

Evaluation report Advanced Thermodynamics

201500024

Dr. ir. J. Kok

The evaluation committee has evaluated the course Advanced Thermodynamic by sending an online questionnaire to 58 students. 16 students filled in the questionnaire, which gives a response of 28%.

The course Advanced Thermodynamics scores an average mark of 3.4, which is insufficient for a master course. 'During the lectures, the subject became clear to me' and 'The quality of the study material (e.g. layout, accessibility, level, index) was good' scores lowest, both with a mark of 3.0. 'The teacher was available for questions' has the highest score with a 3.9.

Considering the lectures, students claim that the first and last part of the lectures, given by Rob Hagmeijer and Wouter van den Otter respectively, were very good and the lecturers made the understanding of the subject very clear. The middle part of the course, given by Jim Kok, was unfortunately not as good. According to the students, it looked as if he did not prepare the lectures, because he sometimes did not understand his own calculations. Considering the study material, students indicate that the book does not fit the course. According to the students, also the lecturers claimed this. Therefore, students advice to write a reader instead.

These are the main conclusions of the evaluation. The interpretation is based on the remarks of the respondents. For an overview of the results, see the graph at the end of this report.

Recommendations of previous evaluation

No previous report was found. It is therefore not possible to state the recommendations of the last evaluation.

Recommendations by the committee

The quality of the course can be improved. Based on the results of the questionnaire, some recommendations for improvement are provided. The most important recommendations are:

- Prepare the (calculations in the) lectures better. This especially holds for dr. ir. Jim Kok.
- Come up with a better alternative for the book. This could for example be a reader.

Response lecturers

Comments of all 3 lecturers

We agree that the text book does have issues to cover the course material. We tried to address this by providing, with every lecture, extensive lecture notes on Black Board. In addition we made formula sheets available during the course and at the exam.

For next year we intend to write a reader. We already have some material available for this. This will lead to a more clear definition of the course material.

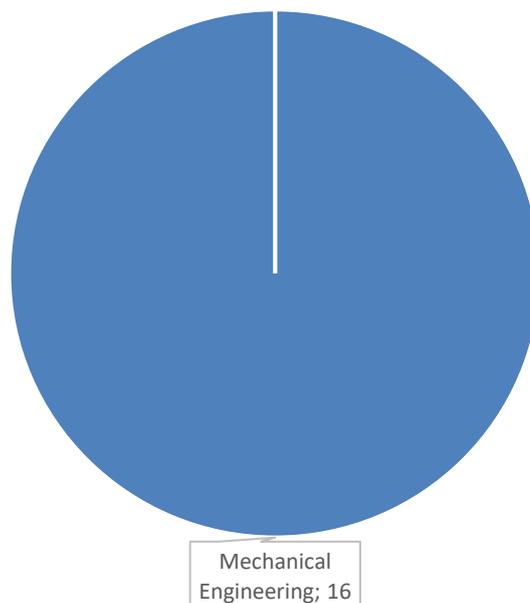
About J. Kok

For the 5 lectures that he presented, the last 2 lectures involved lengthy mathematical derivations on chemical equilibrium and law of mass action for a perfect gas. In retrospect these were less suitable for a lecture format. Although J.Kok was well prepared, it was difficult to avoid having to step back

now and then and trace back errors, when writing the derivation on the board. Maybe this is what the students are hinting at, and it is agreed it is better to avoid this in the future.

For the future the proposal is to change the format of these lectures. The idea is to work with a format where the material in half an hour is summarized and subsequently some examples of application of the material presented. Students are able to read the material and derivations at home in detail. Some of this will return in the subsequent exercise class.

Composition of respondents



Overview

- All marks are given on a Likert-scale from 1-5. For master courses, a mark of 3.5 or higher is sufficient.
- The height of the bars in the graph represents the mark. The thin line at the top of the bars gives the standard deviation.

