## Module title

Dynamics of the land surfaces

| Abbreviation | 04-Geo-RELA2-152-m01 |

### Module coordinator

holder of the Professorship of Remote Sensing

### 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 focuses on the observation of land cover and land cover change (intra- and inter-annual vegetation dynamics) by the means of remote sensing for subcontinental to global scales. The gained knowledge about the dynamics of the earth’s surface is strengthened by self-contained answering of questions on climate change (interactions between the land surface and the atmosphere), sustainable land and water management, land degradation and desertification as well as biodiversity research. The methodological focus lies on the derivation and analysis of multi-temporal geo- and biophysical parameters, quantification of remotely sensed fluxes at the earth surface (CO2, energy balance) and scale issues.

## Intended learning outcomes

The students acquire methodological knowledge and deepening textual knowings about the assessment and evaluation of the land surface dynamics from different perspectives. The carefully selected scientific problems on global change encourage interdisciplinary and holistic thinking and approaches.

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

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<tr>
<th>Type</th>
<th>Number of Weekly Contact Hours</th>
<th>Language</th>
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<td>German and/or English</td>
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### 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)

- a) term paper (approx. 20 pages) or b) preparing a poster (approx. 10 hours)

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)