

Modélisation en géosciences : glaciologie et climatologie

Lecturer

Frank PATTYN (Coordinator)

Course mnemonic

GEOG-F408

ECTS credits

5 credits

Language(s) of instruction

French

Course period

First term

Climate Dynamics and Climate Modeling: <http://www.climate.be/textbook>

Other information

Contact(s)

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Evaluation method(s)

Other

Evaluation method(s) (additional information)

Written/oral exam

Main language(s) of evaluation

French

Programmes

Programmes proposing this course at the faculty of Sciences

MA-ENVI | **Master in Environmental Science and Management** | finalité Environmental Science/unit 1 and finalité Environmental Science/unit 2 and MA-GEOL | **Master in Geology** | finalité Research - 1st year/unit 1 and finalité Research - 1st year/unit 2

Course content

Mathematical models, empirical models, modelling nonlinear processes, numerical and analytical techniques, continuity equation, geomorphological, glaciological and climatological models, data reanalysis.

Objectives (and/or specific learning outcomes)

Numerical techniques in modelling geosystems : applications of climate, glacier and geomorphological models.

Teaching method and learning activities

Lectures and classroom exercises using MatLab

References, bibliography and recommended reading

Extra online course material on climate modelling: Goosse H., P.Y. Barriat, W. Lefebvre, M.F. Loutre and V. Zunz: Introduction to