Emnerapport: GEO-SD302. **Fundamentals of Dynamic Social Systems**

1. Informasjon om emnet	
Emne	**https://www.uib.no/emne/GEO-SD302**
Undervisningssemester	Høst 2020
Emneansvarlig	**Erling Moxnes**
Vurderingsform	Hjemmeeksamen og quiz
Undervisningsform	MOOC/online
Obligatoriske arbeidskrav	

2. Statistikk	
Eksamensmeldt	40
Bestått	31
Ikke møtt	7
Stryk	2
Gjennomsnittskarakter	C
Karakterfordeling: A=3 B=9 C=8 D=6 E=5 F=2	

3. Egenevaluering

Vurdering av undervisningsopplegget i forhold til mål og resultater (emneansvarlig)

Hva fokuserte du på i undervisningsopplegget? Gi en kort beskrivelse av undervisningsopplegget

i emnet, med vekt på det som var nytt denne gangen.

I hovedsak samme innhold som tidligere. I år ble kurset gjort klart for å brukes som en fullverdig MOOC. Dette involverte utvikling av mange Quizzes og diskusjoner. Flipped classroom sesjonene ble redusert på grunn av angel på tid.

Hva er din vurdering av hvor godt undervisningsopplegget fungerte? Gi en kort beskrivelse av eventuelle evalueringer som er gjort, og gi en vurdering av erfaringene med årets undervisningsopplegg.

For all spørsmålene på eksamen var det noen studenter som svarte helt riktig. Dette tyder på at undervisninga dekket eksamen. Kurset er utviklet med tanke på hva som kreves for å bli en dyktig systemdynamiker. Noen studenter har for dårlig bakgrunn i enkel matematikk til å få en god karakter. Dersom Gruppen for systemdynamikk hadde fått fakultetets støtte til å rekruttere kvalifiserte norske Studenter, hadde også resultatene blitt langt bedre. Dette er basert på tidligere erfaringer med norske og studenter rekruttert gjennom vårt tidligere Erasmus Mundus Master program.

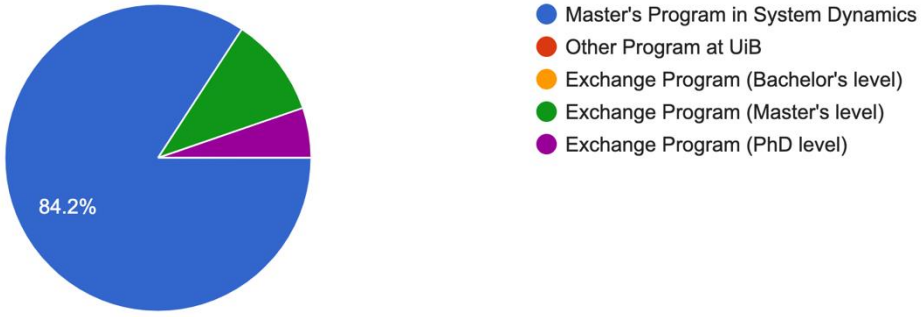
Hvilke justeringer av undervisningsopplegget vil du anbefale for neste gang emnet skal tilbys?
Gi en kort vurdering av hvilket deler av undervisningsopplegget som bør videreføres og hva som eventuelle bør endres.

Ikke noe utover å ta hensyn til de tilbakemeldingene jeg har fått fra studentene, i løpet a kurset og i denne evalueringa.

4. Studentevaluering:

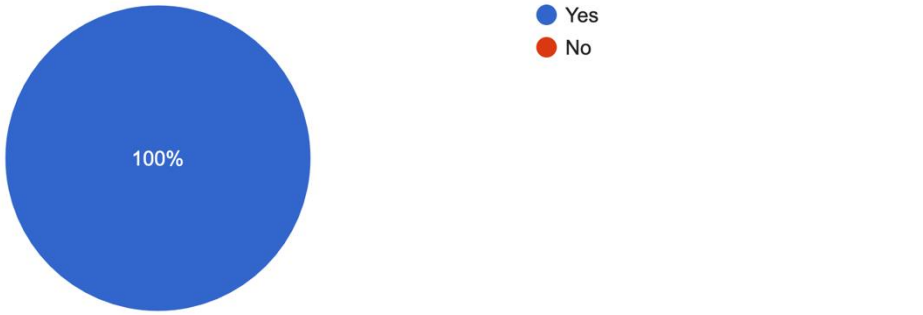
I study GEO-SD 302 as part of:

19 responses



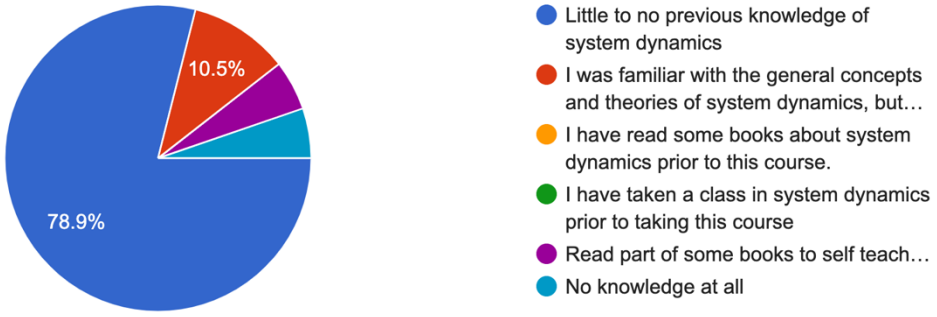
Do you plan to continue on with GEO- SD 303 after finishing with this course?

