

Geochemistry (Marta Svetina Veder, Ph.D., Assist. Prof.)

Subject code: GO

Academic year: 3.

Lectures: 22

Seminar work: 15

Lab exercises: 8

ECTS: 4

Aims of the course:

The aim of the subject is to present the students the basic geochemical mechanisms and provide them with understanding and comprehension of their importance in a natural environment. As first, the students need to acquire and understand basic geological processes and phenomena in the planetary and local sense. Within the subject the students will learn about geochemical atmosphere, biosphere, hydrosphere and pedo-/lithosphere and they will acquire basic mechanisms which constitute geochemical circulation of substances. As hydrosphere is a driving force and prevailing medium for mass transfer among individual spheres, the emphasis of the subject will be put on hydro-geochemistry.

Subject content:

- The earth as an endogenous mass system and exogenous energy system,
- planetary way of comprehending natural phenomena and environmental issues,
- mechanisms of geochemistry and their interdisciplinary connections,,
- global and local significance of hydrogeological cycle,
- geochemical cycles of substances
- Presentation of concrete environmental issues and evaluation of their significance,
- interpretation of geochemical data
- Integration of geochemical researches with other findings,
- seminar work.

Teaching methods:

- lectures with the use of computer presentation
- cooperative learning
- individual learning
- field work

Student's obligations:

- 80% presence
- 2 preliminary exams (prerequisites for the exam)
- seminar work (prerequisites for the exam)

- final exam (written and oral)

Literature

- The latest contributions which will be available to students on the internet.