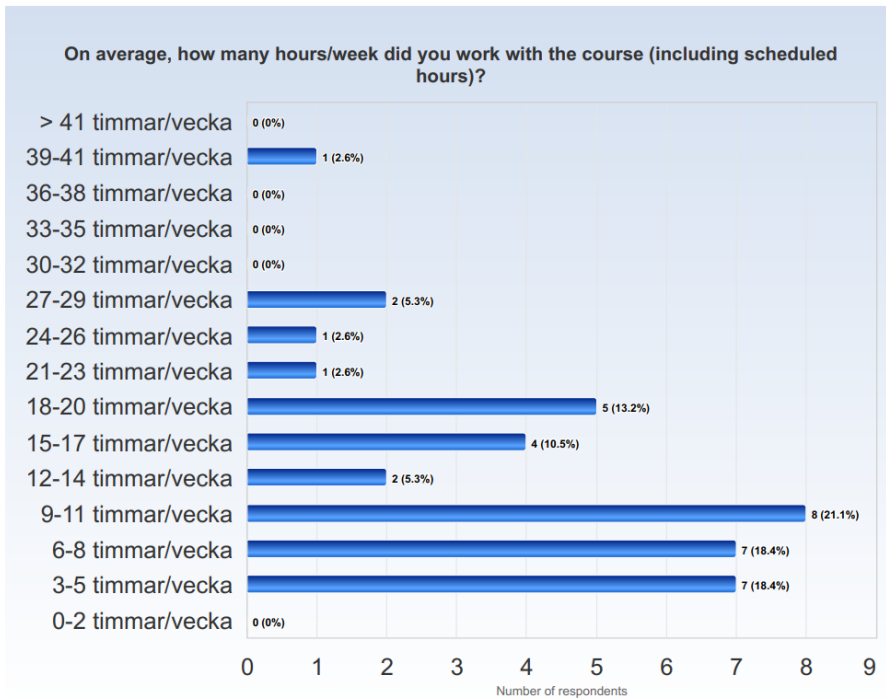
*Support*

- 22. I was able to get support if I needed it (c)

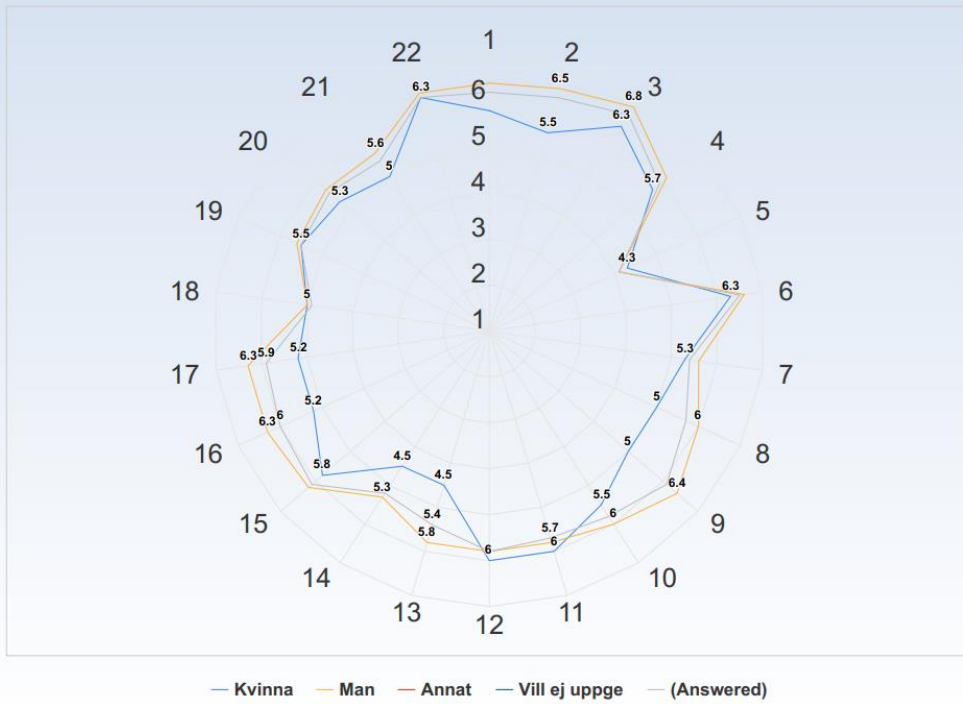
Average response to LEQ statements - all respondents