19 responses



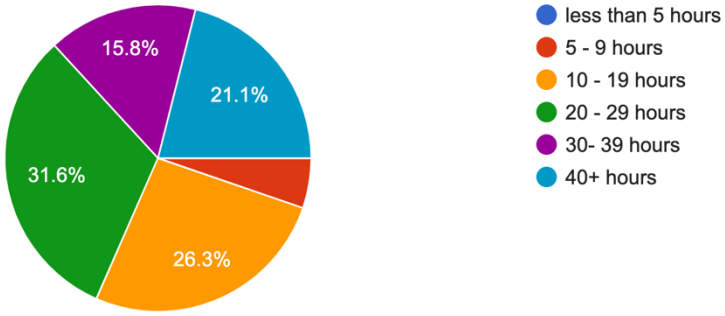
What was you level of knowledge about System Dynamics before you started this course?

19 responses



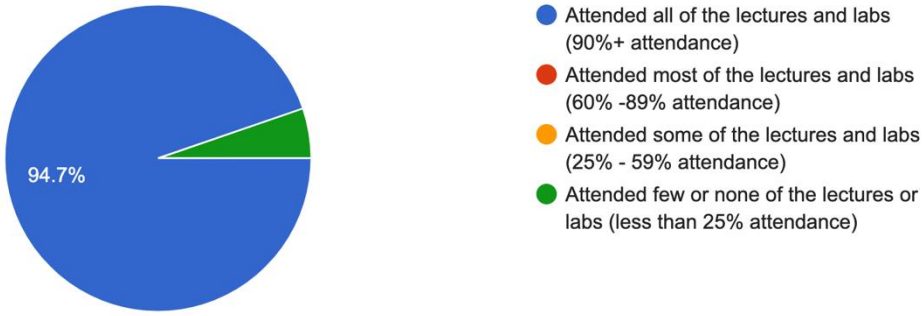
How many hours per week on average did you spend on this course? (include all time spent studying, doing homework, attending lectures and labs, etc.)

19 responses



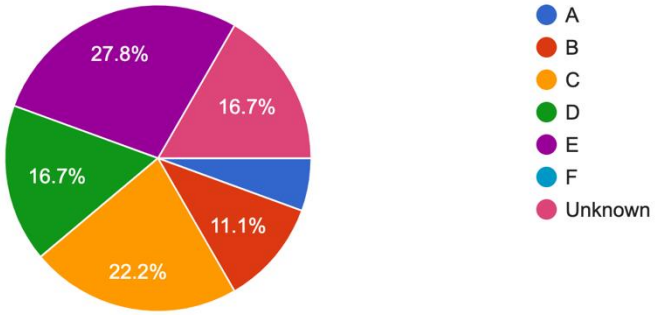
To what extent did you participate in the lectures/labs?

19 responses

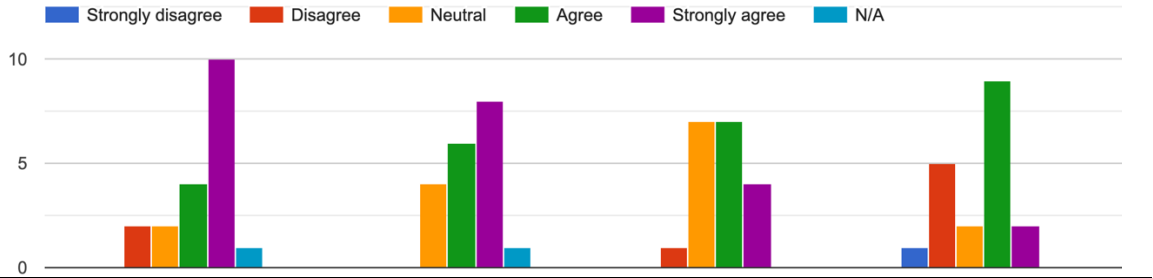


What grade do you expect to get in this course:

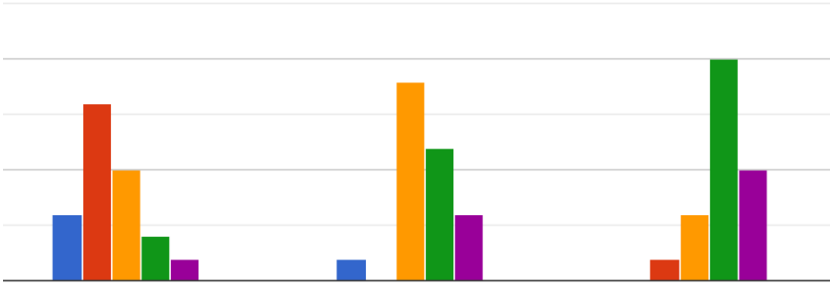
18 responses



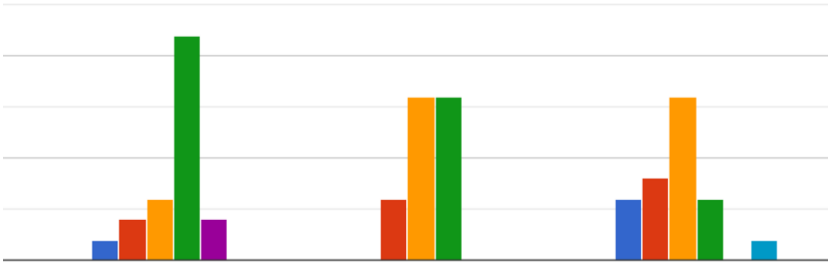
Please mark how you feel about each of the statements listed below:



This course is relevant to my interests	I gained valuable insight and understanding from this course	I would recommend this course to other students	I achieved the learning outcomes of this course



The examination style appropriately captures my level of understanding with the course.	The professor contributed significantly to my learning	The TA contributed significantly to my leaerning



I received adequate support throughout this course	The weekly quizzes appropriately captured my level of understanding with the course.	The final exam appropriately captured my level of understanding with the course.

