

#### Report - IH1611 - 2019-04-03

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 (name, e-mail):

Gunnar Malm, gunta@kth.se

#### **COURSE DESIGN**

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

This year there was a new module covering:

MOS-based memory devices and image sensors

This new content was presented in Lecture 12 (12) but also referred to earlier in the course as an important application area of the more theory oriented parts.

The introduction of this new module was the final step of a course content update that was initiated 2015/2016 after a discussion with program responsible(s) at CELTE. The overall aim was to make the course more useful at the bachelor level and less oriented towards the master level. This course is currently/still offered at both levels.

#### 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?

Yes, only two out of 25 students total reported working more than 20 h per week, corresponding to 50 % of a typical week.

#### 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?

There was a nice and even grade distribution, only a few students failed the course. The exam format was updated to better match the course design (ILOs). Now there were 6 questions, corresponding to 6 major themes in the course plan.

The new content (MOS-based memory devices and image sensors) was examined with varying success rate. That particular question proved relatively hard.

The indicator on the polar chart for the exam had the highest score = 6.5

16. The assessment on the course was fair and honest (k)



#### 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?

All statements on the polar chart received a score in the range 5.3 to 6.5 which is really satisfactory.

There are differences between student groups!

Both for gender and nationality.

I have observed these differences but with a completion rate at 13 (25) for the survey I cannot draw a lot of conclusions.

To summarize

Swedish students at the bachelor level gave higher scores on almost all statements.

A few female students seemed disappointed or at least gave lower scores.

Student(s) with some disability gave scores in the high range, but very close to the average student population.

#### 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 lowest score (5.3) was obtained for statement 4.

4. The course was challenging in a stimulating way (c)

I interpret this as an indicator that there were some too challenging parts of the course, that took away some inspiration and put some pressure on some students.

#### **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 course design with student recitations (students prepare problem in advance and show solutions in class) requires quite skilled assistants to manage the discussion and to provide correct solutions.

The assistant should receive more preparation than this year (roughly 30 min before each session).

#### PRIORITY COURSE DEVELOPMENT

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

A more varied lecture format. I try to involve the class but with limited success. I will try to lift the classroom experience in different ways, including working on my personal delivery style. I try to use student feedback to improve over the years.

#### OTHER INFORMATION

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

Since this course round the course is no longer mandatory but still the number of students is comparable to last year which is a good sign. An effort will be made to interest more students at the bachelor level.

## Course data 2019-04-03

# IH1611 - Semiconductor Devices, VT 2019

#### **Course facts**

Course start:	2019 w.3
Course end:	2019 w.11
Credits:	7,5
<b>Examination:</b>	LABA - Laboration, 1.5, Grading scale: P, F
	SEMA - Seminar, 1.5, Grading scale: P, F
	TENA - Written Final Exam, 4.5, Grading scale: A, B, C, D, E, FX, F
Grading scale:	A, B, C, D, E, FX, F

#### Staff

Examiner:	Gunnar Malm <gunta@kth.se></gunta@kth.se>
Course responsible teacher:	Gunnar Malm <gunta@kth.se></gunta@kth.se>
Teachers:	
Assistants:	

## Number of students on the course offering

First-time registered:	0
Total number of registered:	31

### **Achievements (only first-time registered students)**

Pass rate <sup>1</sup> [%]	There are no course results reported
Performance rate <sup>2</sup> [%]	There are no course results reported
Grade distribution <sup>3</sup> [%, number]	There are no course results reported

- 1 Percentage approved students
- 2 Percentage achieved credits
- 3 Distribution of grades among the approved students