

## Rapport fra «MAE4011 Principles of Measurement: Course Evaluation»

Innhentede svar pr. 14. januar 2019 17:00

- Leverte svar: **11**
- Påbegynte svar: **0**
- Antall invitasjoner sendt: **36**

### Med fritekstsvar

Students are an important source of information about the effectiveness of the course and its instructors. Please, respond candidly to the following questions. You are particularly encouraged to offer constructive suggestions that may help to improve the quality both of the course and the instruction.

To what extent do you agree with the following statements?

### Svar fordelt på antall

	Strongly agree	Agree	Disagree	Strongly disagree
The information provided on the UiO course page was sufficiently clear	4	7	0	0
The information provided on the CANVAS course page was sufficiently clear	8	3	0	0
The learning outcomes of the course were met	4	7	0	0
The instructor(s) explained the topics clearly	5	6	0	0
The instructor(s) demonstrated concern about whether I was learning	7	3	1	0
The instructor(s) inspired and motivated me and encouraged my interest in the course content	3	8	0	0
The speed at which the course proceeded was exactly right for me	1	4	5	1
The course improved my critical thinking skills	2	8	1	0
I would recommend this course	7	4	0	0

### Svar fordelt på prosent

	Strongly agree	Agree	Disagree	Strongly disagree
The information provided on the UiO course page was sufficiently clear	36,4 %	63,6 %	0 %	0 %
The information provided on the CANVAS course page was sufficiently clear	72,7 %	27,3 %	0 %	0 %
The learning outcomes of the course were met	36,4 %	63,6 %	0 %	0 %
The instructor(s) explained the topics clearly	45,5 %	54,5 %	0 %	0 %
The instructor(s) demonstrated concern about whether I was learning	63,6 %	27,3 %	9,1 %	0 %
The instructor(s) inspired and motivated me and encouraged my interest in the course content	27,3 %	72,7 %	0 %	0 %
The speed at which the course proceeded was exactly right for me	9,1 %	36,4 %	45,5 %	9,1 %
The course improved my critical thinking skills	18,2 %	72,7 %	9,1 %	0 %
I would recommend this course	63,6 %	36,4 %	0 %	0 %

### Comment space if you want to clarify your responses

- This course is well-structured and well-taught.
- Björn is a great instructor and I thoroughly enjoyed his course. I do not mean to imply that he didn't care about whether or not his students were grasping the material. I mean to clarify that he didn't simply give out answers when students expressed confusion or encountered roadblocks. He made us really work for the answers and solve the problems ourselves, which I think is actually in our benefit. Sometimes it was frustrating to not be able to know if we were at least headed in the right direction, though. However, I really appreciate that Björn was trying to push us to find the solutions ourselves. He definitely pushed me to learn more and figure out the problems without simply being handed every answer/solution on a platter.
- Speed on Algebra slightly too fast due to lack of basic knowledge on my part. Might be similar for future students since everyone comes from a different background and might not have used these skills in a long time
- The instructor was really fantastic and he is much concerned about the students' understanding
- Björn clearly listened to feedback. Class got better throughout, with clearer and better examples (e.g. using r code and not only formulas). Very good at listening to feedback - probably best I've seen in a university setting. Would like heavier use of R from the start - after all that's where we're intended to implement the formulas, so for some of us that's how the understanding of the mathematics is structured. Pretty much all tasks could be explained with R-code, e.g. how to manually code to find Omega or even simpler subjects such as variance. Björn clearly got more relaxed as the class went on - and while he started out well, he only became better! Great wit, excellent at explaining difficult concepts. Great if he can offer even more of himself - e.g. talk about his research or own experiences, and how concepts relate to that. Really good when he mentioned his research from Hong Kong for instance - but could have gone more in depth as well.

- the content of power point is Too long. It limits how much we can absorb. the teacher sometimes ran out of time, and left some material in the end that was sadly not taught.

## Course Topics Emphasis

Are there topics that would need to be de/emphasized or that you feel are missing from the course?

- None. Every topic was carefully selected and delivered well.
- More clarification on Kane would have been helpful. For example going through Assignment 2 in class, being walked through it, and then being tasked with doing a similar version of the Assignment on our own. Just speaking for myself as I struggled greatly with understanding Kane's theory, wording, everything related to him/validation.
- basic algebra
- The proportion of each topic seemed sensible.
- The tasks after lecture 4 were unwise. With heavy focus on deriving proofs - algebra-mathematics that many of us has not seen in a long time, and not something covered in class - and where even when the answer is shown a week later it is not necessarily understandable - these are the kind of tasks that heavily demotivates students who already struggle with the mathematics side of the class. The tasks in general are great, and some tasks that are too tough is fine - but 3 proof tasks in one go, all of which require stronger algebra knowledge than what is taught in class, and what is required before you enter the class seems brutal. I considered dropping out, and only figured out this was not the type of questions we would be getting on the exam several weeks later.
- All topics were covered.
- Would have been nice to get some more examples of R code as it would facilitate the assignments
- is it possible to give the students a mind map in the future the relation and connection among the mathematics formula, variance, covariance, correlation, omega alpha, how they connect/ derive from each other.

