

Master's course organized by ECS, KTH Coordinator: Professor Semida Silveira;

Course assistants: Tomas Lönnqvist, Xi Pang and Henrique Pacini

Lecturers and instructors: Prof Arnaldo Walter; Prof Sribas Bhattacharya, Prof Staffan Laestadius, Dr. Richard Klein, Francis Johnson

# **Course Evaluation Report**

# MJ2470, Climate Change Mitigation Tools, autumn 2009

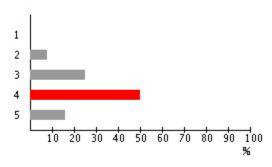
The master course on *Climate change Mitigation Tools* was offered for the first time on campus by the ECS group, between Sep-Nov 2009. The course is offered to engineering and master's students in the fifth year of their education. It is, therefore, meant to provide in-depth understanding of climate change mitigation tools. The course included 7 lectures, 1 symposium, 2 seminars, 3 lab exercises, 1 external visit, and one individual assignment. 6 different professors / senior researchers were involved in the delivery of the course activities. 19 students were initially registered in the course, but only 13 students actually chose to fulfill the course. The student drop out occurred quite early and should not be understood as a negative judgment of the course but is rather in line with what is usually observed in other courses. The course evaluation was carried out after the final report writing and was answered by students through the BILDA platform. 12 of the 13 students have answered the 11 questions of the evaluation thus giving an answer frequency of 92%. One student still has a pending activity to complete and could be the one that did not make the evaluation.

The course was highly rated by the students. In the overall course rating, 75% found the course was above average (Q11) and the others found it was at average level. A high percentage of the students considered the course significantly above average in many respects including content, literature, and quality of lectures, activities and organization. We notice that the average values observed for all questions in the evaluation are all higher than 3. The students were quite satisfied with the course work-load and the credit balance among activities in the course (Q10) which received an average rating value above 4. When it comes to the practical part, the Climate Change interactive exercise and LEAP lab exercise were the most appreciated as the higher marks received indicate. But the visit to Nordpool and CDM exercise were also appreciated.

Specific and constructive comments from the students are also attached according to each question in the report and can be used for future development of the course.

## **Detailed results of the evaluation**

1) What is your <u>overall impression</u> of the course?

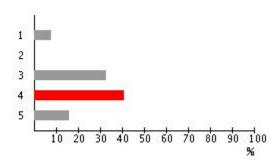


Average (for numeric-answers): 3,75 12 has answered of 13 (92%) Maximum number of choices: 1

#### **Comment:**

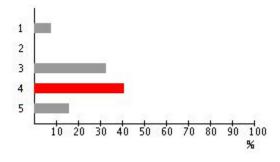
- Course is very well-organized and informative. All lectures/practical exercises are consistent and well-structured.

2) What do you think about the <u>course content</u> in general?



Average (for numeric-answers): 3,58 12 has answered of 13 (92%) Maximum number of choices: 1

3) What do you think about the <u>course lectures</u> in general?

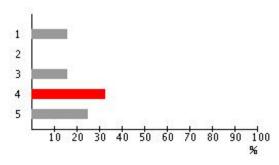


### Average (for numeric-answers): 3,58 12 has answered of 13 (92%) Maximum number of choices: 1

#### **Comment:**

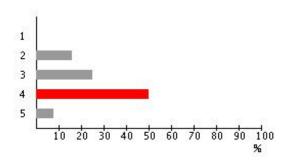
- Prof. Semida Silveria is always good in her lectures, Prof. Sribas Chandra Bhattacharya tends to put too many information on his slides which could be confusing at times.
- 4) How did you experience the practical exercises in terms of content?

Visiting to Nordpool/NASDAQ



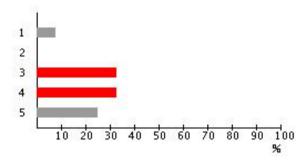
Average (for numeric-answers): 3,55

CDM



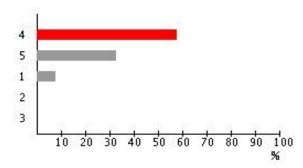
Average (for numeric-answers): 3,5

LEAP



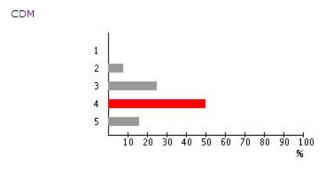
Average (for numeric-answers): 3,67

Climate Interactive Exercise

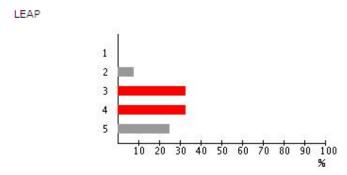


Average (for numeric-answers): 4,08 12 has answered of 13 (92%) Maximum number of choices: 1

- The woman from Nordpool should have come to KTH; it would have been far more convenient as it was only about 1 hour talk. As well, she spoke about subjects that no one understood.
- I find it a good idea that for example in the CDM exercise you do not have to submit any report afterwards but you must work hard during those 4 hours to get a good result from your analysis. This makes you focus on the really important aspects of the matter. As for the climate Interactive Exercise it was something completely new to me.
- 5) How did you experience the quality of instructions and/or other support needed to do the course exercises?