Do you have any comments on your answers above? If so, please discuss here:

The difficulty level of the final exam may have been too high for novice modellers, who lack the experience of modelling under time constraint.
The time was very short for all the new information. It would have been good to have had a week in between to deal intensively with individual topics that you might not have understood the first time before you take the exam. Regarding the quizzes, they are nice for practicing, but they should not be graded. Because at this point you sometimes didn't really understood the topic before you take the quiz. For us is it the first time to deal with such a problem. It would be nice to have more exercises and maybe after the weekly session with Aklilu and Erling there could be also a graded quiz but not in this order. Before you test your knowledge you should be able to practice and ask questions.
I appreciate the exam style where we are asked to show how much we really understand of the material in answering a question we aren't familiar with. However, I did not feel adequately prepared for the level of modeling that was needed for the final. I think it would have been more helpful to give us questions that were still challenging, but manageable, instead of almost impossible with our current skills. I think very few people were able to make the models even in the homework without review from the TAs or other students.
I felt that the course was too challenging for my level of knowledge after just a month, therefore I did not catch up on revising it all before the examination leading to underperforming in the course.
I would like another graded quizes after each lectures with professor,ans this ones would check whether I understanding the course. The quizes we had in this course should be part of self study process instead of part of final grade.
The final exam contained too many questions for the time given. There was no time to think properly, especially since you had to answer at once and weren't allowed to go back to a previous one. The last ones were modelling questions and the time to spend on them was hard to guess.
The professor used much less time on lecturing than what was expected from me as a master student. The online written text was written like spoken text and not like other good written litterature. It lacked structure and overview and was not searchable in its whole, no list of content and almost no referencing to other litterature. If this was supposed to take the place of a proffessor explaining things it has to be written by several people with competance in online learning and digital pedagogy. And the group work was so breif it was not noticable. The professor underlined that when working togehter we learn more. Than why was that only demonstrated for us in the flipped classroom (when after we will start working on new topics) and not implementet in the learning structure? Several things felt contradictory in this course structure.
Online classes not much interaction except the class hours, so I got left behind when I miss/did not understand something, I hope I would learn by myself but couldn't in 302.

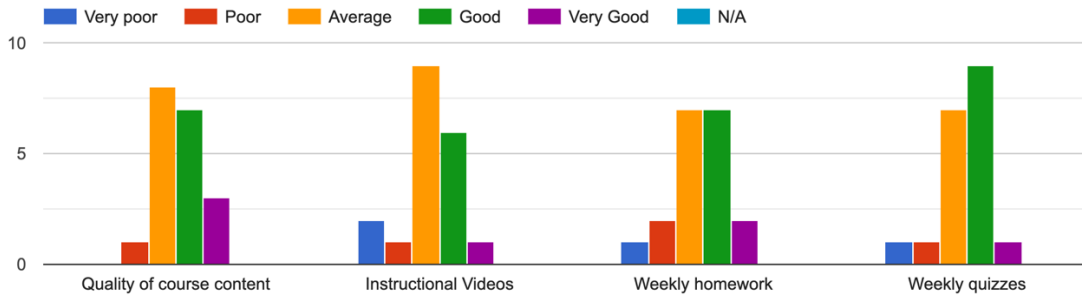
I will try to be as objective as I am able with the feedback regarding the course GEO-SD302.
The feedback can look like quite ambivalent, though. I must admit that it is highly enriching for me. I see new perspectives on how to look on various phenomena now. Also, it is refreshing to have a methodics allowing me to think about the dynamics of a phenomena, comparing to the "simple" method of biggest similarity or difference, and colleration. I see many usages of system dynamics in Political science, also in Security and Strategic studies, which is my "mother" field of study.
However, this course showed me how the education SHALL NOT look like in many ways. I will write these points in bullet-points, so they are easier to comprehend:
Hard to understand study material:
- The texts on Mitt looks like transcripts of a speech. To be honest, many times I felt like I am a beer-buddy of the author in some pub, who is listening his monologue about the system dynamics. The texts do not have attributes of educational materials!

