### Module title
Meteorology: synoptic meteorology and weather forecasting

### Abbreviation
09-MAT2-102-m01

### Module coordinator
holder of the Professorship of Climatology

### Module offered by
Institute of Geography and Geology

### ECTS
5

### Method of grading
numerical grade

### Only after succ. compl. of module(s)
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### Duration
1 semester

### Module level
graduate

### Other prerequisites
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### Contents
The module "Synoptic Meteorology/Weather Forecast" deals with the resource "weather" as an important constraint for structures and processes on Earth's surface. The focus is on the variability of atmospheric conditions on the meteorological time-scale of hours up to days. The module component deals with "synoptic meteorology", i.e. the description of weather patterns as well as weather forecast. Next to numeric methods, meteorological measurement methods will be tested outdoors and measurement data that students gain themselves will be evaluated.

### Intended learning outcomes
Students get profound insights into mechanisms of the weather variability on the basis of physical and mathematical explicit descriptions of atmospheric processes. In addition to the process understanding of complex systems, important skills in the area of quantitative and numeric processes will be acquired. Additionally, students have experiences of meteorological measurement technology and data analysis on the computer. Finally, the students should have the following competences: to detect and understand weather processes and, based on this, make planning decisions.

### Courses
(type, number of weekly contact hours, language — if other than German)
V (no information on SWS (weekly contact hours) and course language available)

### Method of assessment
(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
oral examination of one candidate each or oral examination in groups (approx. 15 minutes per candidate each)
Language of assessment: German, English

### Allocation of places
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### Additional information
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### Referred to in LPO I
(examination regulations for teaching-degree programmes)
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### Module appears in
Master's degree (1 major) Applied Physical Geography (2013)
Master's degree (1 major) Applied Physical Geography (2010)