Vehicle Aerodynamics, 5C1211, 2003

Guidelines for projects

You should choose a project from the course's list though you are also welcome to discuss a proposal of your own with the staff on the course. Most projects will be literature studies. A project should be carried out by a pair of students working together, or posibly a single student, and at most two pairs of students may choose to work on the same project. A supervisor or tutor will be assigned to each project from amongst either the course's staff or the postgraduates who are following the course. Projects are to be documented in a written report and you are also required to prepare a presentation for the whole class. Before these presentations you are required to review another project report and to prepare a discussion of that report as part of the presentation session. During the presentation session you will be required to either present your own project or to lead a discussion of the project whose report you have reviewed. Your project report, the preparation of a presentation, and the review of someone else's report, all together, constitute 2.0 Swedish *studiepoäng, i.e.* 3.0 ECTS credits..

Working on your project

Try to reflect while you read so that you can penetrate into the deeper meaning of what you're reading and pose questions about the text. Look for cause-and-effect relationships. Don't just find out what happens. Try to find out how and why it happens. One good way to get going is to read texts from more than one author or source.

There are a lot of ways of finding information nowadays. The staff on the course can often refer you to relevant sections in basic text books. That's a good place to start but you can also carry out computerized searches in libraries and, not least, the Internet. 'On the web' you can often find the latest results, animations of numerical simulations, and a whole lot more.

Writing your project report

Your report should have a clear structure and should document the whole of your project. You may write it in either English or Swedish.

Students who can read Swedish can find instructions and advice on how to write a report in '*Kommunikation för Ingenjörer*' written by Anders Folkeson and Olle Meyer, Dept. of Machine Design, KTH, 1998. This booklet presents the general requirements for reports written as part of the degree courses in Mechanical Engineering and Vehicle Engineering at KTH and defines the standard for projects in Vehicle Aerodynamics.

You should indicate whether equations you refer to are expressions of basic principles or empirical relationships. If you use an empirical relationship you should clearly state its source.

Peer Assessment

The main idea behind the requirement that course participants should read and review each other's reports is that university teachers have generally found that students carry out their projects better and write better reports when they know that they will have to read and

review someone else's report later on. The staff on this course expect you to be more aware of the criteria and goals for the quality of the project work when you know that you're going to be reading each other's reports.

Reviewing someone else's report

Apply the same criteria when you review someone else's report as you used when you wrote your own report — see above. Try to write a review that confirms for the other students that they have carried out a good project and at the same time supports and encourages improvements that involve a reasonable amount of effort. It is far too easy within the academic culture, *i.e.* the world of research, to have an idea of what the absolutely perfect project report would be like and then write a list of all the failings and errors in the report that you have reviewed. Such an assessment has very little value in a learning context. A worthwhile guideline is to aim at expressing two positive assessments for every negative criticism you make.

A few concise objectives

An objective for the project:

- it should explain 'how and why' and not just describe.

Objectives for the project report:

- it should present the whole project
- it should be written in your owm words
- it should be clearly written and even pleasant to read
- it should have a proper structure

Objectives for the review:

- it should be based on the objectives above
- it should emphasize the good points
- it should support a reasonable improvement

Timetable

You should hand in your project report by Monday the 12th May 2003 at the latest.

You should fetch a report to review on Wednesday the 14th May and you shuld carry out the review before the first session of presentations on Wednesday the 21st May, 10-12 a.m. A second session (2h) will take place during the same week.

Tony Burden, 8th April 2003