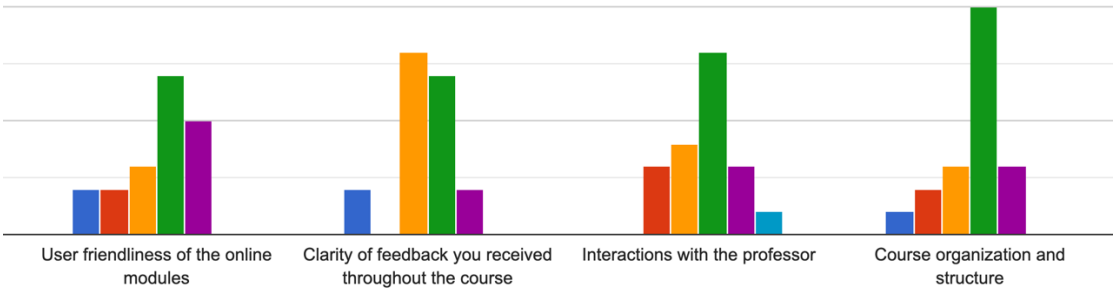
1. The concepts, ideas, and points are difficult to understand. They are somewhat hidden there, but a student need to read the material several times until he got some idea what is the text about. But despite this effort the student figures out, during the online lectures, that the author of those texts had more on mind, and at that point he begins to understand what was the author´s idea in those sentences which originally did not make any sense.
2. The concepts, ideas, points NEED to be visible both VISUALLY and LOGICALLY. The student must be able to see that "this is probably an important thing," so he can focus on it and try to understand it. Also, there must be a LOGICAL order of the points, ideas or concepts in the text. Each text must have an order: you begin with the introduction, than the separate points, arguments, ideas, etc., in SEPARATE paragraphs, so the student know that when reading one paragraph there is not a "surprise" in a form of many information somewhat hidden in the text. The text SHALL conclude in a separate paragraph, where the information are all summarised, organised, and synthetised together!
3. The explanations in the text says A but does not say B in many, but really many instances! It is very confusing when a student is trying to understand something, but his mental map lacks some very important pieces which are not provided to him. Therefore, the student does not have an idea what is the whole information of the current point in the text! I can depict this on an anecdote: "Do you know what is the difference between trying to understand the problematics and trying to understand what the teaches is trying to explain?" "No." "Read mitt.uib materials on GEO-SD302, and you will figure out." I really don't think that the objective of a study is to be trying to complete the incomplete picture which is provided to you. Definitely not in introductory courses!
4. Even if the student have a feeling he understood what the author wanted to explain to him, he later figure out that the explained concept has many aspects, and the teacher or a practitioner expects the student to understand all of them and that the student is able to work with overall understanding of the concept(s). This is naïve! First, the concepts are not wholly explained! It is truly naïve from the author of the educational texts on the mitt.uib and the practitioners on the lectures and/or labs to expect that from incomplete explanation the student would somehow abstract whole spectrum of different aspects of the concept! The explanations are incomplete. For instance: instantaneous and cumulative cause and effect. It is hugely confusing not to tell that each variable can be a part of various causal loops, and in each loop it can have different roles –cumulative in one and instantaneous in another. Why this information could not be explicitly and clearly written in dedicated sections? In reality the student gets this information in "by the way" way when he asks the lecturer if this could be correct? I don't understand why the lecturers and/or teachers are waiting until students ask them to such an important information! I think the reason is that the teachers and lecturers assume that those things are "obvious," because "how else could it be?" But, again, it is very naïve to expect that student from across very broad and different fields of study will have the same understanding of things when they enter the SD! That is the reason why we have introductiory courses, right? That the students are given the opportunity to understand what is the SD´s perspective. This is something the course GEO-SD302 struggles with. Both, the teachers and lecturers must understand that they MUST explain EVERY concept from its basics!!!

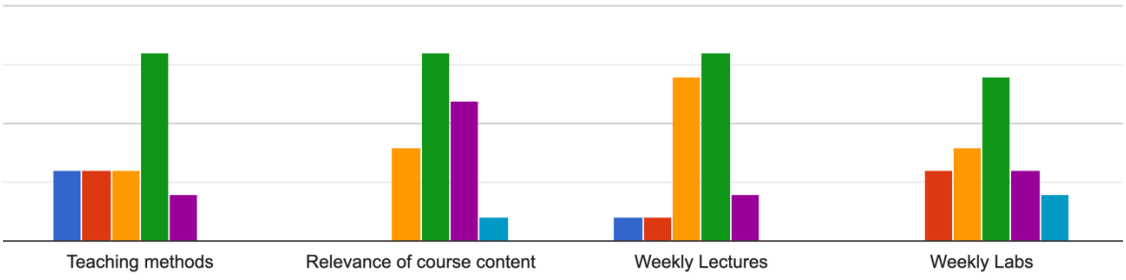
- The method of this course is inefficient:

1. There is huge lack of practise. Practically, the student does not practise at all. All the models the course brings are models which try to learn a student about some new problematics or method. However, we cannot consider this to be a practise. Maybe just "trying." An effective method of practise would be a dedicated week, where the students would be given a situation which they are required to model each day in the morning, and they will be consulted with their solution by a lecturer or practitioner in the end of the day. Also, the P´HAPI or abstracts were not practiced at all. Usually, in courses where there is a focus on some outcome, the students practise this by making various outcomes during the course, and they are given feedback about what was good, what was weaker, what should be improved etc. It would be really helpful to write three, two, maybe even for, or five P´HAPI abstracts per course, and see what are my strong/weak spots, so I can think about them and improve them until the another practice.
2. STELLA. It is really NEEDED to explain in every detail how to use stella before the student are actually asked to use it. It is very time consuming to trying to figure out what is wrong with model, when the issue is somewhere else – in some STELLA configuration.

