# 1. GEO-SD303 2023 STUDENT EVALUATION

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| DEPARTMENT: | System Dynamics Group, Department of Geography, UiB |
| COURSE TITLE: | GEO-SD303: Model-based Analysis and Policy Design (Fall 2023) |
| COURSE INSTRUCTOR: | Saeed Langarudi |
| TEACHING ASSISTANT: | Furkan Onal, Taimoor Hashmi, Konstantin Plotkin |
| TOTAL NO. OF RESPONSES: | 10 |

## 2: Statistics

Signed up for exam: 45

Absence: 15 (not passed compulsory assignments

Fail: 4

Grade distribution:

A: 7

B: 8

C: 5

D: 4

E: 2

## 3: Self-evaluation

Assessment of the teaching program in relation to the objectives and results

A. What did you focus on in the teaching plan? Give a short description of the teaching plan in the course, with emphasis on what was new this time.

After the feedback I received from last year, and after extensive discussions with my TAs, I decided to make a few changes to the teaching plan compared to the last year.

First, I added a few new topics that were missing in the syllabus last year. For instance, we covered the concept of aging chains and coflows and went deeper in topics such as tipping points. We also had a full session on modeling of a interactive multiplayer game (Fishbanks). Second, the assignments were made a bit more challenging to give more room for better students to go deeper in modeling exercises. Third, I decided to use a new software instead of Stella. The main reason for the switch was that Stella gives a way of cheating to some modeling exercises that I could not control. It provides automatic identification of causal polarities, feedback loops, and loop dominance. These features are good for advanced modeling but could block the learning process at this introductory modeling course. Last, but not least, I changed the session schedule so that we had one lab per week (instead of two per week in last year). Also, the week before the final exam we spent all the 4 sessions on modeling practices with no new theoretical lectures. These changes were made to address the shortcomings we spotted last year which were pointing to the need for more intensive modeling practices.

B. What is your opinion of how well the teaching plan worked? Give a brief description of any evaluations that have been made and give an assessment of the experiences with this year's teaching plan.

Overall, I believe the changes I made worked well, although there is still room for improvement. I monitored the students' performance through the feedback I received from the TAs. I also received feedback from the students directly via office hours, Mitt discussions, and in class interactions.

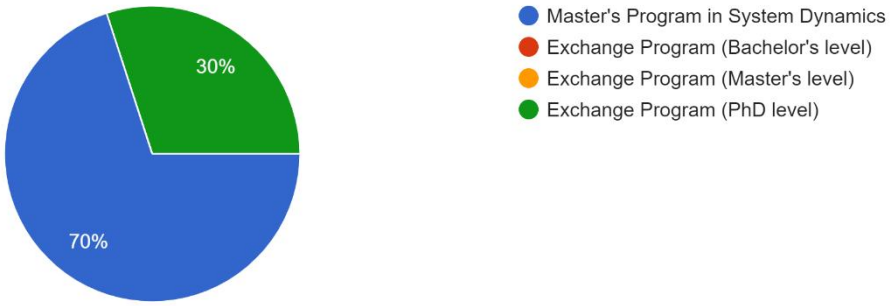
C. What adjustments will you recommend for the next time the course is offered? Give a brief assessment of which parts of the teaching plan should be continued and what, if any, should be changed.

My evaluations indicates that we have reached a nice balance in terms of the intensity of the course and its materials. I am also happy with the course schedule. There are, however, some issues that I need to address for the next year. First, I am still not settled on the software we use. InsightMaker (the software we used this year) has some issues which must be fixed. If it does not improve and meet my expectations, I will continue my research on alternative tools and make a decision on which software we should use next year. Returning to Stella or use a different tool are still open decisions. Second, I might change some of the examples we use in the course, and maybe reorder some of the course contents to make it easier for the students to follow the materials. Third, it was a mistake to have 3 TAs this year (I had 2 last year). Coordination with three TAs was very challenging. My lead TA also had to leave Bergen to deal with an emergency family issue. This incident caused troubles for our coordination plans. Next year, I will work with only 2 TAs, and I will try to improve the coordination. I will give them a clearer instructions for the labs to improve the connection between the labs and lectures. The last and probably the most important change is to spend more time on clarifying the course learning objectives. Some students seem to have a fundamentally different expectations from the course. I must make it clear that this course is about system dynamics modeling techniques and analysis.

