

Report - AH2915 - 2018-03-13

Respondents: 1 Answer Count: 1 Answer Frequency: 100.00 %

Please note that there is only one respondent to this form: the person that performs the course analysis.

Course analysis	carried out by	y (name, e	-mail):

Milan Horemuz

COURSE DESIGN

Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

Lectures,

Computer labs

Project work including practical measurements

Seminar - presentation of a chosen topic based on literature review

Study visit

THE STUDENT'S WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?

The student reported workload ca 12 hours per week, which is less than 40 h/1.5 credits. It might depend on improved lab instructions - the student spent less time working on the reports.

However there were also one comment in Open question section: The workload was improportionally high in comparison to the learning outcome.

THE STUDENTS' RESULTS

How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

One student have not come to exam (nor re-exam)

One student have not passed the oral exam, he did it in re-exam.

OVERALL IMPRESSION OF THE LEARNING ENVIRONMENT

What is your overall impression of the learning environment in the polar diagrams, for example in terms of the students' experience of meaningfulness, comprehensibility and manageability? If there are significant differences between different groups of students, what can be the reason?

The polar diagrams are quite even, which indicate a "normal" learning environment.



ANALYSIS OF THE LEARNING ENVIRONMENT

Can you identify some stronger or weaker areas of the learning environment in the polar diagram - or in the response to each statement - respectively? Do they have an explanation?

The questions 3 (I was able to learn by trying out my own ideas) and 17 (My background knowledge was sufficient to follow the course) got lower marks compared to other questions. All students get the same assignments and they are applying the same methods to solve the problems - that explains the answers to question 3. Question 17 migth depend on the fact that there were several students from other programs having different backgrounds.

ANSWERS TO OPEN QUESTIONS What emerges in the students' answers to the open questions? Is there any good advice to future course participants that you want to pass on?

The students appreciate field measurements, working with software, study visit and seminar. There is a comment in Open question section: "The labs and the project work consisted mainly of following step-by-step instructions. Therefore it was only time-demanding but not challenging."

PRIORITY COURSE DEVELOPMENT

What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term?

The project work assignment should be formulated in a more open form, giving the students more challenging task.

Kursdata 2018-10-12

AH2915 - Laserskanning, HT 2017

Kursfakta

Kursen startar:	2017 v.35
Kursen slutar:	2017 v.43
Antal högskolepoäng:	7,5
Examination:	LAB2 - Laboration, 2,0, betygsskala: P, F PRO2 - Projekt, 3,0, betygsskala: A, B, C, D, E, FX, F TEN1 - Tentamen, 2,5, betygsskala: A, B, C, D, E, FX, F
Betygsskala:	A, B, C, D, E, FX, F

Bemanning

Examinator:	Milan Horemuz <horemuz@kth.se></horemuz@kth.se>
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Assistenter:	

Antal studenter på kursomgången

Förstagångsregistrerade:	8
Totalt registrerade:	8

Prestationer (endast förstagångsregistrerade studenter)

Examinationsgrad ¹ [%]	87.50%
Prestationsgrad ² [%]	87.50%
Betygsfördelning ³ [%, antal]	A 43% (3)
	B 14% (1)
	C 29% (2)
	D 14% (1)

1 Andel godkända studenter

2 Andel avklarade poäng

3 Betygsfördelning för godkända studenter



AH2915 - 2017-10-26

Antal respondenter: 8 Antal svar: 6 Svarsfrekvens: 75,00 %



ESTIMATED WORKLOAD



Comments

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

On average, we have 2 hours for lecture, 6 hours for lab section, but usually I spent 4 hours for each lab section. Additionally, I spent around 1 hours to complete the report.



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 v3.1.3

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. I understood how the course was organized and what I was expected to do (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 choices

19. I was able to learn in a way that suited me (m)

20. I had opportunities to choose what to do (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, intriguing or important

b) We can speculate, try out 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 yet supportive environment

d) We feel that we are part of a community and believe that other people have faith 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 sufficient background knowledge to manage the present learning situation

g) We can learn inductively by moving from specific examples and experiences to general principles, rather than the other way around

h) We are challenged to develop a proper understanding of key concepts and successively create a coherent whole of the content

i) We believe that the work we are expected to do will help us to reach the intended learning outcomes

j) We can try, fail, and receive feedback in advance of and separate from any summative judgment of our efforts

k) We believe that our work will be considered fairly and honestly

I) We have sufficient time to learn and devote the time necessary to do so



m) We believe that we are in control of our own learning, not manipulated

n) We can work collaboratively 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: Vill ej uppge) nil







GENERAL QUESTIONS

What was the best aspect of the course?

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

Working on field measurements and compiling the data obtained using relevant software (i.e. Cyclone)

What was the best aspect of the course? (I worked: 9-11 timmar/vecka) The lab section is the best part, it covers most of the topics in this course. And the home assignment is also great, ii allows me to use the knowledge to solve problems. nil

What was the best aspect of the course? (I worked: 12-14 timmar/vecka) the labs are tightly related to what I learned in the lectures. And the study visit made me know what we learn could contribute to a project. Reading and presenting self-chosen seminar articles was interesting.

What would you suggest to improve?

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

More detailed information on required knowledge (i.e. Using LSQ and BLAVE method in MATLAB) so that we can work on our home assignments more effectively

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

it would be great if there are the name and page range of the related reading materials at the end of each presentation. nil

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) Familiarise yourself with some basic MATLAB, try to attend all the labs and get to work on different types of software, and definitely attend the field trip to gain exposure on the working industry

What advice would you like to give to future participants? (I worked: 9-11 timmar/vecka) Start home assignment on as early as possible.

nil

Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 6-8 timmar/vecka) Prof Milan is an awesome person :)

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

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

The workload was improportionally high in comparison to the learning outcome. The labs and the project work consisted mainly of following step-by-step instructions. Therefore it was only time-demanding but not challenging.

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

















































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







