How do you assess different parts of the course:







Do you have any additional comments on your answers above? If so, please discuss here:
A lot of thought and effort has gone into preparing the online MOOC-style course materials. However, at times, it was difficult to follow along with the material which required reading it over and over again until finally getting an understanding of it. The flipped classroom model is a great idea, however, instead of doing more quizzes during class time, there should be more room for discussions and going over key ideas of the week's content.
I have a hard time with these questions because on one hand I learned a lot from the class content and format, and on the other hand some things I don't feel I learned thoroughly because the explanations were confusing and there were a lot of gaps in the written text that didn't tie things together well enough. Especially since we didn't have regular lectures and had to rely on the text to understand what was being asked.
I think the course would be more easier to understand if there were more quizzes and examples without grades.
Personally I would wish more lectures and clearer structure for the course, rather than a flipped classroom with quizzes I would prefer homework with feedback so that students feel more assured about the curriculum.
I like the flipped classroom very much. The only thing I found frustrating is that I need to read and reread the material many times to really understand and capture the message that I need to capture. May be because my learning style is I need to discuss with someone and say it out in my own word to confirm my understanding and online learning doesn't allow us to do that as often as I would like.
The chapters are heavy in text, difficult to understand through words. More videos/graphics/examples should be included.
The professor as a person seems like a really nice guy, I'm glad to get to know him. His knowledge seems colossal and vision with this course i agree is important, keep it up! But online teaching doesnt seem like the proffesors strenght. Know your weaknesses. I suggest using the resources in UiB more activly the help the prof. in creating this course, his fellow profs. and not least, which is underlined when reading about the course, STUDENTS. In stead of trying to hammer in one persons way of understanding things, let the students find their way to understand it. Guide more than lead. Im not a teacher, but I know my first advice would be to set the expectations to the students by always inform them about what is going to happen and how. A thurough explanation of how the course is going to unfold and every day inform what the lecture is going to look like and what the prof expects to be done (it was forinstanse hard to know when to follow a train of thought and when to use model in the course and in the exam). TECHNICAL: There needs to be used several hours to integrate all the students in to the techincal stuff when its going to be online. In the future when this becomes a real MOOK there should be a thourough explanation how what tools to use and how to get them going on the students computers. When its classes like this it should be addressed directly in a video class, invite a UiB tech person to have a lecture on it maybe.
Should have focused on students on the basics as many do not have any idea about what system dynamics was about and about using stella functions.

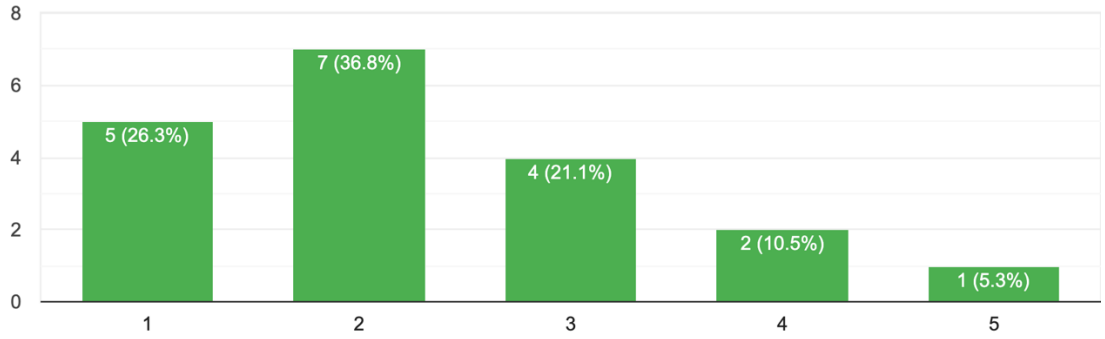
Why would you recommend or not recommend this course to other students?
I would recommend this course to other students interested in learning system dynamics. It's a very tough course, but at the end of the day, the learning was immense.
It's not really my field of study, so it's rather difficult for me, but an interesting field of research.
I would recommend the class because it covers a lot of material in a short time and that is good. I wouldn't recommend it with the graded quizzes, and the final exam was unhelpfully hard I think.
I would recommend this course because it can be taken my any students having any kind of academic background.
It helped me through many fundamental definitions and concepts of system dynamics. In addition, working with Stella was taught step by step. I wonder how much I learned during 4 weeks.
I would definitely recommend it, because it will help students develop critical thinking skills, and to develop a critical perspective on individuals and our social world.
It seems necessary to understand the basics of SD
I would recommend this course to other students as an introduction to a different method of analyzing and problem-solving.
Because it is the milestone of system dynamics
It is fundamental of system dynamics literally.
I would recommend this course to other student. It has achieved its purpose by giving us the fundamental of SD. Although I will warn them that the learning style can be quite frustrating.
You learn so much in just a 4 week time period.
If the course (heavy in text) is improved, i will recommend to others.
No. I felt like a guiniepig of one profs. experiment instead of being part of an organised developing course thoughly created through the best present sientific discourses.
I would recommend this course to other students as this will allow them to get the basic knowledge about SD
If its online class, I will not recommend anyone. Otherwise, it should be fine.
I would recommend it to those who are interested in SD not everyone as it not everyone's cup of tea.
I would, but warn them about the issues I mention above
I would - there sudject is interesting and the structure of the course it neat

