

Course analysis SF2980

- 1. Course data

Course name:	“Risk Management”
Course number:	SF2980
Credits:	7.5 hp (3 hp project + 4.5 hp final exam)
Period:	Period 2, HT 2019
Course responsible:	Anja Janssen
Teaching assistant:	Carl Ringqvist
Lectures:	18*90 minutes of lectures + 6*90 minutes of problem sessions

Number of first-time registered students	65
Examinationsgrad (after 14/1/20)	64,6%
Passing rate at exam 14/1/20	79,0%

- 2. Aims of the course

Intended learning outcomes

To give a good knowledge of risk measures and advanced modelling and computational methods of relevance for the assessment and management of financial risks.

Course main content

Modeling and analysis of financial and insurance risks.

Risk measures: Traditional risk measures, Value at Risk, Expected shortfall, Spectral risk measures.

Empirical distributions, quantiles and risk measures. Analysis of uncertainty with confidence intervals and Bootstrap.

Parametric models: model selection, parameter estimation, validation, simulation.

Extreme value statistics

Multivariate models: measures of dependence, elliptical distributions, copulas, simulation, models for large portfolios, diversification and hedging

- 3. Results of course survey

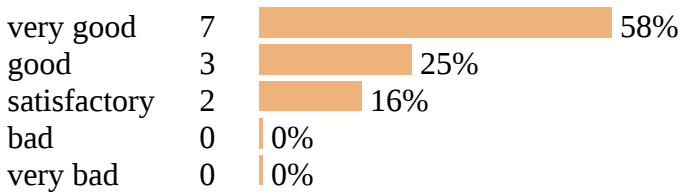
The course survey was carried out using the survey system on the math homepage and available during the period 09.12.2019-13.01.2020. 12 Students took part in the survey. All results are available at:

https://www.math.kth.se/cgi-bin/evaluation/results/evaluation_showresults?command=showresults&evaluationid=482

The general impression was in my opinion positive:

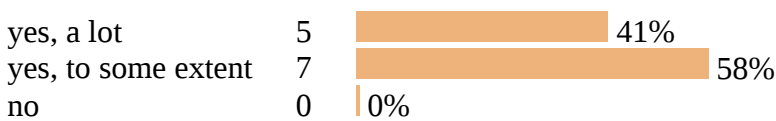
Please indicate your evaluation of the quality of the course overall.

12 svarande



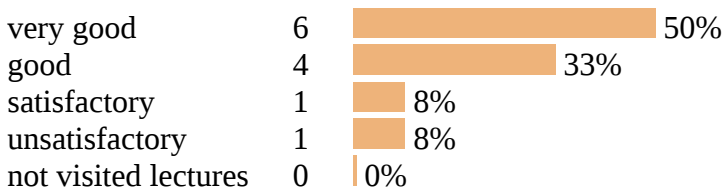
Did the course arouse your interest in the covered topics?

12 svarande



Please indicate your evaluation of the clarity and usefulness of lectures.

12 svarande



Would you recommend this instructor (Anja) to other students?

12 svarande



A critical comment concerned too little practical relevance and applications:

“Could not really take in all theoretical information when no explanation of the usefulness in the “real world” was made. Some moments/subjects was hard to see the context.”

Regarding the projects, reactions were a bit mixed:

“- To vague questions, needs to be more specific since a lot of time was spent on understanding just the questions instead of learning the subject. Also have laboratory time where there are assistants where you can ask about the project or formality or coding in R. Then you will not have that much questions on the lectures to, which I think is taking time from you before, in between and after lectures.

- Hard to grasp how big the projects were expected to be. Clearer instructions would help.

- They were really good and fun to test your own wings with reasonable problems, and the small tutorial-codes that Anja shared was really helpful.
- It was not very clear what was needed for the bonus points on Part A of the project.
- Great projects.
- The bonus points were not awarded properly. A lot of groups put much effort to this part of the course but yet irrelevant things were considered when correcting the assignments. It seems as if the importance was to have a correct scientific report instead of embracing the principles of risk management and truly understanding the subject. Instructions on how the bonus points were awarded were unclear and now there are a lot of us walking into the exam without this which seems unfair considering how they were distributed.

Problem sessions received mixed reviews:

Please indicate your evaluation of the clarity and usefulness of problem sessions.

12 svarande

very good	3		25%
good	3		25%
satisfactory	3		25%
unsatisfactory	1		8%
Not visited problem sessions	2		16%

- Would like more context to the problem. They are often specific cases, so more explanation of the surrounding and different solving methods. (satisfactory)

Would you recommend the TA (Carl) to other students?

10 svarande

Yes	9		90%
No	1		10%

If you have further comments about the problem sessions, please state below.

- Say to everyone that they have to read questions before so the assistant do not have to write down the whole question. Then we have more time for other exercises!
- Carl did not seem prepared for the problem sessions.
- Good problem sessions, but sometimes we ended 30-45 minutes earlier. This time could have been used for more problems instead of hurrying through the session.

- 4. Pedagogic development of the course

I think that SF2980 is overall on a good path as a course on a rather advanced theoretical level with high relevance for practice. To stress the latter and as this was demanded last year, I have invited a guest lecture to talk about credit risk modeling. However, as only six students attended this guest lecture, I think I will not offer this again next year.

As students have repeatedly asked about this and the course contains a few short parts which cannot be found in the book, I am thinking about publishing my (handwritten) lecture notes on Canvas next year, after each lecture.

The second part of the projects will continue to be of a rather open nature, where students can choose their own data sets. This led to some interesting projects this year, with diverse applications, not only from the finance world. I think that the rules for bonus points were clearly communicated in the information about projects, stating that reports have to apply the methods learned in the course correctly in the first place to achieve bonus points. In the next instance, I will stress this fact even more to make clear that in fact the idea is to write a correct scientific report.

Regarding the problem sessions, there will most likely be a new teaching assistant in HT2020, and I will take into account the feedback during our preparation meetings.

- 5. Minutes of the course analysis meeting.

The meeting took place 7/2, 14:00 in F11, Lindstedtsvägen 22. Only the course responsible was present.