## 4. Results

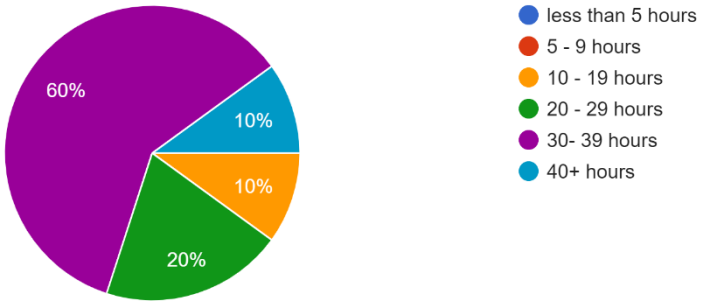
I took this course as part of:

10 responses



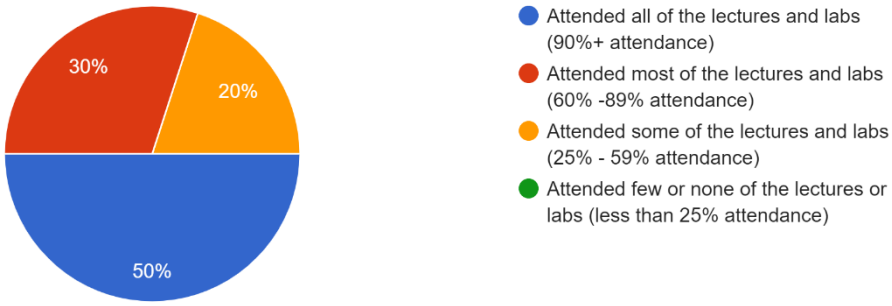

How many hours per week on average did you spend on this course? (include all time spent studying, doing homework, attending lectures and labs, etc.)

10 responses



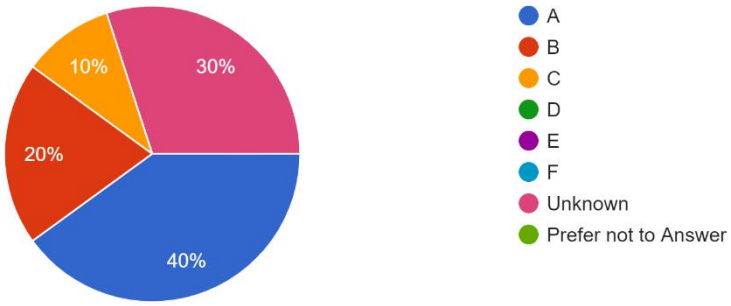

To what extent did you participate in the lectures/labs?

10 responses

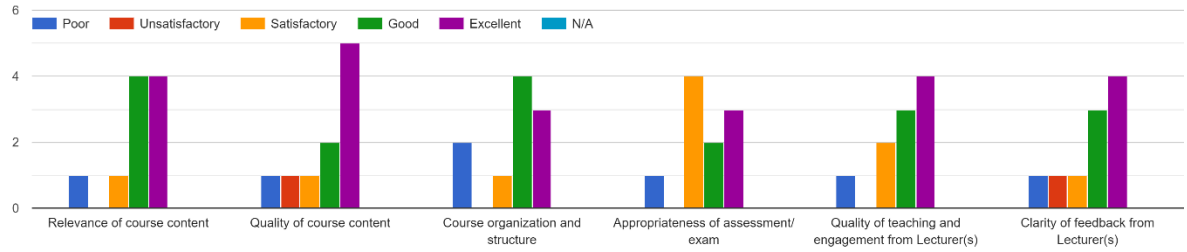


What grade do you expect to get in this course?

10 responses




How do you assess the course content and the lecturer(s)?




What did you like about the main lectures and overall course content?