What did you expect to learn upon starting this course?
I expected to learn the foundations for understanding complex problems and how to model those problems.
To learn the basics of SD.
I wasn't sure how far we would get in the class. I expected to have a better fundamental understanding of stocks and flows in basic systems.
i would expect more understanding about the structure, model and behavior so that i would help my client in decision making process.
Practical concepts of SD.
I expected to learn how to bridge the gap between the two different professions/fields and slove the problems.
The basics of SD
I did not have any prior expectations of this course to remain openminded for the challenges I would face. The complexity of the course surpassed what I would ever expect, but the amount of new knowledge in this field intrigued me more.
I thought i had more time to be familiar with fundamental base if system dynamics and learn more . I think the course was too tight especially for new international students
learn how to use stella and using system dynamics method in real life
The basic theory of SD
Didn't really have that many expectations
Being able to model with the basic concepts learned in the course
History and discusions about the approach of System Dynamics, critique and pros. And the basics of how math is used to explain behavior of systems. Not ex.phil as that is a mandatory course in Norway for all students. How to communicate what we will learn in System Dynaimcs should be a whole own course and not take place in this one. For those of us that come from social sciences that course might not be nessecary as we have done ex.fac in social sicence.
Get a basic knowledge about how things work in SD
I expected to learn the basics of course and being familiar to using stella.
Strategies and methodology to solve business complexities in specific as I am student of Management
I did not have any clear idea
More theory and less practical modelling

What do you feel you have learned by the end of this course? Have you met the learning objectives?
I believe I have achieved the basic objectives. However, I wish there was more practice for us to do more modelling of more real-world problems during the course.
Yes, I think I learned a lot but my knowledge is not really is not yet very profound. Too much in a short time and some more complex relationships are therefore still unclear.
I think I have learned the basics I was expecting, though after the exam I am doubting how successfully I mastered the skills.
In a way yes, and no because I am able to model but was not abled to conquer in exam.
Yes, I learned more than I supposed.
I have learnt to integrate the mathematics into the social system.
I have a good idea about what what I should know, but I don't necessarily understand it all. I hope what I have picked up is sufficient to keep on going.
I picked up some fundamentals of the new program, Stella Architect, and understanding of some of the important vocabulary used to categorize the various models. Moreover, my mental perspectives of things has broadened.
No, because i need to have more time to study the relevant materials
I get the basic knowledge of system dynamics and the sofeware. Iwould say I did not bad.
I think I have met my learning objective and more. The content covers wider topic than what I expect
I think so
Yes. but I spent more than 40 hours a week to try to understand the course materials. Many times, I spent too much time on quizes that needed skills that yet to be taught in course. This is not learning through "struggling" anymore. It is asking one who cant walk to run. I feel time can be used more wisely instead of trying to do something that we have not been taught.
A little bit of a lot of things.
I still could not understand a lot of things. I believe I need more time to get used to with the terms and software.
I did not meet my expectations. The classes were good but for me who didn't know anything about system dynamics, it was hopeless.
I don't think that I have learnt enough that I should done
I gained some knowledge, but I doubt I was able to show very good performance on the test with what I had learned, we did not even practised modelling as such, and the test was from half about modelling different situations. I got ome knowledge and skills in graphical integration, and some basic understanding of what is instantaneous and cummulative cause and effect, but I think I have fully understood it in the next course, geo-sd303
I know more about what SD is and have some practical modelling skills

To what extent did the 'distance learning' style of this course affect your experience with the course and your ability to achieve the learning outcomes?

19 responses



You can expand upon/comment on your answer above here:
Modelling as a beginner is extremely tough without collaboration. Having contact time with my peers would have made the experience more insightful and productive in my opinion. Without this peer support, and group collaboration, it was easy to feel helpless at times, and just wait for the TA session to get on with modelling.
I am grateful I was able to take the class. And being remote allowed me to still spend time with my family. However, I wasn't able to learn as much from others and the lack of lecture was more difficult. Positive is you can go at your own pace. I did like that, but hard not to get behind.
Because students were from a wide range of time zones, it was a bit hard to be synchronized with each other. Although we had discussion groups in Whatsapp and Team, it was hard to transfer our understanding to each other. I believe that I experienced in a different way from edx and coursera, because in this course we had one by one experiences. But if we were all in Bergen and close to Professor and TA, it would have more incomes.
The flip class session was really new to me. As much as I enjoyed communicating with fellow students, it was difficult to interpret and and reach right conclusions. I have a feeling we needed more time and practice. A lecture on the respective subject would have been better before we go through all the subject matter by ourselves.
I prefer a physical learning environment as an online class restricts the amount of interactions and communication with the class. Although everything can be available virtually, I still prefer in person classes due so that I can be more open about any struggles or issues and receive instant feedback and corrections or responses in general.
I think this way of teaching is really usefull for international students and i wish this method would continue at least for another semester
more frequent but shorter session in a week would be preferred
This is a program heavy in practice. It is difficult to learn piano with just words from books.
Could not focus through computer screens, less interactions, less group discssions, plus studying from home was difficult to focus, and getting disturbances on internet
it is really hard for me to compare, as I do not have an experience with this field of study presented on physical-study environment

