Advice to next year's students

Start with assignments in time.

Do not miss seminars. The price for that is high. I would expect that compensation assignments should be about 2 hours of extra work each (since the duration of a seminar is 2 hours), but it turns out to be quite more than that.

No trips, conferences, nor teaching at the same time when the course is given.

The projects are really time consuming but it's the best way to get a true feeling of stochastic methods.

Knowing a programming language well enough like MATLAB or Python

Prepare plenty of time

Difficulty

Amount of work
The assignments were fun and investigational.

Miniproject 3.

The miniprojects were very good. Flipped classroom is nice.
By spending so much time on the mini projects I finally feel I have some knowledge about SDEs, Metropolis algorithm, etc... Much more than if it would simply have been lectures

Constructive Projects

Topics are very interesting and useful. The works we have done in the course help a lot to have a better understanding, and you have to do the homework before seminars.

Points for improvement

I don't like that report writing is such a large port of the course. It is more fun to focus on learning new things/solving problems.

It would also be nice to discuss mathematical aspects of stochastic methods not only computational (implementation) aspects. Maybe more details into stochastic calculus.
We need significantly more time with the teacher! (a lot of questions in the gap after we understand the theory and before we start to implement) Event though we got the methods to work, we still have huge holes in theory and a lot of unanswered questions which we did not get to ask (i.e. When you changed the proposal function for \( \sigma \) and \( \mu \) to lognormal, did you remove the possibility of \( \mu \) to be negative?) There should be a short lecture/session in the middle of each miniproject interval, significantly before the deadlines/seminars. The first exercise should be a bit relaxed or split in groups (it was depressing).

We had too little time for the projects, it was actually very stressful not to have a properly working program by the deadline of the projects. More guidance (i.e. in the description of the project) would be greatly appreciated so that we don't have to rely on asking you all the time in order to understand what we should do.

It needs more lectures

We need more lectures or exercise-solving seminars, and more reading literatures or text books to help us understand. During the lectures this time, it is always quite hurry and too quick, and we do not have enough time to ask questions and digest.

Teacher: Stefan Engblom (teaching was clear and well structured)

Teacher: Stefan Engblom (teaching was engaging)
Teacher: Stefan Engblom (positive points)

Stefan kept an open atmosphere where it was ok to be wrong and ask questions.
The miniprojects were well designed and well matched to the intended learning outcomes.
Navigated us through the field.
The assignments' topics were properly chosen and interesting. After completing them, I feel I know much more than before.
Providing constructive projects
The homeworks are well designed and clear. The contents of each lecture are well designed beforehand.

Teacher: Stefan Engblom (points for improvement)

More lectures.
There was a lot of uncertainty in the assignments, like it was easy to get stuck on some technical issue or to misunderstand the instructions and implement the wrong thing. Maybe next time it would be better to have more time for the projects and more guidance concerning the problems we are likely to encounter (eg for metropolis algorithm can be optimized to avoid computing the full hamiltonian but only the difference of the hamiltonian, or like how to choose the size of the data for the parameter estimation, etc...)
To provide more lectures
Most of the time, lectures are quite hurry.

The suggested reading material
The assignments

![Bar chart showing assignment ratings]

Excellent: 5  0  0%
Bad: 1  0  0%
2  0  0%
3  0  0%
4  1  16.7%
Excellent: 5  83.3%

Final words

Fun course that has broadened my knowledge a lot when it comes to stochastic numerical simulation.

More classroom occasions are needed. Not necessarily lectures, they can as well be some kind of seminars. The course was intended to be a discussion course based on seminars, but I felt that it was too little time to ask and discuss questions. It was a lot of rush on these four occasions that took place.

There should be another applied course based on the MP3!

Maybe we need more time for finishing the course.

Finally: Overall rating of the course

![Bar chart showing overall ratings]

Bad: 1  0  0%
2  0  0%
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Excellent: 10 0 0%

**Number of daily responses**