ESTIMATED WORKLOAD

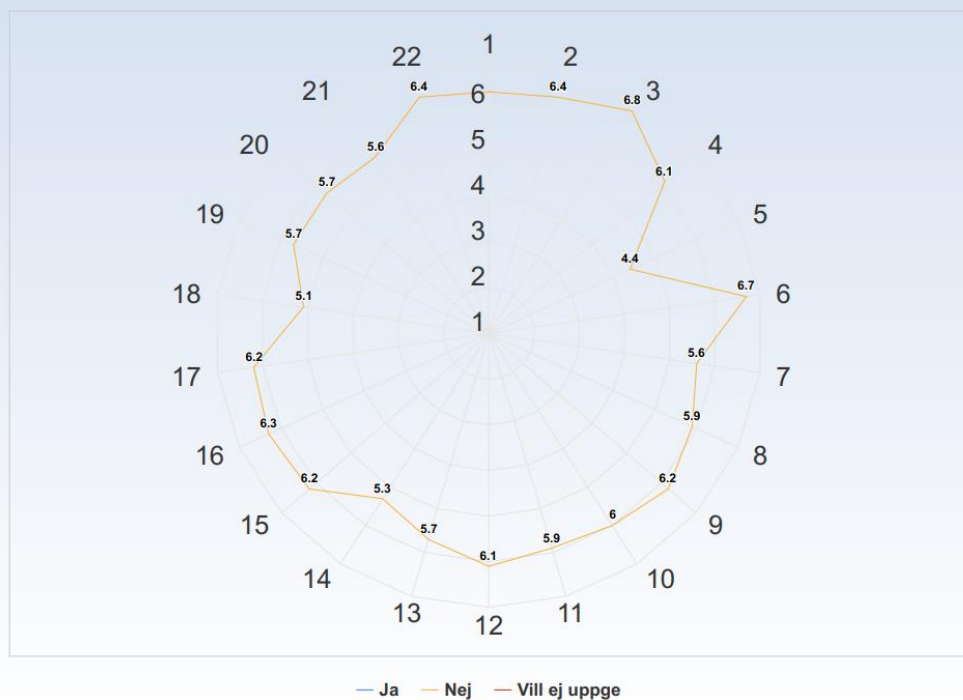


Average response to LEQ statements - per gender

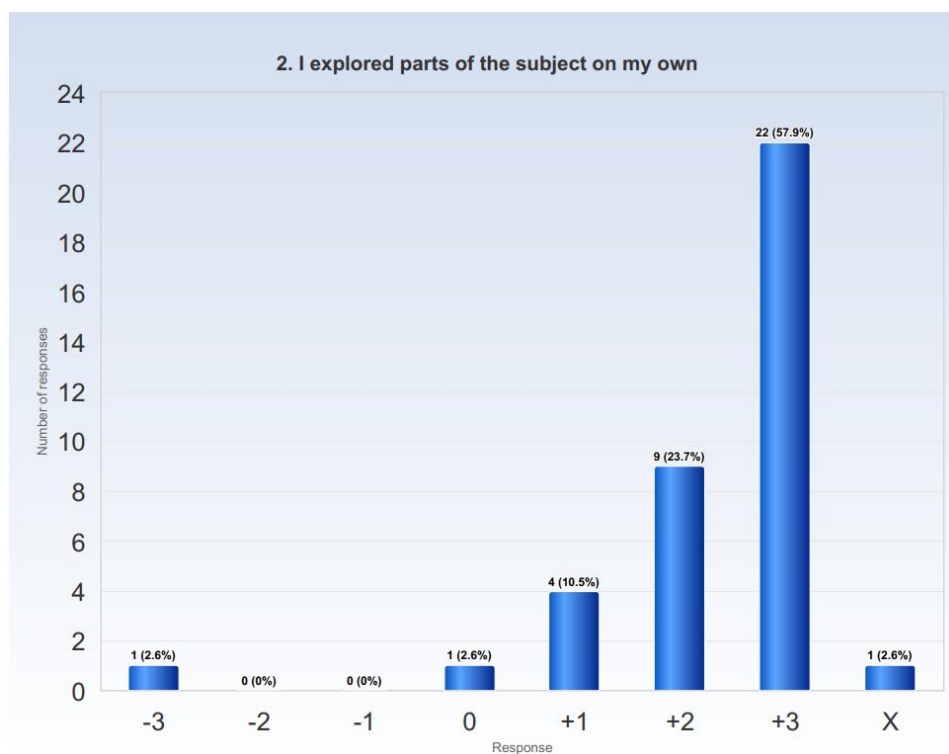