What could the instructor have done to improve your learning experience?
I believe that there should have been at least two flipped classroom sessions, one for concrete discussions amongst students and instructors of the materials covered in the week, and one for the quizzes to check our understanding.
Provide more exercises with solutions.
I think more in-person sessions would have been helpful. The quizzes and modules also needed more review to make sure there were no gaps and the questions were clear.
I think the effort that instructor have done to my learning process is just commendable. They should give more examples in the course so that practical would be effective than theory.
The challenging style of teaching was very time-consuming for students but really effective in learning and long-term memorizing. What I saw from questions of many students, those with a little math background were really confused with basic math. Maybe a for example 3-5 pages of required math in simple words (presetting before first week) can help them.
A brief lecture and discussion before going ourselves. More Practice questions followed by graded quizzes would have helped. More practice on Stella lab with TAs.
Assume a lower level of knowledge and understanding throughout the course
I would wish the tutor provided more learning material and had the opportunity to properly execute example models or illustrations through maybe a connected tablet. I also would prefer if there were more lectures a week as the one weekly lecture was too crammed and did not leave any chances of discussing with fellow students.
He should take more time to study before exam
If he can provide more examples to explain how these method or system works
More video content
Give the right answers and models, so a good comparison with my own work could be made.
Change the teaching approach. Less words, make sure students learn the needed skills before quizes.
Ive addressed that in the above forms (tell me to read through the form so i can better distribute my opinions to where you want them or give an overview initially).
I felt the contents could be a little more elaborated in easy language, so that it would have been easier to understand for those who are new in SD.
Focus on the basics more. It would have been way easier to learn if I understood the basics about course and stella functions
They were friendly and did all tooth and nail to make us understand but here the virtual system of learning could not be effective enough from our side as we are not used to it.
take for granted that all students are "tabula rasa," and they need to be explained all the concepts from the very beginnings, from the very detailed basics
Provide a better chance of success before quizzes

What could you have done to improve your learning experience?
I could have found better ways to collaborate digitally.
Provide more exercises with solutions.
I should have made sure to keep up with assignments and felt freer to ask questions even via email.
I think practicing more in modeling and understanding what the questions is actually demanding for the perfect answers.
Listen more carefully :)
Given the time I could have read more of the related contents and subject matters.
Had a better technique for studying. I should have noted what I did and did not understand before moving on to "catch up". When "caught up", I had problems understanding what I did not understand when I inevitably got stuck.
I could do more personal readings into the learning material, the Sterman book, or other third-party resources. I would also think that practicing models on my own with hypothetical simulations would help me familiarize myself more with Stella Architect. Lastly, a larger initiative to communicate with all students online would also help in sense of receiving help and sharing knowledge.
I think i should have more time to study other relavant materials
NA
More group discussion with other students
-
Be physically in Bergen
Make my own study-group after the first class (which is hard to initiate alone, from your room, not even using the same communication platforms as the rest of the class).
I could have asked more questions to clear my confusions.
If I was present in bergen, I would ask questions in person to professor and other fellow students as that was the education system I was prepared for.
May be devoted more time than regular as I am from working group.
not think I understood the materials fully even I thought so :D :D
Practiced more using external resources

How would you reflect on your learning process throughout this course?
It was a steep learning curve, but worth the struggle.
Did my best, but I'm a little disappointed with the exam, as I'm sure I can do better, but there was just barely time before the exam to prepare in detail.
Trial and error through the modeling pieces.
I was clear while there was an instructor explaining but the exam part of modelling was very difficult, which leads to decrement of my learning progress.
It was fine.
It was harder said than done. Had to change my perspectives on different things. Some contents were not practical and logical enough.
Non-linear
I would admit to not have studied as diligently as I should have, the excuse that this is all new felt too daunting as there was no gradual introduction into this with a clear foundational start.
I think it is possible with studying more books and materials
Talk more with classmates.
Self-study can be quite frustrated because sometimes I feel stuck on certain topic and cannot move on to the next one. However it does makes me remember well on the part that I got stuck or made mistake. Just that in limited timeframe like one month per subject this frustration creates a lot of pressure for a student.
I learned a lot
I think if I dont put in more than 40 hours week. I would barely get anything out from it. The same learning process can be more efficient if the course being taught in a better way.
Caothic. It became clearer during the start of 303.
N/A
I miss some points , and lost the speed to learn with the professor explaining speed.
May be I will try to apply the things that I have learnt in the real life application!!
I think it could have been done more efficiently, had the timetable of the course would be different, such as that all of the materials are accessible since the very beginning, and I can go through them all and be able to understand them before specific quiz requires their knowledge from me, but also because it would be much better for me to not "waste" time during the first weeks, because I finished the mitt.uib materials in one or two days, but during the final weeks I was lacking time cause the complexity was much bigger. But also the materials were so poorly explained, both in the materials and the lectures, so the efficiency could have been much higher if the materials were READABLE. I dont understand why pro. Moxnes asks us to check what is the "readability value" or our text outcomes, when his texts are so difficult to understand, that it is necessary to reak them 7 times, or even more.
A bit fuzzy

What did you find very helpful or useful in this course?
The TA sessions were really useful for clarifications and help in the modelling process. Also, the quizzes in the course material were very useful to check understanding and gaining further insights.
The online material, the lessons with Aklili and also the Sessions with Erling. The contact with other students was also very helpful to discuss and share experiences.
I did think the quizzes were helpful, and that you needed to read through every assignment before proceeding.
I think Teacher Assistant session was very much helpful and useful.
Erling's method to challenge our primary understanding with quizzes was helpful. However it was more fair if their weight was 10% as it was intended.
It invited students to participate, motivates them to contribute and captures their interest and attention.
Aklilu
I found communication with classmates and the student group MINDs the most helpful. There I received the most simple feedback and personal explainations.
The case and examples
Erling's teaching method, this forced me thinking and correct bymyself
The flipped classroom is a great way to check our understanding
The practical and theoretical things combined.
TA session and friday class when there are human interaction
Prof. illustrating with the slingy and a book I got recommended by a second year student (Meadows. Thinking in Systems).
The quizzes were helpful as they gave some ideas about each chapters.
Aklilu :)
I am not yet able to decide what's so useful till the date.
the introduction into the systemic thinking as such is very, very useful
The TA sessions and quizzed - I would have preferred the quizzed not to be graded

