

## Regional Geomorphology (C003869)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

<b>Course size</b>	<i>(nominal values; actual values may depend on programme)</i>		
<b>Credits</b> 5.0	<b>Study time</b> 150 h	<b>Contact hrs</b>	70.0 h

### Course offerings and teaching methods in academic year 2020-2021

A (semester 1)	Dutch	Gent	fieldwork	21.25 h
			lecture	35.0 h
			seminar: coached exercises	12.5 h
			online lecture	0.0 h
			online seminar: practical PC room classes	0.0 h
			online project	0.0 h
			online seminar: coached exercises	0.0 h

### Lecturers in academic year 2020-2021

Dondeyne, Stefaan	WE12	lecturer-in-charge
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### Offered in the following programmes in 2020-2021

	crdts	offering
<a href="#">Bachelor of Arts in Archaeology</a>	5	A
<a href="#">Bachelor of Science in Geography and Geomatics</a>	5	A
<a href="#">Linking Course Master of Science in Geography and Geomatics</a>	5	A
<a href="#">Preparatory Course Master of Science in Geography and Geomatics</a>	5	A

### Teaching languages

Dutch

### Keywords

Geomorphological concepts and theories, slopes, rivers, Glaciations, Periglacial, Karst, Volcanism, Coast, Artificial terrains, Geomorphological research methods, Soil geografie, Soil geomorfology

### Position of the course

The aim of the course "Regional Geomorphology" is to (i) give students insight into the concept and theoretical concepts of geomorphology, (ii) to give them an in-depth knowledge of important geomorphological processes and landforms, (iii) and to apply these insights and knowledge to regional case study.

### Contents

- Introduction: Geomorphological concepts and theories
- Geomorphological action of wind
- Dissolution and karst geomorphology
- Geomorphological action of frost, snow and ice
- Direct human impact (geomorphology of artificial terrains)
- Structural geomorphology
- Geomorphology of volcanic and plutonic regions
- Coastal geomorphology
- Geomorphological research methods
- Field work: observation, analysis and reporting.
- Literature study.

## Initial competences

Basic knowledge of physical geography and geology (courses ba1 or equivalent)

## Final competences

- 1 To know and integrate specific concepts in geomorphology (and their equivalents in various languages).
- 2 To understand the main geomorphologic processes and to be able to analyse them.
- 3 To know which concepts and methods from physics, chemistry, bio-engineering sciences and geology are important for geomorphology. To have insight on the history, theories, methods and techniques of geomorphology.
- 4 To be able to evaluate the information available for geomorphological research with regard to appropriateness, usefulness and quality.
- 5 To understand the experimental scientific research methods in geomorphology.
- 6 To be able to study geomorphological processes in the field.
- 7 To be competent in carrying out an international literature study, with scientific reporting of results, both in written and oral form (in front of colleagues).
- 8 To be able to indicate the development and place of geomorphology in science.
- 9 To be apt to collect base information for the analysis of geomorphological research questions.
- 10 To be able to apply basic scientific methods and techniques in geomorphology.
- 11 To know conceptual research models in geomorphology.
- 12 To be able to find and justify creative solutions for geomorphological problems.
- 13 To have interest and a critical research attitude for geomorphology.
- 14 To gauge the relevance of geomorphology for society, with attention for ethic, normative and cultural aspects.

## Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

## Conditions for exam contract

This course unit cannot be taken via an exam contract

## Teaching methods

Guided self-study, excursion, lecture, online discussion group, fieldwork, seminar: coached exercises, online lecture, online project, online seminar: coached exercises, online seminar: practical PC room classes

## Extra information on the teaching methods

- Lectures illustrated with Powerpoint presentation. / partly given as "flipped classes"
- Due to COVID19, modified teaching methods may have to be used ; in particular online teaching, working on case studies with online support and presentations, and online interaction during exercise sessions.
- Three one-day excursions to the (i) Silt-Loam and Hageland (ii) the Campine area, and (iii) Belgian Ardennen. Estimated cost: 55 euro

## Learning materials and price

- Course handout will be made available as pdf via UFORA; free downloadable
- Powerpoint slideshows will be made available through Ufora; freely downloadable.
- additional references (books and papers) as case study materials, equally freely available via Ufora

## References

- Huggett, R.J., 2017. Fundamentals of geomorphology, Fourth edition. ed, Routledge fundamentals of physical geography series. Routledge, Taylor & Francis Group, London; New York.
- Ollier, C., Pain, C.F., 2000. The origin of mountains. Routledge, London; New York.
- Pavlopoulos, K., Evelpidou, N., Vassilopoulos, A., 2009. Mapping geomorphological environments. Springer, Heidelberg; New York.
- Gustavsson, M., Kolstrup, E., Seijmonsbergen, A., 2006. A new symbol-and-GIS based detailed geomorphological mapping system: Renewal of a scientific discipline for understanding landscape development. *Geomorphology*, 77: 90–111.
- Schatzl, R.J., Thompson, M.L., 2015. Soils: Genesis and Geomorphology, Second edition. ed. Cambridge University Press, New York, NY
- Pissart A., 1987. Géomorphologie périglaciaire- Texte des leçons de la Chaire Francqui belge 1987. Édition du Laboratoire de Géomorphologie et Géologie du Quaternaire de l'Université de Liège, 135 pp.

**Course content-related study coaching**

Interactive support during lectures, field work, excursion, via Ufora, Geoweb and consultation hours.

Coaching with regard to practicals is done by the practical assistants.

**Evaluation methods**

end-of-term evaluation

**Examination methods in case of periodic evaluation during the first examination period**

Oral examination

**Examination methods in case of periodic evaluation during the second examination period**

Oral examination

**Examination methods in case of permanent evaluation****Possibilities of retake in case of permanent evaluation**

examination during the second examination period is possible

**Extra information on the examination methods**

- Periodical evaluation: oral examination with written preparation (including report on regional case study and report on fieldwork and excursions)

**Calculation of the examination mark**

- Periodical evaluation ; where the report of the case study stands for 8/20 points, report of the excursion 4/20, additional theoretical questions 8/20