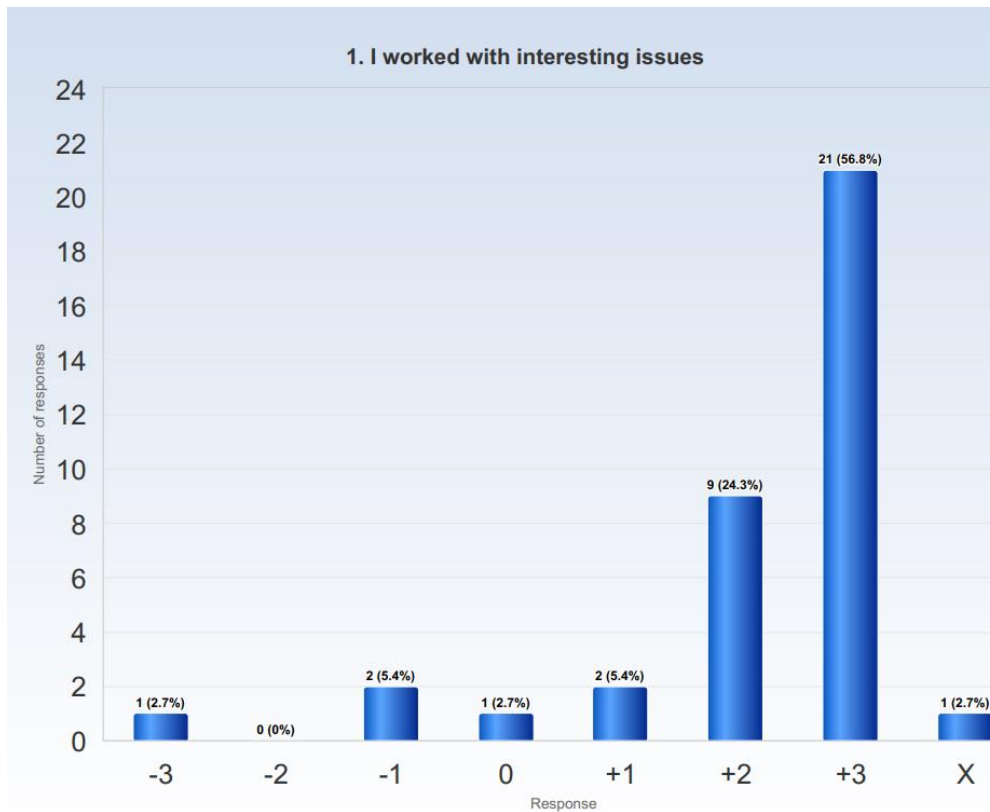


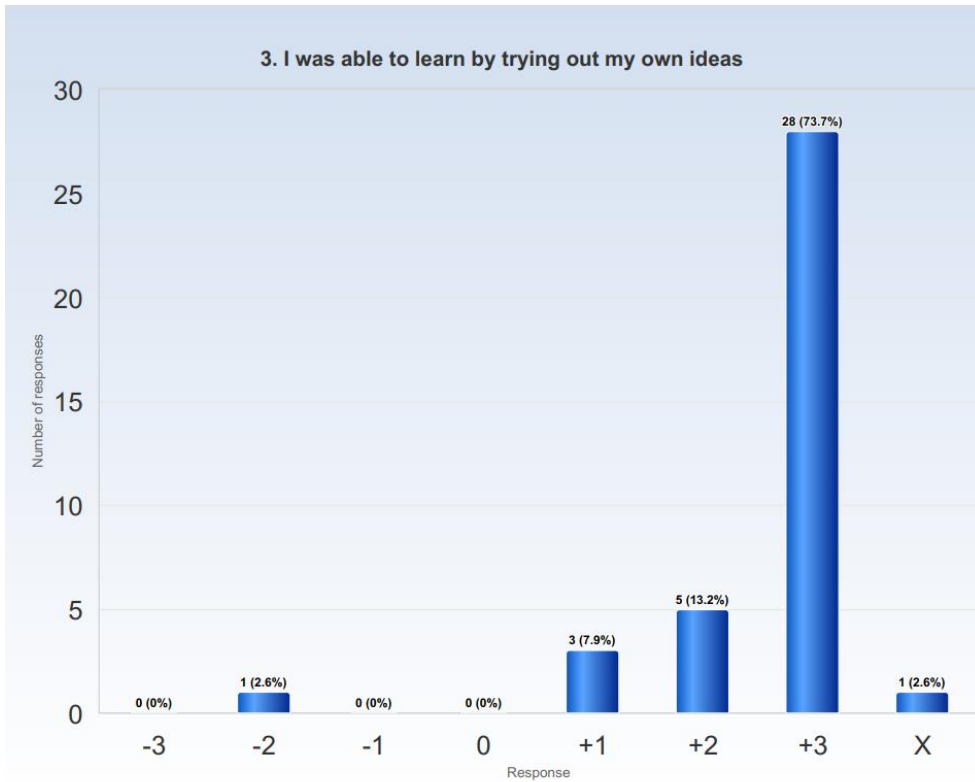
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Average response to LEQ statements - per disability