What do you wish you could have learned more about in this course?
I wish the problem behaviours we tackled were more relevant to social issues or social systems as the course title suggest, which would make it easier to understand the system structure.
How to deal with Stella. There are still a lot functions I don't really know.
I wish we spent maybe more time building simple models. To jump through to doing delays with sometimes equations we didn't understand was too much. I feel I wish I could have slowed down a bit and done more examples.
I wish I would be in the classes and there would be more communication between instructor and students. This would uplift my understanding level and also the grades.
Nothing more in 4 weeks I can imagine.
I would have liked to learn more about the model on Stella. Also the subject matter with more examples and their explanation would have been better.
Hard to say. I don't know the relevance yet of the different aspects of the course.
I wished we had more practice with modeling as I only found the previous examples familiar by could not connect previous learning material to newer problem statements.
I wish i had more time to study more about feedbacks
NA
Practice building model and analysis with more case study
More about efficient or clever ways to model easy
I think we are given more than enough for a 5 weeks course.
Pros and cons. Discussions and the core behavior of systems. Archetypes maybe.
I wish I could have learnt to understand how to create models properly in Stella
The basics and how to use stella
More modelling and a perfect interpretation from the side of professors.
hard to say
More examples - seeing the lecurer do analysis

What do you feel could be improved about this course and what suggestions do you have for ways to improve it?
The way the quizzes have been formulated seems like at times, they were meant for us to get it wrong as part of learning. However, this also serves to demoralise us and adversely affect our grades. The final exam should keep in mind that we do not have the experience in independently modelling problems under time constraint. The alcohol assignment, which we did in the same week, on average took us days to get it right. So, I believe the modelling component of the final exam should have gone easier on us. Anxiety during the exam plus a ticking clock leads to a reinforcing feedback loop for the worse.
Provide more exercises and maybe also in form of a tutorial, so that you don't have to learn everything more or less by yourself, but that you can go even more into the discourse.
More examples, and more explanations of different model functions (such as Min/Max, Step, etc). It would have been great to have some of these laid out clearly, when and how to use them (assuming we are going to be asked to use them). Somehow tighten up the first sections, or start faster so that more time will be allowed for the later lessons. The later lessons took longer and many people got behind, but yet these seemed more heavily weighed in the exam.
I think one should focus more on examples rather than theory. One should make significant concern for the native students as they are different and there level or the ability of understanding would be different.
The course is basically a class attending one and it is approaching to an online course by appropriate using of technology. I guess if this course is intended to present in two format (online and class attending) in future, the online version is better to extend to 2 months. For distance learners it is harder to gain the concept by the same pace.
1. Contents could be explained with more examples and explanation. 2. Lab oriented practice on Stella. 3. A lecture beforehand.
Removing grading from quizzes.
I would suggest at least 2 lectures a week in addition to one session with the TA. More model focused material (example: videos) to follow along with the lecturer in creating models and explaining the functions (MIN, MAX, RAMP, SINWAVE etc). Have non-graded quizzes similar to how the exam was conducted so that students can submit their own models for the purpose of feedback and learning. The discussion sections were discarded by most students as our focus was to move onwards with the curriculum, thus I felt it was not fill its beneficial point.
Please didicate more time to teach the such important course for international student especially for the first course of program
Add graded quizes after lectures, and add more examples in online material.
More case study for model building and analysis. Not necessarily have to be graded upon.
Give the final models.
Extra TA session on Monday. Then the usual TA on thursday and class on friday. This is not a course that everyone can self study before the modelling quizes assuming none of us has background in SD.
Answered thoroughly in above comments.
There should be a trial and error option in the quizzes if the quizzes are graded, so that students can understand their mistakes on the first time and then try again.
I don't know
I can't suggest anything right now other than praying the Almighty to end up this pandemic and have physical class I Bergen.
I have already mentioned them in the previous questions
There could be more quizzes for training and challanges - I like the idea of learning by failing, but it created a lot os stress when the quizzes were graded.

Any other comments can be made here:
Appreciated the course overall!
Overall this is the good course.
No. Thanks
I appreciate the hard work from the lecturer and the teacher assistant! It is a whole new method of teaching and I am grateful that we are still able to learn during such a trying time. My feedback points out what did not work for me, but I understand that this method might have been more efficient for other students.
Please take the time to adopt to new students from different countries who are going to study in new language with a new program I lost the good position i could i have because of this limitation
It is very stressful to have to do the quiz well especially when it's 25% of the grade. I feel like doing the quiz well test you more on your capability of trying to understand the material by yourself and not really testing your capability of understanding the topic. As an example, in Friday session, I perform much better when I do the quizzes. This is because I have gone through mistake from the quiz and discussion with TA. My point is your grade should not be hurt by your ability to study on your own. And may be graded quiz should be done after we have gone through the whole cycle of class i.e. TA and flipped class room.
I appreciate the knowledge I gained in this course, I think SD is an essential tool. However, learning can be more fun and not discouraging for the very motivated new students. I have heard quite a number of students talking about dropping the course. Unless the intention of this course is to make students who are not so competent to drop the course, I think the learning process can be less stressful, less time consuming but a very effective learning output.
Make it better cause this is important! I ROOT FOR YOU GUYS!

5. Oppfølging

Oppfølging av/kommentarer til tidligere evalueringer. Hvordan rapporten følges opp, evt. tiltak eller endringer som er gjort/planlegges gjennomført på bakgrunn av emnerapporten

Se punkt 3.