



LUND UNIVERSITY
Faculty of Science

Centre for Mathematical Sciences
Division of Mathematics and Numerical Analysis

Course Analysis for MATM20 Mathematical Modelling, VT 2023

Course Information

Lecturer: Joachim Hein

Teaching assistants: None

Number of students: 19

16 newly registered and 3 re-registered.

7 students answered the course evaluation,

4 of them are enrolled on Bachelor's Programme in Mathematics,

2 of them are enrolled on Master's Programme in Mathematics,

1 of them is enrolled on another Programme or as stand alone course

Examination

Project: 11 students passed.

Oral presentation: 11 students passed.

Oral examination: does not apply

Written examination: 9 students passed.

- Ordinary examination 31/05 2023: 9 students participated and 9 of them passed.

- Resit examination 23/08 2023: 1 student participated and 0 of them passed.

Final grades:

In all, 9 students, including 1 re-registered students, have got their final grade.

7 passed with distinction.

2 passed.

Course Evaluation

Summary of student's answers:

Seven students took the time to provide valuable feedback on the course. The overall satisfaction of the responders is very high, with an average rating of 4.4 out of 5.0. None of the responders left a negative overall rating. All of the individual question received high average scores of 3.7 out of 5.0 or better. Only 3 questions were rated below 4.0.

Six students offered textual feedback. The seminars are mentioned very positively. Some responders raise criticism on the exam. One responder would like the course to cover more of the material in the book.

Teachers' comments:

The course consisted out of lectures and seminars. All events were on campus in a classroom setting. For most parts the course followed a textbook. There were set exercises, which were discussed during the seminars in the following week. Students received Python programs and Excel sheets from the lecture demonstrations and sample solutions for the programming exercises.

As stated in the course plan, there was a written exam and project work. The project work was a group assignment with a project presentation in the end. All project members had to actively participate in the presentation.

I really appreciate the feedback on the course and how well the course was received. Regarding the comments on the exam, I like to point out, that mathematical modelling is about making the connection from the real world to the world of mathematics. This is in its nature a bit more wordy than a “normal” course in mathematics. Considering the pass rate and the number of distinctions achieved in the exam, I can not see that the exam was too hard or examinees would have needed more time.

The course covered exactly those chapters in the text book, which are stated in the course plan. Covering more of the book would require revisions to the current course plan.

I am very pleased that all responders answered that they feel more confident about tackling unfamiliar problems. All responders gave this question a rating of 4 or better, with an average rating of 4.7 out of 5.0.

Changes from the previous course realisation:

Compared to the previous year, the number of computer demonstrations developing the code from scratch have been reduced. On a number of occasions, instead of developing the code in front of the class, the code was ready at the beginning of the lecture. This was done in response to feedback received on the 2022 running of the course. Judging by the comments, some responders comment positively on the coding sessions, while others are still a bit critical. It seems to me, the balance was approximately where it should be.

Suggestions for the next course realisation:

Based on the positive feedback received, no major changes are planned for future course realisations.