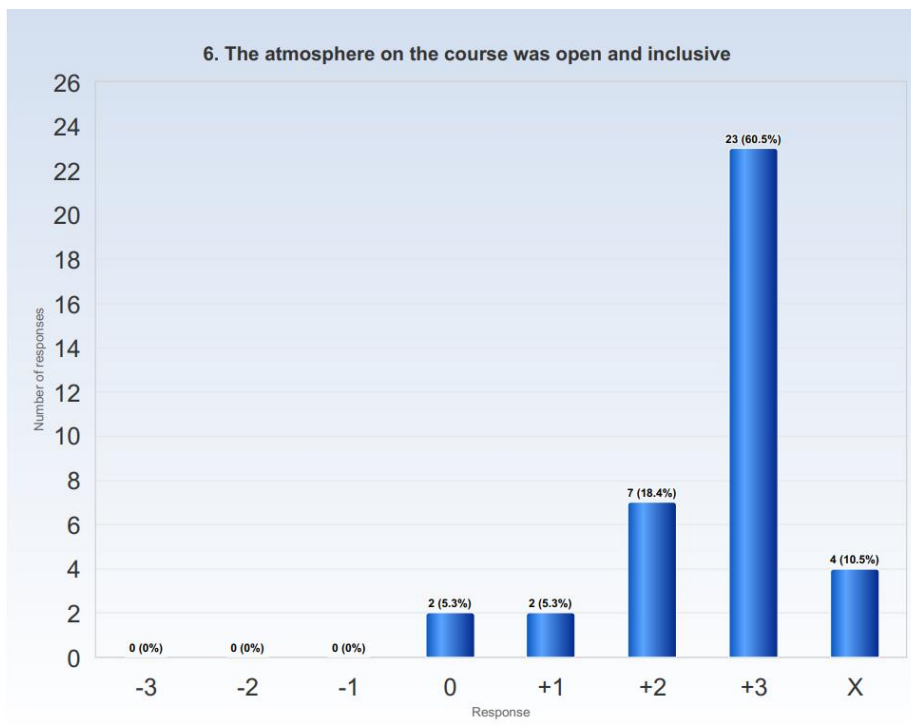


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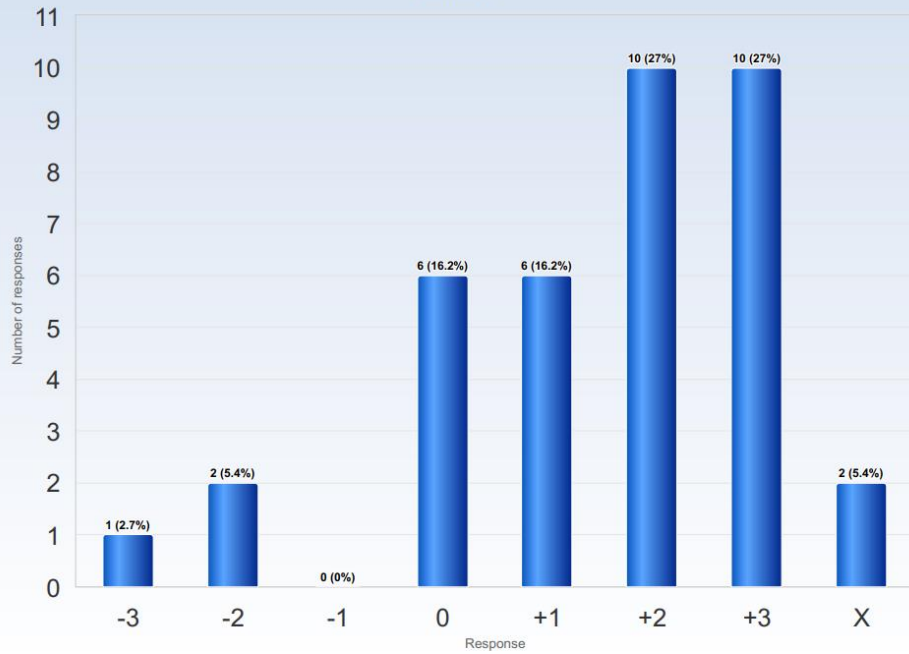




