

## Geohazards (C004254)

Wegens Covid19 kan mogelijk afgeweken worden van de onderwijs- en evaluatievormen. Dergelijke afwijkingen zullen via Ufora worden gecommuniceerd.

**Cursusomvang** *(nominale waarden; effectieve waarden kunnen verschillen per opleiding)*

**Studiepunten** 3.0      **Studietijd** 75 u      **Contacturen** 30.0 u

### Aanbodsessies en werkvormen in academiejaar 2020-2021

A (semester 2)	Engels	Gent	hoorcollege	12.5 u
			groepswerk	17.5 u

### Lesgevers in academiejaar 2020-2021

Van Daele, Maarten	WE13	Verantwoordelijk lesgever
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### Aangeboden in onderstaande opleidingen in 2020-2021

	stptn	aanbodsessie
<a href="#">Master of Science in Geology</a>	3	A
<a href="#">Uitwisselingsprogramma geologie (niveau master)</a>	3	A

### Onderwijsstalen

Engels

### Trefwoorden

geohazards

### Situering

Understanding of the fundamental processes governing the most important geohazards and of the impacts that such geohazards can have on society, and insight in approaches to conduct hazard and risk assessment and to establish mitigation and prevention measures.

### Inhoud

- Volcanic eruptions and other volcanic hazards
- Earthquakes and associated hazards
- Tsunami
- Mass wasting / Landslides
- Flooding
- Coastal hazards
- Marine hazards
- Hazardous geologic materials, such as asbestos and radon gas
- Natural geologic subsidence, such as sinkholes
- Sudden catastrophic geologic events, such as asteroid impacts
- Human-induced hazards
- Cascading hazards
- Hazard and risk assessment, mitigation and prevention

### Begincompetenties

Basic knowledge of general earth system science, geophysics, geochemistry, structural geology, geomorphology and sedimentology..

### Eindcompetenties

- 1 Obtain an in-depth understanding of the fundamental processes governing the most important geohazards (i.e. volcanic eruptions and other volcanic hazards, earthquakes and associated hazards, tsunami, mass wasting and landslides, flooding, coastal hazards,...).
- 2 Develop the aptitude to conduct a hazard and risk assessment.
- 3 Develop transferrable skills in literature analysis communication about geohazards to

the general public.

### **Creditcontractvoorwaarde**

Toelating tot dit opleidingsonderdeel via creditcontract is mogelijk mits gunstige beoordeling van de competenties

### **Examencontractvoorwaarde**

Dit opleidingsonderdeel kan niet via examencontract gevolgd worden

### **Didactische werkvormen**

Groepswerk, hoorcollege

### **Toelichtingen bij de didactische werkvormen**

Lectures

Teamwork: group assignments involving literature review, synthesis and report, on topics in the field of geohazards

Teaching methods may need to be adjusted, should the COVID19 situation demand this.

### **Leermateriaal**

Annotated PPT presentation available via Ufora

### **Referenties**

Bryant, E., 2005. Natural hazards. Cambridge University Press. 312 pp. ISBN: 978-0-521-53743-8

Keller, e.a. & Devecchio, D.E., 2019. Natural hazards. Earth's processes as hazards, disasters and catastrophes. Routledge. 642 pp. ISBN: 978-1-138-35221-6

Smith, K., 2013. Environmental hazards. Assessing risk and reducing disaster. Routledge. 478 pp. ISBN: 978-0-415-68106-3

### **Vakinhoudelijke studiebegeleiding**

Interactive assistance during teamwork and with electronic learning environment (<http://Ufora.UGent.be>).

Coaching by professors and assistants.

### **Evaluatiemomenten**

periodegebonden en niet-periodegebonden evaluatie

### **Evaluatievormen bij periodegebonden evaluatie in de eerste examenperiode**

Schriftelijk examen met open vragen

### **Evaluatievormen bij periodegebonden evaluatie in de tweede examenperiode**

Schriftelijk examen met open vragen

### **Evaluatievormen bij niet-periodegebonden evaluatie**

Verlag

### **Tweede examenkans in geval van niet-periodegebonden evaluatie**

Examen in de tweede examenperiode is enkel mogelijk in gewijzigde vorm

### **Toelichtingen bij de evaluatievormen**

PE: Questions testing both knowledge and insight in material presented in lectures and group assignments of fellow students.

Examination in the second examination period is possible.

NPE: Evaluation of the written report. Students who eschew the non-periodical evaluation cannot pass for the course.

A second examination chance is offered in modified form between the first and second examination period.

### **Eindscoreberekening**

PE: 75 %

NPE: 25 %