

## MARUM / GLOMAR Basic Knowledge Course

### Earth System models and their application in geosciences

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#### Objectives

What are Earth System models? Why are there so many models around? What are the differences? How should they be used? The course aims to provide both modellers and non-modellers with the basic knowledge about Earth System modelling that is more and more often needed in order to critically read and review scientific literature and collaborate in multi-disciplinary climate research.

#### Topics

- Introduction to Earth System modelling and its history
- Different models to cover range of spatial and temporal scales
- Different models to investigate processes ranging from ice-sheet dynamics to stratospheric chemistry
- Model forcings, feedbacks, boundary conditions, parametrizations, tuning and ensemble simulations
- Model errors and uncertainties

#### Methods

A combination of lectures, demonstrations and a literature discussion to apply the insights that have been gained.

#### Location and Time

MARUM, University of Bremen, Leobener Str. 8, 28359 Bremen, Germany  
Room 2060

09.00 – 13.00 hrs.

## Registration

To register for this course, please visit the [course webpage](#).

*Please note that your registration will be binding.*

The registration deadline for this course is **31 October 2017**.

Any enquiries regarding the course should be addressed to [glomar-courses@marum.de](mailto:glomar-courses@marum.de).