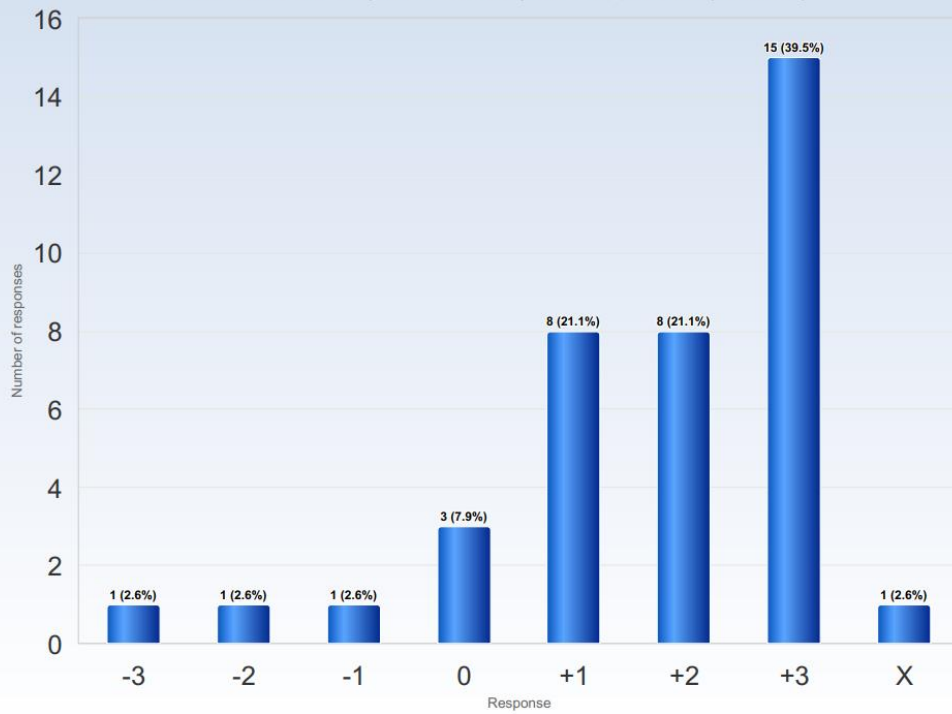


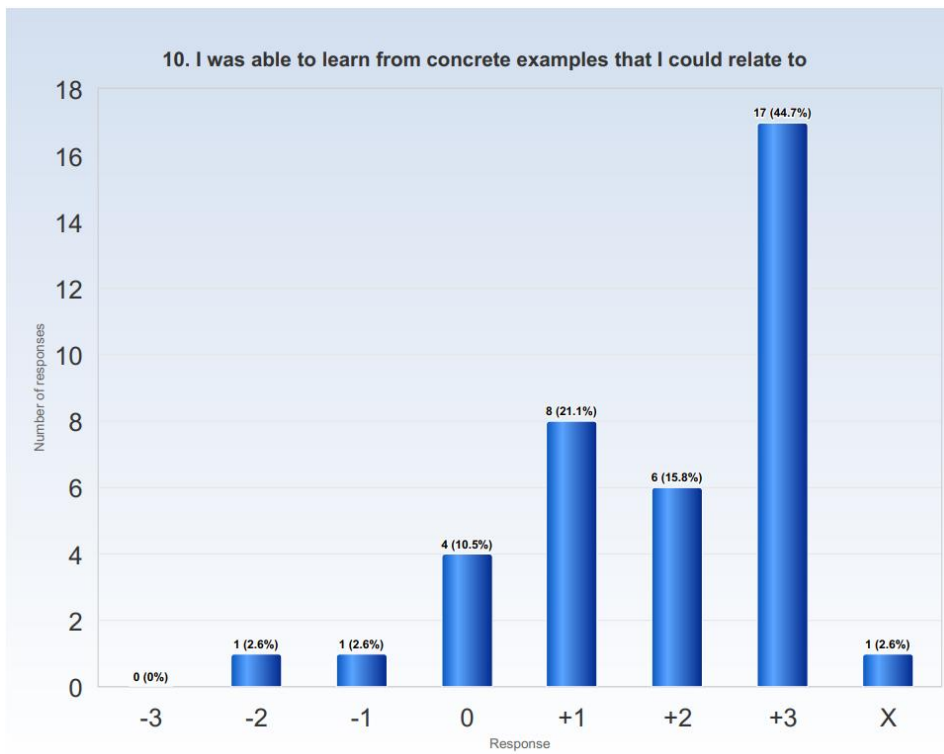
