

Course Summary for "Climate Change and its Impacts on the Environment" ht 2020

Course coordinator: Paul Miller (INES)

Teachers in the course: Paul Miller, David Wårlind, Stefan Olin, Jing Tang, Wenxin Zhang, Marko Scholze, Vaughan Phillips (all INES), Wilhelm May (CEC), Jesper Sjolte (Geology)

Number of students: 14 registered students

Grade distribution: 10 G, 3 VG, 1 not yet completed

Evaluation

Summary of the course evaluation

Number of survey responses: 11, which is 79 % of the students

Short summary of the evaluation responses:

In general the students were satisfied with the course (overall score of 4.0, on a scale 1-5) and thought that the aims of the course were achieved (4.4/5). Canvas worked well. The workload was considered slightly too high (score 3.6 out of 5, where 3 is OK). Some students found it hard to concentrate if more than one 3-hr lecture was on the schedule per day.

The teachers inspired the students (4.5/5) and the exam reflected the course content (4.3/5).

Lectures: Most (11 of 12) lectures got a grade of $\geq 4/5$, but the students thought that some lectures were either too complicated or that they contained too much material. Technical problems impacted one lecture a lot (grade 3.6/5). Exercises: 3 modelling exercises were made more difficult by the distance format. In some cases students had problems when trying to run simulations or do analysis on their own computers.

Feedback to the students was considered poor or slow on certain exercises.

The project work (with Paul Miller and Marko Scholze) was appreciated by the students (4.4 / 5).

Comments from the teaching team

The teachers' opinion is that the course went well, but that distance learning made it more difficult to engage with the students.

Legacy timetable issues still meant that some lectures could not be given in the same week as exercises on the same topic.

Evaluation of changes implemented since the last time the course was given

Improvements and updates were made to the climate extremes exercise resulting in a better grade this year (score 4.2/5, up from HT2019's 3.1/5).

Marko Scholze successfully took over as supervisor for the projects with Paul Miller.

Suggestions for changes to implement before the course is given the next time Before the HT2021 course, we will:

- Avoid days with > 1 3-hr lecture on the schedule
- Give faster and better exercise feedback to the students
- Change the schedule so that part of Wilhelm May's extremes lecture is held together with the climate extremes exercise. Introduce material on extremes at the beginning of the course.
- Ensure that the same computer lab is available from one evening to the next morning for the climate modelling exercise (week 2), and preferably for the whole week it is running. This will allow students to run simulations overnight, greatly improving their progress and learning.
- Move Vaughan Phillips' lecture to nearer the beginning of the course.
- Reduce the complexity and/or content of the lectures that scored < 4/5 in the evaluations.
- Review the modelling exercises if distance learning is still in place.

2021-04-01, this summary was done by Paul Miller with input from all teachers.

Utvärdering av förändringar sedan förra kursen

Sedan förra gången har vi ändrat och uppdaterat "Climate extremes" övningen och dessa förbättringar gjorde att övningen fick bättre betyg (4.2/5, en ökning från HT2019s 3.1/5).

Nu handleder Marko Scholze projektarbeten tillsammans med Paul Miller.

Förslag till förändringar till nästa kurs

Till nästa gång kursen ges (HT2021) ska vi

- Undvika dagar med fler än en 3-timmars föreläsning per dag.
- Ge snabbare och bättre feedback på övningarna
- Schemalägga Wilhelm Mays föreläsning om extremer så att det hänger ihop med övningen på samma tema och introducera studenter till extremer i början av kursen.
- Se till att studenterna har tillgång till samma datorlabb för hela veckan då klimatmodelleringsövningen körs.
- Schemalägga Vaughan Phillips föreläsning till de första veckorna på kursen.
- Minska komplexiteten och/eller mängden innehåll i föreläsningar som fick betyg < 4/5 i kursutvärderingen.
- Se över modelleringsövningarna om kursen fortfarande ges på distans.

2020-04-01, sammanställning är gjord av Paul Miller och lärarlaget.