

Course analysis report – FAF3604 Soil Mechanics 7.5 credits - 2023-03-31

Please note that there is only one respondent to this form: the person that performs the course analysis.

Course analysis carried out by (name, e-mail):
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DESCRIPTION OF THE COURSE EVALUATION PROCESS Describe the course evaluation process.

Describe how all students have been given the possibility to give their opinions on the course. Describe how aspects regarding gender, and disabled students are investigated.

About 1-3 students pass the course each year. Four of resent students have been interviewed and provided some written comments on the course.

DESCRIPTION OF MEETINGS WITH STUDENTS Describe which meetings that has been arranged with students during the course and after its completion. (The outcomes of these meetings should be reported under 7, below.)

See above.

COURSE DESIGN Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

The course is a self-study course with flexible start, where the students read the book Soil Mechanics by Lamb & Whitman. The course part corresponds to 6 credits and is examined via a written home exam. The second part of the course corresponding to 1.5 credits consists of an essey on a chosen subject related to the subject area.

THE STUDENTS' WORKLOAD Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If these is a significant deviation from the expected, what can be the reason?

The students reported that 7.5 credit was reasonable for the workload. However, some students think the book is a little too long to read and was in itself a huge task. The homework questions were also extensive

THE STUDENTS' RESULTS How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

All students have Passed so far.

STUDENTS' ANSWERS TO OPEN QUESTIONS What does students say in response to the open questions?

What aspects of this course were most useful or valuable?

Students are generally satisfied with the course, as it was practice oriented on an important skill for the carriere.

The students believed that the course helped them to reach the general goals of the PhD degree.

The most useful or valuable thing is to read the book "Soil Mechanics" and take a comprehensive approach especially about "critical state soil mechanics". The homework questions highlighted important aspects and parameters that one needs to understand for practical soil mechanics designs e.g. the importance of shear strength, considering cohesion in clayey soils, etc.

Regarding the essay the students think it was really useful and they learned how to do a comprehensive literature review without getting lost in it.

How would you improve this course? (For example, regarding course content, layout, or course administration)

If several students take the course at the same time, they can have a number of meetings (such as workshops) around different chapters in the book (perhaps not needed for each chapter but for the "big" topics). This gives an opportunity to highlight things that the student has difficulty understanding, to discuss in a group. Perhaps the course supervisor in this work prepares a number of "slides" with discussion questions for each chapter.

It could be one short introductory session with doctoral students taking the course per semester. The session can then be used to explain the main concepts of soil mechanics that are important and commonly applied to industrial/field problems. The short introductory session could take the format of a short PowerPoint presentation that includes pictures/video examples from doctoral projects or industry-related projects where certain concepts proved useful OR one could record the PowerPoint presentation + lecture video, which saves you time (the videos can be updated when need be). Such an introductory lecture might help quicken and deepen the learning experience for doctoral students that are not directly working with soil mechanics projects.

SUMMARY OF STUDENTS' OPINIONS Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.

Summary made in previous question. (The interview only had open questions).

OVERALL IMPRESSION Summarize the teachers' overall impressions of the course offering in relation to students' results and their evaluation of the course, as well as in relation to the changes implemented since last course offering.

The students are generally satisfied with the course content and think it's relevant to their PhD studies. However, the course has been given for many years without significant development. The examiner feels that the students' results and experience vary mainly depending on somewhat unclear guidance.

ANALYSIS Is it possible to identify stronger and weaker areas in the learning environment based on the information you have gathered during the evaluation and analysis process? What can the reason for these be? Are there significant difference in experience between:- students identifying as female and male?- international and national students?- students with or without disabilities?

Too few students and too small course to make this detailed analysis.

PRIORITIZED COURSE DEVELOPMENT What aspects of the course should be developed primarily? How can these aspects be developed in short and long term?

- A newer textbook should be considered.
- One short introductory session with doctoral students taking the course per semester.
- Course syllabus must be updated and clarified regarding layout and guidance. A Powerpoint presentation will be prepared with a number of "slides" with discussion questions for each chapter in the book.

OTHER INFORMATIONIs there anything else you would like to add?

N/A.