

3-year course evaluation

Course: Physical Climatology (GEOF212)

Semester and year of conducted subject evaluation: 2023 Autumn

Name of course coordinator(s): Shunya Koseki

Content

- 1. Describe and justify pedagogical choices in the subject, reflecting on the student's learning as a result of these choices.**

Based on a text book "Global Physical Climatology" written by D. Hartmann, the students have learned an overview of physical climate system, climate variability and climate change. Not only the fundamental materials, but also some latest scientific outcomes have been also introduced. This course also has practical class to solve the problems and analyze climate data using Python codes so that they can make their understanding more advanced.

Because of recently increasing demands from interdisciplinary fields to climate science, in the course the students discussed how climate science can be applied to other sectors. Because there are students from different backgrounds (science, engineering, computer science, etc), this kind of discussion is beneficial. I would propose that one or two of lectures could provide climate application in next years.

course evaluations should also include at least:

- 2. Follow-up on previous evaluations**

For the class in 2023, I obtained several and helpful feedbacks and materials of 2021 and 2022 from Prof. Lea Svendsen who was in charge of this class in previous years and discussed how the class should be. Basically, the class-23 followed the course materials in 2021 and 2022. Taking Svendsen's suggestions into account, some new materials have been included in the course.

- 3. Student evaluation and other evaluations relevant to the course**

According to student's evaluation, the contents of this course is clear to the students and easy to follow the course materials. However, one of critical feedback is that there are many figures and graphs from papers, articles, etc, and this style seems confusing to the students. This point needs to be improved.

Also, some of them are not satisfied with if they could improve writing skill through the class. Even though a few homeworks (for example, the students describe discussion on a simple climate model simulation) were given through the course 2023, that might not be sufficient. Instead, in the Writing exam 2023, I set some problems that require the students to describe discussions.

4. Experiences from others contributing to the teaching in the subject, both students and staff

The practical classes were given by Teaching Assistant who is Master student at GFI. She has already taught this practical class last year and well-experienced. Also she contributed to evaluating the oral exam.

5. Failure rate in the course

There is no student who obtained Grade F in 2023.

Tableau Report: [Link to Tableau Report]: https://rapport-dv.uhad.no/#/views/SVP3Emnegjennomfring_1/Emnegjennomfringslister?:iid=2

6. Any peer assessment

N/A

7. Assessment of alignment between the course learning outcomes description and teaching, learning, and assessment methods

8. Assessment of whether the progress and structure of the course align with the established goals for the subject and program

This course follows the text book of Global Physical Climatology. Most of essences of the book have been introduced in the course 2023 so that the course aligns well with the established goals of the course. On the other hand, some details like equations and their derivation have been skipped because of limited time.

9. In cases where there is a connection to practical experience or work relevance in the course, evaluate whether the arrangement is functioning satisfactorily.

As described in #1, the students also attended practical course to solve the problems and analyze the climate data using Python codes so that they could understand physical climate system more deeply.

This course has two exams: (1) Oral presentation, 30% for grade and (2) Writing exam for 70%. Especially, the practical class is very important to Oral exam where they analyze climate model's data and have presentation about the results and discussion.

This time all the students made very good score of Oral exam.