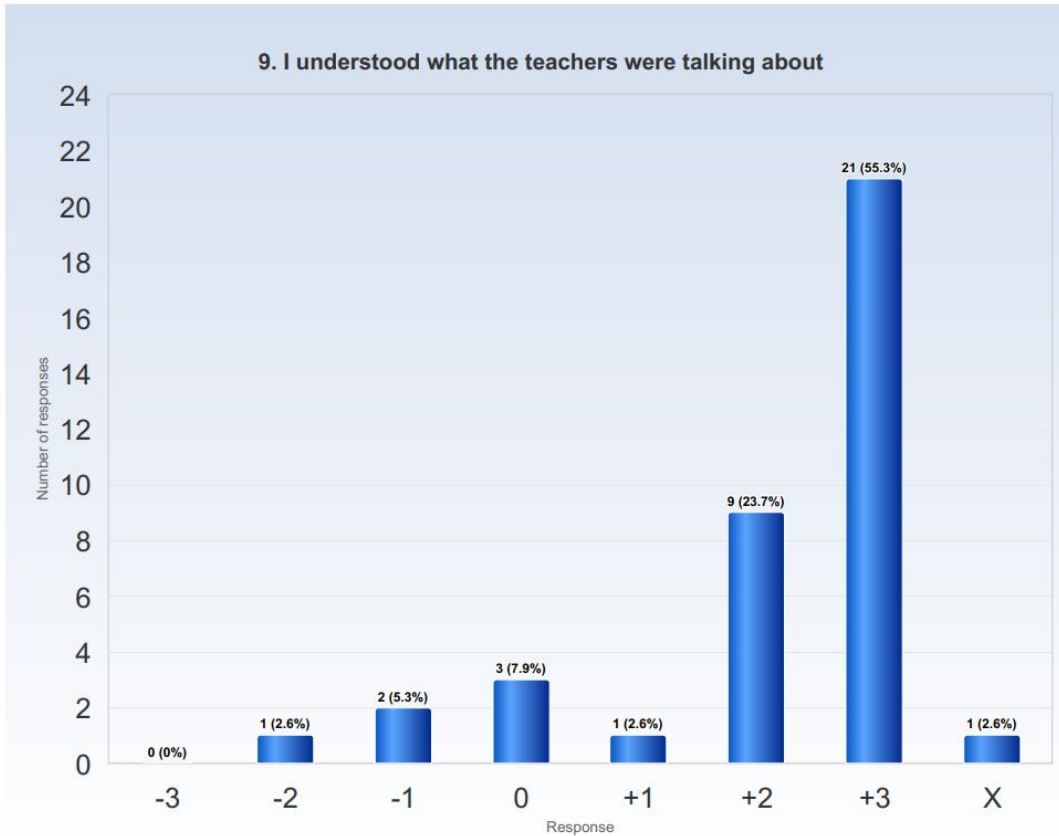


