

## Cartography (C001059)

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.

Course size (nominal values; actual values may depend on programme)  
Credits 5.0 Study time 150 h Contact hrs 52.5 h

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

Offering	Language	Location	Teaching Method	Hours
A (semester 1)	Dutch, English	Gent	lecture	30.0 h
			seminar: practical PC room classes	30.0 h

### Lecturers in academic year 2020-2021

Huang, Haosheng	WE12	lecturer-in-charge
De Maeyer, Philippe	WE12	co-lecturer

### Offered in the following programmes in 2020-2021

Programme	credits	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, English

### Keywords

Thematic cartography, topographic map, semiology, map production, history, Web Mapping, new trends.

### Position of the course

General overview on cartography and skills on map conception.

### Contents

- Introduction to the history of maps and making
- Overview of map types.
- Representation of height, depth and relief on maps.
- Generalisation in cartography.
- Accuracy and precision on maps.
- Mapping, data management and symbolisation of geographical data.
- Symbolisation theories.
- Colour theory and application.
- Map production and theoretical flow charts.
- Creation of maps, examples and exercises.
- Map reading, map analysis and map interpretation.
- Text placement.
- Cartography rules for Web cartography
- New trends: AR, user research, neocartography, visualisation for navigation, ...

### Initial competences

- Final competences of the course "Introduction geomatics".
- Basic knowledge regarding Geodesy.
- Passed or following the course GIS.
- OR having acquired the intended competences in one way or another.

### Final competences

- 1 To be able to analyze and interpret different map types.
- 2 To be able to design a map and to define a map production process and be able to realize a map e.g. in a GIS environment.
- 3 Basic knowledge of map production, map use, map history, semiology.

- 4 Be up-to-date regarding recent evolutions in the cartography.
- 5 Be able to, in a group context, create a critical summary of scientific literature.
- 6 Be able to do a summarative presentation of recent scientific literature.
- 7 Be able to critically evaluate the work of fellow-students.

#### 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

Lecture, seminar: practical PC room classes, online lecture

#### Learning materials and price

**Theorie:** course + slides

**Exercises:** slides + assignments  
(see Ufora)

#### References

Main:

- Slocum, T., McMaster, R., Kessler, F., Howard, H (2009) *Thematic Cartography and Geovisualization*, 3rd Edition. Pearson
- De Maeyer, Ph., Ooms, K. 2015, *Cartografie*, Lannoo

Others:

- Brewer, C. (2015) *Designing Better Maps: A Guide for GIS Users*. ESRI Press.
- Field, K. (2018) *Cartography*. ESRI Press
- Dent, B., Torguson, J. & Hodler, T. (2008) *Cartography: Thematic Map Design*. New York: McGraw-Hill Higher Education, 336.
- Kraak M.-J. & Ormeling, F. (2010) *Cartography: Visualization of Spatial Data*. London: Pearson Education Limited, 231.
- Tyner, J.A. (2010) *Principles of Map Design*. New York: The Guildford Press, 251.
- Kimerling, A. J., Buckley, A. R., Muehrcke, P. C., & Muehrcke, J. O. (2009). *Map use: reading and analysis*. Esri Press.

#### Course content-related study coaching

**Theory:** after the lesson or after an electronic appointment

**Exercises:** during the practical sessions or after an electronic appointment

#### Evaluation methods

end-of-term evaluation and continuous assessment

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

Written examination with open questions

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

Written examination with open questions

#### Examination methods in case of permanent evaluation

Participation, assignment, peer assessment

#### Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

#### Calculation of the examination mark

Theory: periodical 50%

Exercises + presentations: periodical and non periodical: 50 % (second session possibility of an alternative task for this part).