10 responses

1. Some techniques on model testing.
2. Saeed availability
3. Saeed is very dedicated and available to help
4. The stimulus to participate
5. The structure and content design are very scientific
6. Course pace was faster than 302 and there was a strong focus on application and practice. I was able to observe clear improvement in my modeling competency by the end of the course.
7. The didactic
8. I think they were engaging and the content was relevant!
9. introduction to other free software
10. nothing

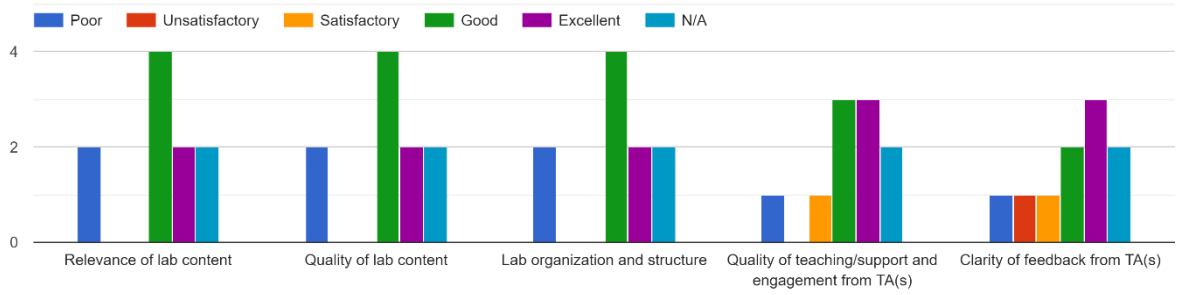
What improvements would you like to suggest to the Lecturer(s)?

10 responses

1. Prepare more detailed slides.
2. No suggestions
3. lack of syllabus. 2. Labs were (sorry for the harsh words) quite useless and had little to do with the lectures. It seemed like nothing was prepared in advance. The professor should have directed the TAs with clear goals/mission and teaching methodology

4. Make the assignments much shorter
5. The content of the PPT should be more specific
6. n/a
7. There is no need of long exam to access the content learned. Insightmaker is controlled, stuck, confused, not practical and not private. If there must be something free to learn why not start with simantic system dinamics? It's in Java, not reliant on browsers full of cookies. How ethical it is to weight on students insightmaker and use Stella?
8. I would only change the assignment and exam format to be a little less time (and energy) consuming
9. not an improvement to the lecturer but to the program itself; 6 weeks (5 weeks) is a very short amount of time to learn, especially for online students when lectures are not uploaded on the they they took place. It is very difficult to keep up if we are not in the same timezone.
10. all

How do you assess the labs and the Teaching Assistant(s)?




What did you like about the labs or other interactions with the TA(s)?

10 responses

1. N/A
2. Their knowledge and availability
3. TA were awesome. They were very available and willing to help. However, the labs themselves were not! Most of the time, it felt like they had little to do with what we were learning in class, and the content dealt with was very basic.
4. Did not follow the labs
5. Very responsible
6. Good on topic practice
7. Neutral
8. Helped us with common problems along the course
9. labs seems relevant to the lectures
10. nothing

What improvements would you suggest to the TA(s)?