## Work Load

How much time did you spend approximately per day/per week working for the course?

- Approx 20-25 hours a week.
- below 250 hours
- 5hrs/day
- around 20 hours per week. but very varying depending on topic/assignment
- 5-6 hours per day, 5 days a week.
- 5/day
- 1 ETCS
- Varied from 0 to 60 - higher workload when assignments were due and when reading for exam
- 3-4 hours/day

Note that 1 ECTS stands for approximately 25-30 hours. This course is listed as 10ECTS worth.

## Assignments

Please comment on strength and weaknesses of the assignments (e.g., difficulty, length, frequency, effectiveness)

### Weaknesses:

- Would have been really helpful to have had a little more guidance on how to complete / what was expected of us for Assignment 2 (the Kane / Validation essay). I really struggled with not only writing the assignment but also interpreting the instructions for the assignment.
- Last assignment deadline was a bit tight
- last labs were quite close to assignment deadlines, sometimes new insights came/new things were explained about the assignments during these classes and there was less time to implement these ideas.
- There was too many focus on the assignments, because of the difficulty and short due, so that I sometimes lost the tempo of the actual classes.
- The assignment concerning validity (assignment 2) seemed very open-ended and was personally perceived as difficult to obtain an understanding of. The content was abstract and was presented in the lectures as a bit abstract as well.
- Could have been better initially at answering questions about the tasks - however this improved throughout. They were only marked as pass/fail. Could be improved by actually having a bearing on final grade, with less emphasis on the exam alone.
- First assignment hard due to lacking knowledge in R. Second assignment on IUA difficult due to Kane's theory/article which was hard to grasp/make concrete.
- Assignments were a bit detailed(in that, it demanded extra knowledge to fully complete them) and were averagely difficult but not too difficult
- too frequent, not enough time, quite lengthy. Please emphasize more that we can actually send you questions, we were scared to bother you. From our previous experience, we were told that we might or might not get a reply if we send email, or more precisely, try your luck!

### Strengths:

- Learned a lot and really appreciated Assignments 1 & 3, especially. It was very helpful to have concrete example problems and tasks to study for our final exam as well. The labs were also really informative and very helpful for studying / learning. And thank you so much for providing such detailed feedback on where we went wrong, what we did well, etc. for each of our assignments. That feedback was hugely helpful for all of us. We hadn't gotten this kind of involved feedback in other courses. I really appreciated it.
- The three assignments brought my understanding of the course topics together.
- Length and difficulty of assignments were reasonable
- good balance between new skills and examples from lectures. Some things were explained before, some parts you had to figure out by yourself, but it was never so unknown that it would 'break the spirit' so to say.
- The assignments were difficult enough to encourage me to study more, and we got much help on them in the seminars. Which made me motivated to work on the subject a lot.
- The strengths of the assignments was the oppourtunity to apply knowledge in practice and work with data sets that we got to be a bit familiarized with. This was a good approach to contextualize the course content. Feedback on each assignment was also comprehensible and beneficial.
- Great that they were different, and required and rewarded different tools.
- The Assignments given covered topics taught over the week, which was good for study progression.
- Very good for learning. Fair assignments.
- it helps to envision the exam, it gave a good traning.

## EXAM

### Svar fordelt på antall

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	Strongly agree	Agree	Disagree	Strongly disagree
There was sufficient time to prepare before the scheduled exam	3	5	1	2
There was sufficient a priori information given on the nature of the exam	2	7	1	1
The time to complete the exam was sufficient	5	3	3	0
The exam questions did not come as a surprise to me	4	5	2	0
The exam adequately covered the whole span of the course contents	5	5	1	0
The exam questions were clearly formulated	4	7	0	0
I feel I have a pretty good idea about how I will score on the exam	1	3	6	1

### Svar fordelt på prosent

	Strongly agree	Agree	Disagree	Strongly disagree
There was sufficient time to prepare before the scheduled exam	27,3 %	45,5 %	9,1 %	18,2 %
There was sufficient a priori information given on the nature of the exam	18,2 %	63,6 %	9,1 %	9,1 %
The time to complete the exam was sufficient	45,5 %	27,3 %	27,3 %	0 %
The exam questions did not come as a surprise to me	36,4 %	45,5 %	18,2 %	0 %
The exam adequately covered the whole span of the course contents	45,5 %	45,5 %	9,1 %	0 %
The exam questions were clearly formulated	36,4 %	63,6 %	0 %	0 %
I feel I have a pretty good idea about how I will score on the exam	9,1 %	27,3 %	54,5 %	9,1 %

