

3-årig emneevaluering: GEOV242

Emne: Petrology

Semester og år for gjennomført emneevaluering: V22

Navn på emneansvarlig(e): Andreas Beinlich, Rolf Pedersen

Innhold:

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

This was the first year I was teaching the course and the course has also not been offered in previous years. The course consists of two parts – igneous and metamorphic petrology, I was responsible for the metamorphic petrology.

The course consisted of theory lectures from the front and exercises. The exercises comprised thin section microscopy and discussion of metamorphic conditions and evidence that could be used to infer the protolith rock, and its composition. Additional practical exercises were calculation of mineral formulae from electron microprobe data to be used for calculation methods of metamorphic pressure and temperature conditions.

Emneevalueringer skal også minst omfatte:

2. **Oppfølging av tidligere evalueringer**
There were no previous evaluations.
3. **Studentevaluering og andre evalueringer som er relevante for emnet**
Not relevant since the course was held for the first time.
4. **Erfaringer fra andre som bidrar i undervisningen på emnet, både studenter og ansatte**
Not relevant – I was teaching the metamorphic part alone.
5. **Strykprosenten på emnet**

Rapport i Tableau: https://rapport-dv.uhad.no/#/views/SVP3Emnegjennomfring_1/Emnegjennomfringslister?:iid=2

Everyone passed the course. This webpage does not work when I enter my username and password.

6. **Eventuell fagfelleevaluering**
Not relevant
7. **Vurdering av samsvar mellom emnets læringsutbyttebeskrivelse og undervisnings-, lærings- og vurderingsformer**

Learning outcome:

- Identify the connection between geodynamic setting and the nature of magmatic/metamorphic conditions.
- Interpret simple geochemical variation and metamorphic phase diagrams
- Describe and interpret the textures of igneous and metamorphic rocks
- Discuss the different metamorphic environments and products
- Infer metamorphic conditions based on petrological observations

The learning outcomes were reached. The interplay between geodynamic setting and different pressure-temperature paths was discussed throughout several theoretical and practical sessions. The students were trained in the interpretation of phase diagrams and the theory behind their construction. Textural analysis formed a major part of the practical work with the petrographic microscope, in the course of which also metamorphic environments and metamorphic conditions were extensively discussed.

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

9.

The indicated objectives for the course are:

The course reviews igneous activity in different tectonic environments, including continental rifts, oceanic spreading ridges and subduction zones as well as within tectonic plates. The second part of the course will familiarize with principles of metamorphic petrology with emphasis on the importance of fluid-rock interactions.

These objectives were well met in the course.

10. I de tilfellene det er tilknyttet praksis eller arbeidsrelevans i emnet, skal det evalueres om ordningen fungerer tilfredsstillende.

Not applicable.