SD2307 review of the course feedback LEQ

5 people answered the LEQ

#### No major issues detected

## 1 Course feedback

Clustering of course feedback in different themes or areas for a better understanding and postprocessing:

## 1.1 What was the best aspect of the course?

#### 1.1.1 Perspective

It gives a good overview of rail vehicles.

We can know a lot of basic knowledge for the railway engineering, especially for the students who are not in this background like me.

I loved the fact that everything (and more) could be found in the textbook.

#### 1.1.2 Study visit

I like the material and study visit to Hagalund Depot. Other study visits should occur, such as visits to another Depot of Roslagbanan, or Pendeltag Depot.

#### 1.1.3 Oral test

The oral exam was a great addition to the course.

I also enjoyed the oral test of this course. Such an exciting thing to have a discussion with Carlos about many things about railway vehicles, but unfortunately it was being graded :D

#### 1.1.4 Project task

I loved the project task a lot. It gave more flexibility and a lot of space for me to research and assume and do the virtual calculation and predictions. It motivated me a lot to study more about every topics and work on the project task to give the best.

The project was interesting and challenging.

## 1.2 What would you suggest to improve?

## 1.2.1 Specific, real-life examples

It would be great to include a few more examples (like how the specific system works in the specific train, with specs and figures, not only a general overview) in the lectures. Finding publicly available detailed data about trains is sort of a challenge. It would make doing the project a bit more comfortable because we will be able to understand if our numbers look realistic.

#### 1.2.2 Railway industry and Regulations

Please more material to be included about railway industry in Europe, the regulation and standards for railway vehicle, their development and progress from the past to current and also for future and potential projects.

I suppose that it is beneficial for students to emerge in the real situation. For example, more visits to railway companies will help us understand railway operations and better understand the components and functions of trains.

## 1.2.3 Project task improvements

And I think it would be better to return the final presentation so that people will show their projects in a more official way, compare with each other and the deadline will motivate the students.

Maybe the project task could be more specific and detailed in some parts, like adding info about the country where it is happening, more info about passengers, and so on.

The project task was interesting and it was getting better and better as I worked and tweaked it every time I update or modify my train parameters. However in the final, the project was validated only by the results not with the project file itself which worried me. Because different groups did their projects with different accuracy levels considering/not considering (say, gradient start/end, maintenance time allotment) the given criteria. I accept it'll take a lot of time evaluating a whole project file but I guess it'll show the level of understanding the task and the involvement of a group in the project.

#### 1.2.4 Written exam

The written exam this time was little hard for the given time. First, we students need to read the question and understand the requirement and then need to work on it. And the question 6 especially is just the same we did in our project task but with more use of the calculator which is time consuming. So, I found it was so hard to complete all 6 questions in the given time.

## 1.2.5 Grading

I think more chances/opportunities can be given to the bright students to get higher grades in general.

#### 1.2.6 Book

Also, it would be useful to have an electronic version of the book, if it is possible.

## 1.3 What advice would you like to give to future participants?

#### 1.3.1 Project task

To start early with the project and to not underestimate the material for the oral exam.

Ask teachers about the project, don't believe your first numbers, it will get worse and in the end, you will work hard to fulfill all requirements.

And find good teammates, it will be extremely helpful.

#### 1.3.2 Examination

For oral exam just try to understand big concepts of how everything works, don't go deep into details before you have clarified the basics.

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## 1.3.3 Student participation

For those who already have experience in railway industry, just enjoy the course, and ask questions as much as you could to all the teachers. Dig deep into railway vehicle industry in Sweden and Europe.

For those who haven't got experience, spare your time to learn more about railway vehicle components outside class through the internet, such as videos on youtube, etc. You need to sharpen your intuition and feeling about it. Once you get it, you will enjoy this course.

Attending to classes as much as possible, it will help you realize more comprehensive knowledge about railway no matter for no-background students or knowledge-related people. Reviewing of what you have learnt will be extremely helpful for your oral and written exams.

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

It was a nice course, many thanks to Carlos, Sai, and all teachers on the course!

About railway project tasks, there should be additional questions for every student before it is graded. This is to ensure every student contributes enough to the group projects. Sometimes, in a group of 3, only two persons or even one did the project while the others did not.

There are many different ways could help students dig interest in the railway, like proving more interesting animations about the railway to students, and organizing more railway-related visitings, including museums and companies. Studying could be an easier way after getting interested in it.

# 2 Things to work with before next course round based on the feedback

#### 2.1 Specific, real-life examples

ILO4. Already there, maybe try to highlight them in each chapter/lecture.

## 2.2 Railway industry and Regulations

ILO4. Industry Processes lecture. Consider how to integrate industry and regulations here or in all the course (three tiers for each theme? Theory – practice – industry and regulations? Or something like that?) – long term dev.

#### 2.2.1 Project task improvements

Consider reintroducing final presentation - how to do this without consuming a huge amount of time?

Project task evaluation – add context to how it links to the other parts of the course – not working on it gives you less chance to pass/get good grades in the other examination parts, while being not-so-many points in the grading criteria.

#### 2.2.2 Written exam

Calibrate difficulty of the written exam so that it is not that time consuming.

Create exercise examples that students can solve, including solutions, based on previous exam.

#### 2.2.3 Grading

Review grading system for better capturing students performance.

Clarify the grading from day 1.