### Comment space if you want to clarify your responses

- The timing for the exam was great until I reached the essays at the end. I felt I spent an average amount of time on the questions leading up to the essays, and by the time I got to the essays I had about 30 minutes to write 3 essays and ideally I would have needed much more time to coherently write out my arguments for the last 2 items on the exam. Writing coherent, thorough free responses takes a great amount of time, and I could have greatly benefited from another hour added onto the exam time we did have.
- -
- The information lacking before the exam was example exams - this will be better once earlier exams are available for comparison. Some questions on the exam included deriving proofs - if this is necessary remedial classes on BASIC algebra could be good to help students with less skills. Remedial classes were more targeted to high end and solutions for specific tasks given, rather than basic mathematics.
- I don't have a clear idea of how i will score on the exam
- The exam has some quite easy questions but it was tricky, the last material on the courses were not covered much . wish that the teacher will emphasize this more in the review so we can focus on other things that's actually in the exam.

## OVERALL

### Strengths and/or elements to retain

- I thought the exam questions were fair, straightforward, and appropriate for the extent we covered the topics in class. I felt I prepared adequately and the best I could, and I felt more-or-less comfortable with the questions I answered above that I have no idea what my score will be because I don't necessarily know how strictly or leniently the exam will be graded.
- Every lecture has been carefully prepared evidenced by the beautifully typed out lecture slides. The lecturer controlled the timing of each lecture well.
- Informative slides. Preview & Review. clear overview of topics, but over the course as well as in the lecture. keeping track of the topics that are not quite clear with the polls. Discussing the more difficult topics during seminars Extra classes for calculations/algebra
- Tasks and assignments that were supporting the classes were motivating and encouraging.
- The pace of the course was very comfortable, and I really appreciated the surveys the instructor provided after the initial lectures, where we were asked to comment on which topics we found difficult to understand. This is a great way to attempt to get as many students as possible up to the same level of understanding. The extra sessions devoted to statistics and calculations was also a great platform for learning.
- See comments above - all in all, a very good class, with great teaching staff (all of you guys)
- Formate of seminars were great - defining concepts, discussing, presenting - learnt a lot and useful in discovering misunderstandings.
- Overall, the course was well taught and delivered. Most of the slides were well design and contents were easy to understand.
- the seminar is okay to have, but maybe it is good to motivate students to learn more on the terminology and to really understand them. You can use a mind map or more graphical, image, pictures, to understand this terminology than just through sentences. Make it more creative so that it is more exciting for us.

### Suggestions for improvements

- Maybe 1 essay instead of 3. If we were shaky on validation, we would have been severely punished for being weak on this one topic, since nearly 10 points on the exam were assigned to just this 1 topic (in free response format).
- None. Please retain everything as it is.
- During extra classes (if they stay.. please have them for next year too!) a more structured approach to the solving of the tasks. skipping back to correct makes it hard to follow for the ones who have trouble holding on as is.
- Maybe it was not necessary to show us too many advanced stuff that made us freak out. It was difficult enough to digest the very basic statistical principles to begin with.
- The validity topic needs to be addressed as there was substantially more complex reading (in my experience) on this topic and the discussions in class were also vague at times.
- Less focus on proofs - more on application/use. Is McDonald the right book, or are other resources better for this setting?
- Give examples of 'good practise' papers on IUA (correctly used IUA)
- The lab/exercise should be designed that it can really give the best to students, some people experienced that it didn't help them much given that their R skills are not sufficient yet. Please consult datascience teacher, and the students too about how they feel about their R skills and the statistics, as it will affect how we solve your assignments. Your course really somehow depends on what has happened with data science. and for this first semester it was crazy to teach all basic R skills to us in 6-7 hours (2 labs). We begin with very rough start in the very first course, losing several classmates due to indirectly elimination treatment, but you have restore our faith that we can somehow survive. If students can't understand of how something is explained in a very easy/ simple way, there is no

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chance they can understand if it is explained in complicated way. I mean we get it that it is graduate statistics, but it all come back to how strong we were in junior high and high school. Please make it more simple and be patient with struggling students. I think the teachers are sensible enough to know some who were struggling in silence, hope your team can address this. The extra lessons were great, but it only helps to solve the questions you gave not necessarily the understanding of it. You know this already, the requirement for the admission should be changed so that cemo don't mistakenly lure innocent students with no background thinking that they have a chance in this programme.

Thank you for participating!

Se nylige endringer i Nettskjema (v536\_1rc1)