Module title
Synoptic meteorology and weather forecasting

Abbreviation
04-Geo-MAT2-152-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
This module deals with the variability of atmospheric dynamics at the synoptic time scale, i.e. hours to days. The main focus is on synoptic meteorology which describes weather phenomena in the extratropics and aims at weather forecasting. The module presents numerical methods in atmospheric physics, meteorological field measurements, interpretation of forecasted atmospheric fields and computer-based data analyses.

Intended learning outcomes
The students gain substantial insights into the mechanisms of weather variability on the basis of physically and mathematically explicit assessments of atmospheric processes. The module aims at enhancing skills in maths and physics, in meteorological measurement techniques, in programming and in writing of measurement reports.

Courses
( type, number of weekly contact hours, language — if other than German)

Ü (2)
Module taught in: German and/or English

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)
Assessment offered: Once a year, summer semester
Language of assessment: German and/or English

Allocation of places
15 places. Should the number of applications exceed the number of available places, places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.

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 (2015)
Master’s degree (1 major) Applied Physical Geography (2016)