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|---|---|--|---|--|--|--|--|
| GEW-MF22 Physicochemical Mineralogy-Petrology       |   | Number of credit points (LP): 12                         |   |  |  |  |  |
| Module type (mandatory or elective module)          | Advanced module   |  |   |  |  |  |  |
| Contents and qualification objectives of the module | <p><b>Contents</b><br/>           This module focuses on physicochemical and structural properties of Earth materials, and concepts, methods, and tools based on these properties. Conduct experiments and analytical procedures on properties, synthesis, and reactions of geomaterials. Motivation, execution and results should be documented, presented and discussed.</p> <p><b>Qualification goals</b><br/>           Students</p> <ul style="list-style-type: none"> <li>- acquire in-depth knowledge of physicochemical and structural properties of minerals, rocks and fluids</li> <li>- learn the professional, practical use of experimental and analytical methods for the investigation of minerals, rocks and fluids for addressing different geoscientific questions and on different spatial scales</li> <li>- learn how to independently evaluate, assess, classify and present investigation results to understand geological processes</li> </ul> |  |   |  |  |  |  |
| Module examination (number, form, scope)            | An examination of the following forms:<br>Oral exam, 30-45 minutes<br>Report, max. 20 pages<br>Portfolio examination, presentation (15-20 minutes) and accompanying report (max. 15 pages)  |  |   |  |  |  |  |
| Self-learning time (in time hours)                  | 240   |  |   |  |  |  |  |
| Events (teaching forms)                             |   | Contact time (in semester hours)                         | Secondary examination (number, form, scope) | Partial module examination accompanying the course (number, form, scope) |  |  |  |
| Lecture and seminar (lecture and seminar)           |   | 2V+2S  | For the completion of the module            | For admission to the module examination                                  |  |  |  |
| Seminar and exercise (seminar and exercise)         |   | 1S+3T  | -   | -  |  |  |  |
| Frequency   |   | Winter semester and summer Semester (over two semesters) |   |  |  |  |  |
| Prerequisite for participation in the module        |   | None   |   |  |  |  |  |
| Teaching unit(s)                                    |   | Geosciences  |   |  |  |  |  |