463 GE7006 Information and Modelling Systems for Land and Water Resources VT17 Kursrapport

Kommentarer och önskemål om förändringar till nästa kurstillfälle:

Makes sense to add a quiz in the discussion meetings to make the grading a bit more concrete and objective.
Move discussion off Friday afternoon?

Kurs-/momentansvarig:

Steve Lyon

Antal studenter på kursen:

17

Beskrivning av ev. förändring sedan förra kurstillfället:

From the last offering, there was a new teaching assistant (Romain) for the Matlab exercise part. More added on statistics (Stefano). The Project 2 was made a bit more to the point (Steve). The flood exercise to demo HEC-RAS stayed the same (Jan).

Kursens/momentets styrkor enligt studenterna (sammanfattning baserat på kvantitativa resultat samt fritextsvar):

This is directly from the student free text (nothing changed):

To actually learn programming
The large amount of exercises, the best way to learn modelling is by doing it.
I really liked how much hands on practice we got with models and with matlab in general. I feel like I'm leaving the course with skills that will be very useful no matter how I end up using my degree (research, consulting, etc.). The way we were introduced to matlab was well planned (starting with tutorials and exercises). Despite not having a clue what to do on day one, by the end of the course I felt very confident in matlab and with the mechanics of modelling as a whole. Everything...
Especially the involvement required. You cannot do this course without putting effort into it
To get an understanding of modelling and its positive and negative sides. To learn about MatLab and other programs, by actually getting knee deep in it.
That we actually got to work with programmes, 'learning by doing' approach. Also that the course was divided into sections, made it easier to structure.
Allowing me to be creative in solving problems.
That it's so much practical work! Really fun, and really useful in the future I think.
Slowly learning matlab.
The best approach is Matlab and programming for the basic of hydrological modelling.
The mini projects, activities, and final projects in matlab
The matlab crash course
its structure and the way it was presented
Variety of lecturers, hands-on MATLAB exercises and very friendly vibe overall
That you learned how to manage a problem and solve it with matlab

Kursens/momentets svagheter enligt studenterna (sammanfattning baserat på kvantitativa resultat samt fritextsvar):

This is directly from the student free text (nothing changed):

None as I can think of
The book was very hard to understand, I understand that it shouldn't be easy but it would be nice if there is other/more clear literature.
I would have preferred for the seminars to be broken up a little more (maybe doing 4 instead of 3). Sometimes there was a little too much material to cover for one Friday afternoon and it would have been good to shorten them up a little bit. I would also suggest speeding up the timeline at the beginning of the course. Most of the exercises could be done within a few hours at most, so it would be nice to tighten up the time between exercises a bit and maybe add another small project or something.
Find a way to make the book reading less confusing and easier to understand. For example, every week, one hour session of one of the book model testing.
In some way try some of the other models mentioned in Beven textbook.
While i understand that it is a master course and the bar must be raised from bachelor studies i feel that the course book felt too advanced.
Maybe develop some side material that makes the book easier to understand?
If there is a modelling text book that is more pedagogic that would be appreciated. But I guess there isn't tons of them out there.
Connect the seminars better with modelling strengths and weaknesses, primarily for the morecommon models.
In my opinion, we all know that hydrological modelling is advanced knowledge. At least, lectures should be given for the difficult part such as predictive uncertainty. Further, application with sample of hydrolocical models should be practiced such as TOPMODEL, MODFLOW, etc.
make the seminars shorter, or more interactive, or somehow more interesting
higher tempo with the projects. Possibly more help sessions
Maybe some more tricks with matlab
Textbook seminars to be held not on a Friday afternoon
It would be easier to relate what beven talks about if you could try some different models. Some lectures in the beginning to explain some of the basics in modeling, would make it easier to grasp the concept.

Lärarnas analys av kursens/momentets genomförande:

The students did a great job bringing energy and engagement to the course. That makes it easy to teach. Yeah, Friday afternoons were a bit of a drag this year. I felt everyone achieved the objectives of the course (yeah!).

Slutsatser samt förslag till förändringar:

Well, clearly, the text book and seminars were a bit of an issue. Next time, I would probably break things up a bit (maybe 5 discussions NOT on Friday). It would also make sense to add a quiz to the seminars to help give students incentive to read the material. One good suggestion that came up was to have a lecture on some of the models discussed - that's not a bad idea at all. Other than that, seems like things run smoothly and students are happy. Awesome.