A comprehensive, periodic evaluation of MAE4001 – Linear Model Autumn 2019

Executive summary. After a change in the overall programme structure of the master in Assessment, Measurement, and Evaluation, this was the first year that this 5 ECTS course was introduced and delivered. Previously the course contents was integrated in MAE4000 Data Science. We feel that the structure change was relatively effective, but of course as always there are some challenges remaining to further optimize the course.

The formal student feedback was received after exam results were communicated. Students results mostly balanced around the grade D [i.e., a satisfactory performance, but with significant shortcomings]. Eleven out of the twelve course participants responded to the survey queries. The obvious things to notice are that 2 to 3 students were malcontent overall across the whole line and that the course polarized the group somewhat:

	Strongly agree	Agree	Disagree	Strongly disagree
I enjoyed participating in this course	2	3	3	3
I would recommend this course	2	3	2	4

The most contributing factor to this divide was the exam format as that was a concern for most students. To optimize the learning and exam experience of all parties involved, extra uniform-structuring measures will be implemented for next year [i.e., reporting session & R-markdown exam report template].

Time / Workload aspects

With an average of about 150 hours, the reported estimated time investment in the course was quite on spot for the bigger half of the students. Yet some individuals reported that it was almost as time consuming as a 10ECTS (with one mention of MAE4011-PoM run in the same semester). Workload was perceived to be rather high by more than half of the students and they would have appreciated a lower pace and extra sessions.

No clear indications where given for the discrepancies between people and between perceived workload and time investment, but this could possibly be related to differences in prior knowledge and/or living circumstances. Due to the corona-pandemic, the 80% attendance requirement was replaced by obligatory assignments so that could also influence perceived workload.

	Strongly agree	Agree	Disagree	Strongly disagree
The connections between the different lectures were clear	2	4	2	3
The lecturer(s) adhered to the time plan	3	4	1	3
The speed at which the course proceeded was exactly right for me	1	2	6	2
The number of sessions was adequate for the content of the course	1	3	5	2
The workload was adequate for me	1	2	5	3
The number of breaks was adequate for me	0	7	1	3

Learning

	Strongly agree	Agree	Disagree	Strongly disagree
The content of the course conformed to the previously provided information	0	7	2	2
The course increased my knowledge about the topic	4	4	0	3
The assignments supported my learning progress	3	4	2	2
The course increased my interest in the topic	2	3	1	5
The course improved my critical thinking skills	2	5	0	4
My questions were answered appropriately	4	2	2	3
Following the course digitally worked well for me	0	6	3	2

The majority of students do indicate that they got something out of the course, which is always a good sign. The mini-case studies and assignments were generally well received, although some students expressed struggle with connecting general whole-class feedback to their own individual work. The latter is difficult to counter as individualized tutoring is not a realistic possibility. The virtual teaching due to the corona-situation was also not that ideal for more practical tutorial sessions, where you usually can learn from both the mistakes and insights from your peers sitting next to you in the classroom.

The Exam

From what would have been initially a regular written exam, the corona-pandemic forced us to move to a home exam. This home exam was constructed as a report of a data-analysis task on individualized custom datasets where contents but not data was shared across students. Students indicated that they prefer this type of exam format above a regular written exam, but also expressed that additional structure in what exactly needs to be delivered would be appreciated. This is also something we immediately noticed ourselves as some reports left us wondering whether everyone had actually spent time in reading and following the same instructions. We don't understand the disagreeing students on the question about coverage of course contents as it is literally the most comprehensive exam possible, but for now assume that those expressions are a result of frustration with the exam and their grade.

Given these experiences and to avoid having to throw the baby out with the bathwater, we think we can nevertheless further optimize this exam format by implementing a few uniform-structuring measures

- include an additional session on reporting
- supply a R-markdown template for the exam report

We have good hopes that this will benefit the learning and exam experience of all parties involved.

	Strongly agree	Agree	Disagree	Strongly disagree
It was sufficiently clear what was expected from me for analysis	0	1	3	7
It was sufficiently clear what was expected from me for reporting	0	2	2	7
It was sufficiently clear what was expected from me for layout	0	2	2	7
The exam adequately covers the course contents	0	6	4	1
I would prefer a regular written exam instead of a portfolio exam	0	1	3	7

Appendix: Other survey queries for completeness.

	Strongly agree	Agree	Disagree	Strongly disagree
The information provided on the UiO course page was sufficiently clear	2	6	0	3
The information provided on the CANVAS course page was sufficiently clear	2	6	0	3
I got access to all required materials (e.g., literature, slides, software)	3	4	1	3
I received sufficient information about the written assignment requirements	2	3	4	2