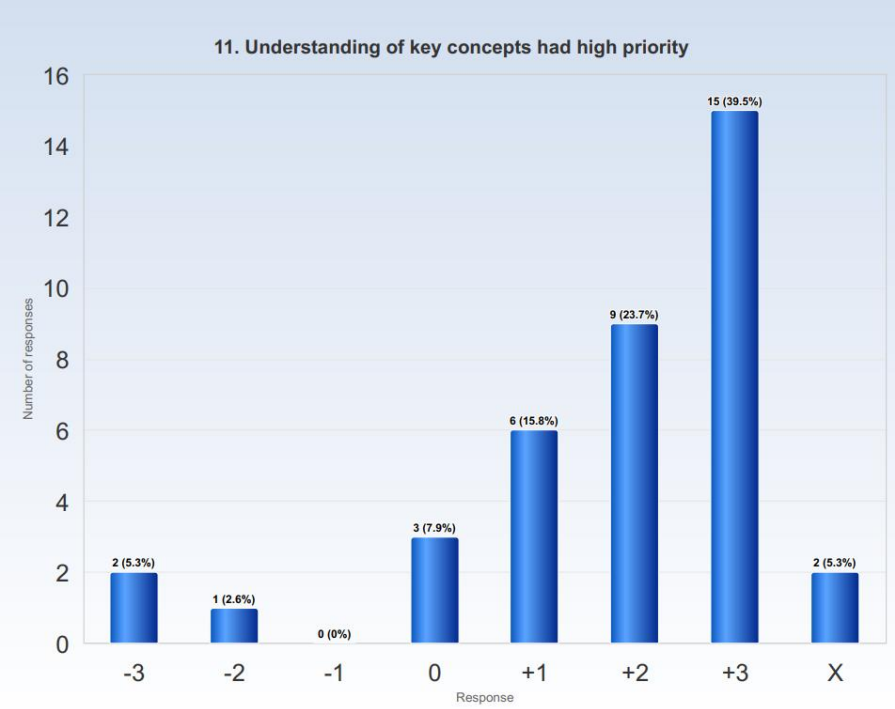
**7. The intended learning outcomes helped me to understand what I was expected to achieve**



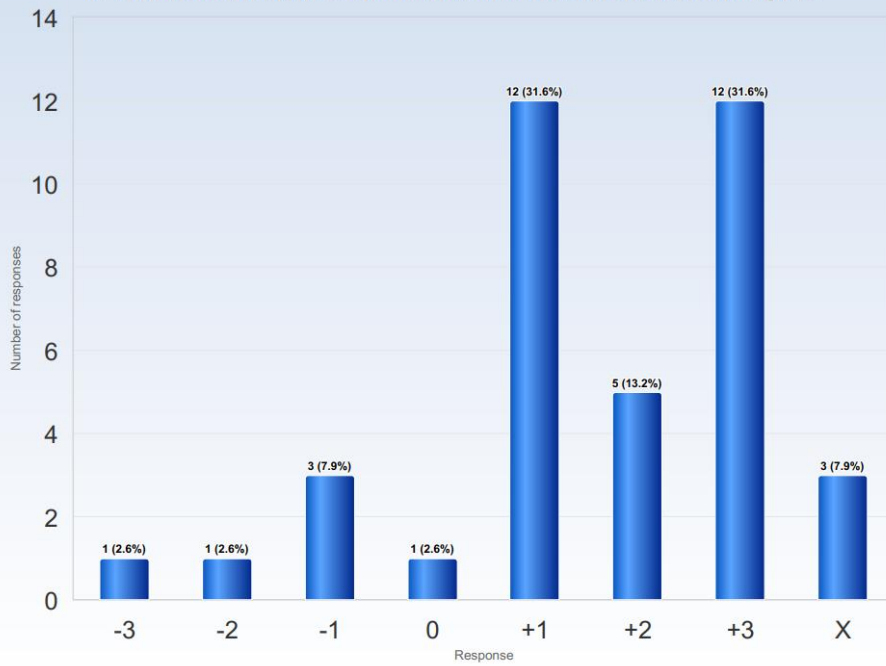
**8. The course was organized in a way that supported my learning**



