Report - SD2225 - 2018-08-14

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):

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COURSE DESIGN

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

The overall goal of the course is to give the student a deeper knowledge about modelling, simulation, measurement and analysis of ground vehicles dynamic behavior.

The course has the following learning activities; lectures, exercises, guest lectures, two study visits (this year to VTI and Öhlins), four compulsory assignments (LAB1, LAB2, LAB3, PA1) which includes field tests with a real test vehicle and a radio-controlled scaled down vehicle as well as modelling and simulation by using the software's Matlab and Adams.

The examination is a written exam and written reports and oral presentations of the completed assignments.

The course runs over two study periods. In the first study period focus is on lectures and exercises and the three first assignments. At the end of the first study period the written exam is given. In the second period the focus is on study visits, guest lectures and the large final project.

Small changes in the formulation of the assignments has been done since last time to make it more clear. The Scania study visit has this year been replaced by a study visit to Öhlins. Some extra project consultation hours have been added compared to last year.

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?

Calculating that one study period is 8 weeks the student in total have 16 weeks for 11 hp which results in an average of 18.3 hours per week. Only one of the students have responded this amount, the rest have responded that they have had a lower workload.

The major workload is in the first study period (7 hp) but the course evaluation is made at the end of the second study period where the workload is less (4 hp) which might be the reason that the student indicates a lower workload than expected.

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?

They sucesseded very well. Very simular to previous years.

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?

From the polar diagram it is evident that the overall view is that this is a meaningful, comprehensive and manageable course. In the average polar diagram, the score is never lower than 6. However, when splitting up on different groups it is clear that the Swedish students gave lower scores on a few questions compared to the other groups (International master students and International exchange students). The questions where relating to exploring parts on its own, regular feedback and if they regularly reflected on what they have learnt.

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?

From the polar diagram it can be seen when splitting up on several groups that some student would like some more feedback.

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 best parts aspects on the course were given as:

* The final Adams project and all the lectures including the Guest lectures really helped in developing important and useful concepts.

* The general layout was really good, and the different tasks helped me gain knowledge and interest on the subject.

* It covered all the basic concept which were applied in project.

* For the second period--the project part, everyone spent lots of time in the lab. And we could discuss the problem and help each other. The possibility to have a relatively long group work based on the previously learned theory.

*To practically apply our knowledge attained during lectures and exercises proved to be very stimulating and learning for me. The labs where very good.

Regarding improvements: From the general questions one can see that the request for more feedback is primarily more help/feedback relating to the final project. They also would like better computers in the lab which they experience as slow. One student suggested that the exam covers to many credits (7 hp).

There are several good advices to future course participants:

* Every lecture is very important, try to solve related numerical. Adams is a bit less user-friendly so use it carefully because most of the errors are user error.

* Be thorough and work with every chapter of the course literature. A solid background makes the rest more fun and easy!

* Practice the exercises regularly for the 1st period; and come to the lab at least during the planned course time. It's so hard for you to finish all the project without asking for the teachers and other classmates' help sometimes. Study the theory well, know the fundamentals. Also, spend a lot of time practicing with Adams Car: it is not a user friendly program and takes
time to master.

* Start with the labs and projects early on! Enjoy the course, it's stimulating and you learn alot about vehicle dynamics. Go through and learn key
concepts such as bicycle model early on.

*Great course! "Lagom" effort for the credits, they felt well earned.

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 main thing to focus on is to improve the support in the final ADAMS project. A better introduction to the software, improved computers in the lab and improved feedback/support on regular basis in the project.

OTHER INFORMATION

Is there anything else you would like to add?

This analysis is only based on 9 answers out of 34 participating students in the course.

Course data 2018-08-14

SD2225 - Ground Vehicle Dynamics, Basic Course, VT 2018

Course facts

Course start:	2018 w.3
Course end:	2018 w.23
Credits:	11,0
Examination:	TEN1 - Examination, 7.0, Grading scale: A, B, C, D, E, FX, F ÖVN1 - Assignments, 4.0, Grading scale: P, F
Grading scale:	A, B, C, D, E, FX, F

Staff

Examiner:	Jenny Jerrelind <jennyj@kth.se>
Course responsible teacher:	Jenny Jerrelind <jennyj@kth.se>
Teachers:	Jenny Jerrelind <jennyj@kth.se> Henrik Hvitfeldt <hhv@kth.se> Lars Drugge <larsd@kth.se> Annika Stensson Trigell <annika@kth.se>
Assistants:	

Number of students on the course offering

First-time registered:	33
Total number of registered:	38

Achievements (only first-time registered students)

Pass rate[1] [%]	*There are no course results reported*
Performance rate[2] [%]	55.90%
Grade distribution[3] [%, number]	*There are no course results reported*

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