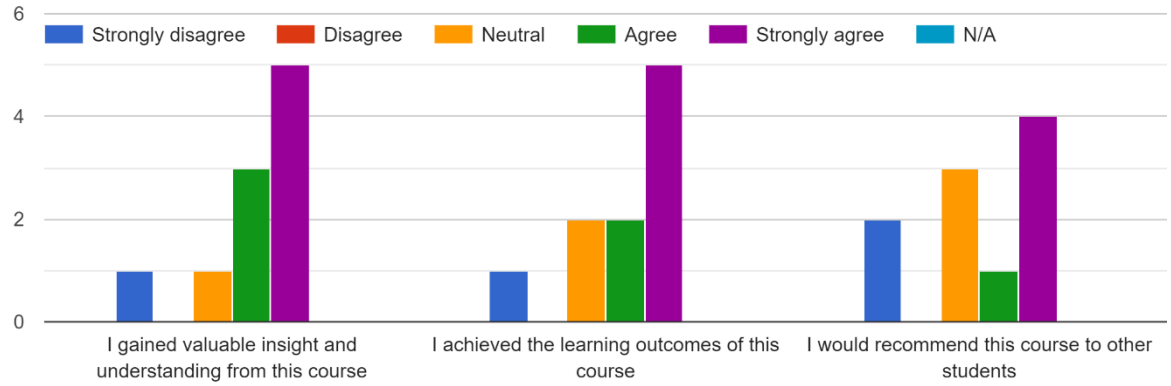
10 responses

1. N/A
2. No suggestions

3. Prepare in advance, have clear teaching goals. Honestly I dont know where to start here. More work should be done on organinising the basics and setting clear learning outcomes.

4. I am not criticizing the TAs specifically - they were great. But the overall structure driving the action of TAs was not
5. did not follow the labs
6. Hold a meeting to explain how to answer the questions in the assignment
7. n/a
8. To make the course online too, it's necessary to include them. The people online must feel they are in class and not just watching a video course.
9. None :)
10. they did a great job
11. all

What is your overall opinion of this course?




What do you feel you have learned by the end of this course?

10 responses

1. Only a couple of testing techniques.
2. Modeling skills, reading skills
3. everything that was taught. mainly modellling and model analysis
4. I improved the understanding of fundamentals of SD structures
5. Deeper understanding of SD
6. Built confidence in modeling abilities and understood common modeling principles.
7. To analyze models in system dynamics. If I passed the exam.
8. -
9. SD modeling fundamentals
10. Nothing

What do you wish you could have learned more about in this course?

10 responses

1. -
2. More structured and detailed way of testing a model.
3. advanced methods and policy design. The professor could have gone deeper into content and assignments could have been made more relevant and less repetitive.
4. I wish I had a little bit more freedom in building the model, maybe
5. A deeper understanding of modeling
6. n/a
7. The course has no time for more wishes
8. nothing, there is enough information already! more time (longer courses like 8 weeks) would be better for slow learners but I understand this isn't a possibility
9. fundamentals of system dynamics

Do you have any additional comments? If so, please discuss here:

5 responses

1. The assignments were the worst part. Too many questions to get very few marks. The assignments could be bi-weekly. They really killed me personally cause the subquestions to earn a respected grade were sooo many. Also, why InsightMaker on the course and we invest so much time in this? There are other software, but we were forced to use this one, which was not hard, but no one uses it. I got so demotivated by this course compared to the GEO-SD302. Even if I am confident I very easily passed this course, I did not enjoy it at all. it seems to lack a pedagogical way of delivering it is the major issue.
2. assignments could have been made more relevant and less repetitive. I saw myself several times spending many hours of my day re-doing things that were already done in the week before. And these things were more often than not more mechanical than cognitive.
3. but the most critical improvement for next year's are the labs.

4. overall, I would really appreciate if the master overall improve these details - as some of these critics could be applied to both of the courses we took until now
5. no
6. The professor must take criticism not personally. “Accept the way the lecture is build or leave the class” is not a proper way to address conflicts. Unless we are under a dictatorship.
7. lectures should be uploaded the same day; it is difficult from a tech perspective but if the program is offered online/hybrid then I think this needs to be figured out for all classes (302 and 303)

## 5. How do plan to follow-up based on the course report

The course report seem to be aligned with my own observations. I agree with most of the criticisms we have received, especially those that mention the coordination with the TAs and improvement in labs. As I described in section 3, the majority of the issues were caused by having 3 TAs rather than 2, and the unexpected personal challenges that our lead TA had to face. In response, I will reduce the number of TAs to two, and will have a clearer instructions and plans for the labs. The other major complaints is about the software. I will do some research and address that issue as well.

To follow up, I will continue to update myself by talking to the students in the office hours, and other interactions I have with them in the program. I will also talk to my colleagues on a regular basis and seek their opinion on the related issues discussed here.