# Kursanalys IX1501 – Matematisk statistik

2024-05-27
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## Course design

The course consists of both online resources and offline activities. 14 lectures (föreläsningar) are provided as pre-recorded videos on Canvas. The theory lectures are complemented with 7 in-class sessions for the problem solving (one session per two lectures) and 5 exercises (övningar). Problem solving videos are also available after the in-class sessions. Additionally, 3 projects (projektuppgifter) are conducted as a mandatory course element.

The assessment of the exam part is composed of three mandatory exams (two partial exams during the course and one final exam), each of which accounts for about 1/3 of the course contents. Students need to pass all three exams to be able to pass the course. At least one more chance is given to all three exams through the second part of the final exam and the re-exam. See the figure below.

Grading is based on mandatory projects (INLA, 3.5 hp, P/F) and examination (TENA, 4.0 hp, A-Fx).



## The students' workload
The LEQ indicates a varying workload from 9-30 hours/week. The majority of the students work 18-20 hours per week, which is expected.

## The students' results

95 students registered (89 first registrations and 6 re-registrations). 80 students passed the project (INLA) and 53 students passed the exam (TENA). Finally, 53 students passed the course. The success rate is a bit lower than the previous years.

## Students' answers to open questions

- It was difficult to obtain useful feedback from the course evaluation (kursenkät) due to the low response rate. To remedy this, I conducted in-depth interviews with four students who passed the course.
- It was the first year with the new assessment format in the exam part (TENA). Students were mostly satisfied with the format. They said that it was easier to focus on the specific part of the course contents. Also, spreading the exams throughout the course kept the motivation to study.
- Online material is certainly effective for students' learning. The students responded that they were able to learn at their own pace, which improved the results significantly.

## Overall impression

- The current form of the assessment seems to work well. However, some students relied on the re-exam. In fact, more students took the re-exam than previous years.
- The programming language for the project has been changed from Mathematica to Python, and it looks that most of the students liked it.
- I have been concerned about the low attendance at the in-class sessions. The students whom I interviewed argued that it was effective to learn through the online material at their own pace and thus the low attendance should not be an issue.

## Prioritized Course Development

Improving the quality of online materials has been identified as the prioritized area for course development because it affects the quality of learning significantly.