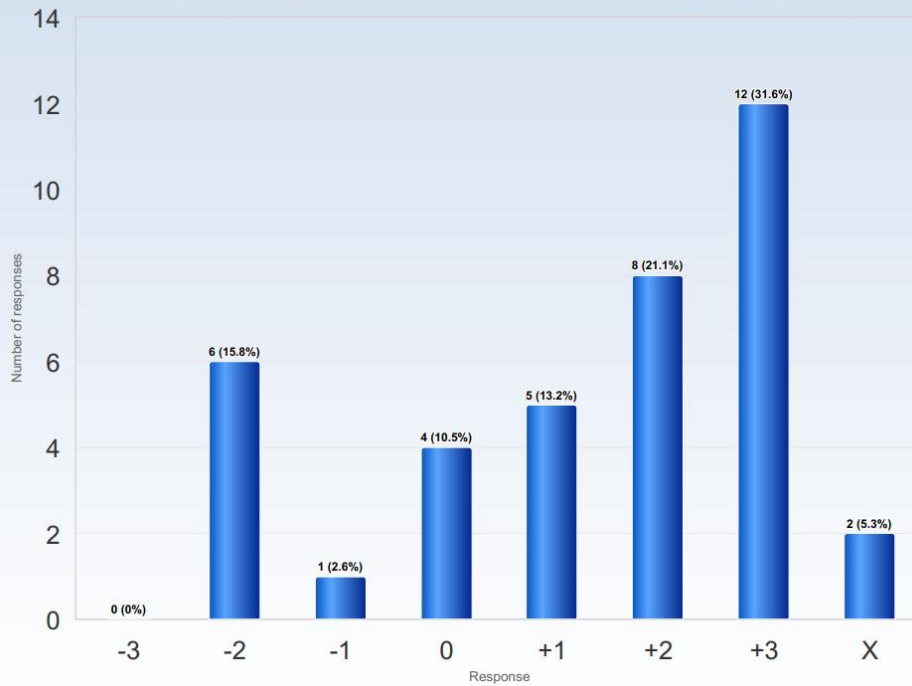




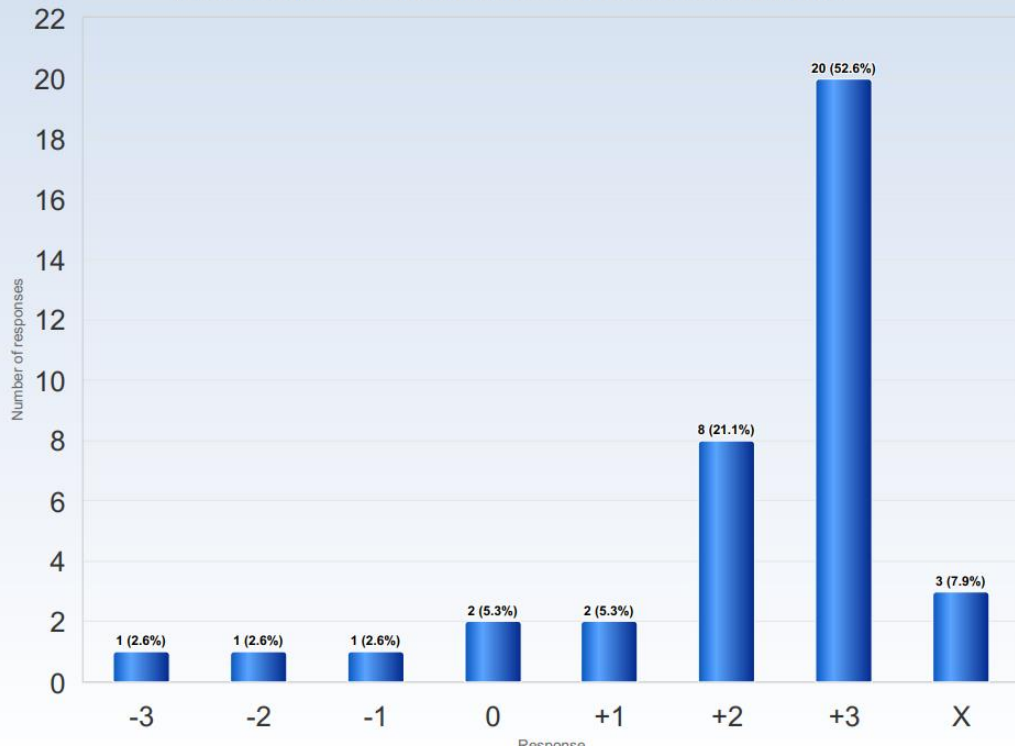
13. I understood what I was expected to learn in order to obtain a certain grade



14. I received regular feedback that helped me to see my progress



15. I could practice and receive feedback without being graded



16. The assessment on the course was fair and honest