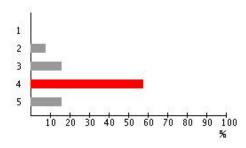


Average (for numeric-answers): 3,75



Average (for numeric-answers): 3,75

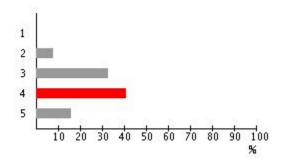
Climate Interactive Exercise



Average (for numeric-answers): 3,83 12 has answered of 13 (92%) Maximum number of choices: 1

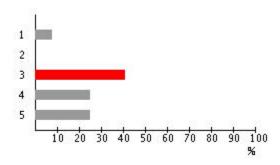
#### **Comment:**

- Climate interactive exercise instructions were quite confusing
- Although LEAP caused problems to some students it worked on my computer so ... In the Climate Interactive material I believe there were some repetitions in the General Instructions pdf. I mean that it could be shorter without omitting important information.
- 6) How did you experience the quality of course material in general (syllabus, course instructions, ppt presentations)?



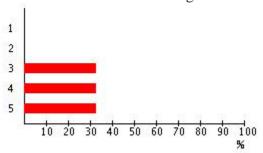
Average (for numeric-answers): 3,67 12 has answered of 13 (92%) Maximum number of choices: 1

- there are some lecture slides missed in bilda. Better to have records by centra
- 7) What do you think about the cohesion and balance of the course program? (e.g. focus, interaction and complementarity of topics and lectures, balance lectures / practical exercises, group work / individual work)



Average (for numeric-answers): 3,58 12 has answered of 13 (92%) Maximum number of choices: 1

8) How did the BILDA platform work for information sharing and course information?

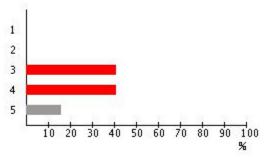


Average (for numeric-answers): 4 12 has answered of 13 (92%) Maximum number of choices: 1

#### Comment:

- Bilda was sufficient.

9) How much do you feel you have learnt on the Climate Change Mitigation Tools?

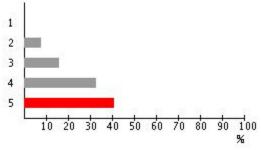


Average (for numeric-answers): 3,75 12 has answered of 13 (92%) Maximum number of choices: 1

#### **Comment:**

- quite a lot. CDM, LEAP and so on

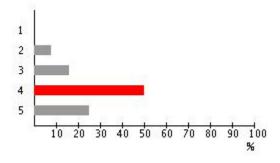
10) The course entitles to 6 hp (4 weeks full time work). How does that reflect the requirements and work load you experienced in the course?



Average (for numeric-answers): 4,08 12 has answered of 13 (92%) Maximum number of choices: 1

#### **Comment:**

- A little too much work load. Should be at least 7.5 credits.
- 6 hp is fine for this course.
- I think it is reasonable since all the activities are group based and the work is divided among the students. It is crucial at such courses to be in a productive group otherwise the overall work can seem too much.
- could have more credits
- 11) What is your <u>rating</u> of the course as a whole? Please, add eventual suggestions for future improvement.



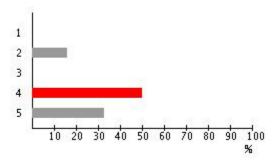
Average (for numeric-answers): 3,92 12 has answered of 13 (92%) Maximum number of choices: 1

- For improving, it would be useful to provide the students with more information about the different activities in advance (exercices)
- The Nordpool visit was a very good idea. It gave the students a feel of how things are done in real life.

Another thing about the name declaration at the end of this evaluation: Personaly I don't have a problem stating my name but keep in mind that in general people tend to feel obliged to state their names if there is a relevant field and this in turn might make them be more linient in their evaluation. If you want to get as realistic evaluations as possible I think you should remove that field.

- The preparation of the lectures and labs could be better.

12) Would you recommend this course to other students interested in climate change?



Average (for numeric-answers): 4 12 has answered of 13 (92%) Maximum number of choices: 1

- Assuming there are some improvements.
- It's an interesting course with a different learning approach. One last remark: in the syllabus I think you should state the different lecturers and the number of lectures that they will be giving. This is because a lot of students choose courses based on the professor that is teaching them so they should have an idea.