

Kursrapport MM1005 Mathematics for Economic and Statistical Analysis HT25

Antal respondenter: 1
Antal svar: 1
Svarsfrekvens: 100,00 %

. Beskrivning av kursupplägget.

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The course covers elementary functions, derivatives, maximum and minimum problems, Taylor's formula and Taylor series, integrals, functions of several variables, optimisation problems with and without constraints, matrices and determinants. The course is part of the Masters programmes SNEKO (53 students) and SSTAO (17), but also admits registration of free-standing students (48).

We have followed the structure of 2h lecture + 1h Tutorial/Guidance + 1h Problem-solving session. The lectures were interlaced with small in-class 5 minutes exercises intended to practice/revise some particular topic, and help students reset their attention.

The course runs intensively in the first period of the fall term.

The slides of all the lectures, and videos of a previous instance of the course, are published on the course-page. After the request from the Statistics department, we introduced some material, regarding the formal definition of limit. We supported this with slides created to cover this topic, which is not worked out in the course-book.

. Kursens fördelar, beakta studenternas uppfattning i kursutvärderingar.

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The report show an exceptionally high appreciation for the teaching efforts from both lecturer and TA. Despite the shortness and intensity of the course, both teachers seemingly have managed to generally create a very strong in-class rapport with the students, that has helped to create a good learning environment for many, where students could achieve mastering the learning outcomes. The course seems to have satisfied a very large portion of the students, and find the material relevant for achieving the learning objectives.

The course had a high passing grade in the first exam (70% of those that wrote the exam, obtained a pass grade), with similar rates to the previous years. Overall, 58% of those registered in the course during the term, obtained a pass grade in either the exam or the first re-exam.

A large proportion of students in the course attend lectures and tutorials, and showed an active participation in the practice exercises. They show a very positive predisposition to learn the topic.

. Kursens nackdelar, beakta studenternas uppfattning i kursutvärderingar.

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Some students found the course extremely fast-paced and difficult ("One month with such heavy materials to learn was not enough"), while others felt it was too slow and easy ("The content was too simple for a master's course"). Overall, the range of Students' prior knowledge seems to be too wide. There are a number of students that arrive to the course with very low level in elementary mathematics. Specially for those, the high tempo is too high. Those would probably benefit of a preparatory course, where they can gain some elementary algebraic manipulations.

It is a high-paced course, with 4 hours on a row on every teaching occasion. Several students criticize the schedule of the lectures. It is difficult to find alternative available times and available suitable rooms where the course could be taught, as it required one of the large rooms in the building during the whole period A, on almost every day (the number of active participants in the classroom is quite high, with around 80+ participants) [this is also reflected in the comment: "The class size is so big[...]"]

There was a question in the exam (and re-exam), related to the formal definition of limits, which is a "new" type of question for this course. Although this increased the difficulty of the exam did not have an impact on the ratio of passing grades (70% of those that wrote the exam, similar to last year's ration), it had an impact on reducing the number of top grades (13% A's instead of 16%).

. Slutsatser samt förslag till förbättringar.

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The discrepancy of prior knowledge in the students seems a difficult problem to tackle. There are some links to some review material from another university in the course-page.

I think that the layout of time works fine as it is, but a possibility would be to reschedule the course in the afternoon instead (12:00-16:00, or 13:00-17:00).
