

3-årig emneevaluering: GEOV342

Emne: The Geochemical Toolbox

Semester og år for gjennomført emneevaluering: Spring 2024

Navn på emneansvarlig(e): Desiree Roerdink

Innhold:

1. Beskriv og begrunn pedagogiske valg i emnet, reflekter over studentens læring som følge av disse valgene.

This course has been substantially modified based on student interviews and mapping of teacher competences (as part of Desiree's UPED coursework). As students indicated that they missed practical competences in geochemistry, and shortage of staff resulted in limited possibilities for covering the topics in the previous version of GEOV-342, the following choices were made. Firstly, the course was re-designed as a modular course, with each module being independent from the others and taught by a different instructor. This enabled the involvement of instructors from different research groups, and would allow in the future for a easier swapping of instructors if they would be unavailable. As a result, students get learning experiences related to geochemistry from both the Geochemistry and Geobiology group, as well as the Quaternary research and Paleoclimate group. Secondly, the previously largely theoretical course was modified and the new course instead focuses on how to do research in geochemistry, rather than learning theoretical concepts. Concepts in isotope and element geochemistry are still covered, but not to the same extent as before – instead, students are given a geochemical toolbox so that they can dig deeper into topics when relevant. This has made the course more directly relevant for MSc and PhD projects, as they learn skills and competencies that are directly relevant for their own research projects, from formulating research questions to analyzing data.

2. Oppfølging av tidligere evalueringer

This is the first time the course in its current version is evaluated in the 3-years evaluation.

3. Studentevaluering og andre evalueringer som er relevante for emnet

Feedback confirms that students find the concepts and skills learned in the course useful. Students appreciate practical experiences such as sampling, laboratory analyses and data evaluation, but also value the experiences gained in relation to the planning and execution of research projects (e.g. how much time to spend on the different aspects).

Coordination between individual instructors could perhaps be improved.

4. Erfaringer fra andre som bidrar i undervisningen på emnet, både studenter og ansatte

In the current course setup, students are given the option to design their own research projects, or to do something in relation to ongoing research at the department. Those designing their own research projects often end up with more simple datasets and perform less analytical work themselves (e.g. major/trace element analyses) than those working more closely with existing research projects. Although

the learning experience of how to do geochemical research is achieved in both cases, this division results in a bit of discrepancy between groups as some data is more complex to interpret. This has been discussed between instructors at the end of the Spring 2024 semester, and in 2025 we will attempt to let students be more involved in data generation for the self-designed projects.

5. Strykprosenten på emnet

All students have passed the course.

6. Eventuell fagfellevurdering

Not performed.

7. Vurdering av samsvar mellom emnets læringsutbyttebeskrivelse og undervisnings-, lærings- og vurderingsformer

The course description is appropriate and accurate.

8. Vurdering av om framdrift og opplegg for emnet er i samsvar med de fastsatte målene for emne og program

The course provides students with a useful set of skills and competencies for their MSc program.