

MARUM / GLOMAR Basic Knowledge Course

General Aspects of Physical Oceanography for Palaeoceanographers

Dr. Janna Köhler

Institute for Environmental Physics (IUP)
(and GLOMAR alumna ☺)

6 June 2019, MARUM Bremen

Objectives

Understanding principles of physical oceanography and being able to correctly “read” respective graphical representations is often helpful if not mandatory to interpret scientific results from other marine science disciplines.

This introductory course aims at going back to the basics and addresses beginners from the natural sciences disciplines interested in gaining background information on principles of general physical oceanography. Through a mixture of lectures, group discussions, and exercises we will learn and discuss basic characteristics of the ocean circulation dynamics on modern time scales and what causes respective variations.

Topics

- Physical properties of sea water and how they are measured/observed
- What sets the depth of the thermocline, halocline, pycnocline, mixed-layer, and why is this important
- Major water masses and water mass formation
- The thermal, haline, and wind forcing causing motion in the ocean
- The general current system and the Meridional Overturning Circulation

Target group

This course aims to provide palaeoceanographers with an understanding of physical processes in the ocean.

However, people from other disciplines are very welcome to participate!

Location and time

MARUM, Room 2060
09.00 – 17.00 hrs.

To subscribe

To subscribe to this course, please visit the [course web page](#).

The registration deadline for this course is **28 May 2019**.

Any enquiries concerning the course should be addressed to early-career@marum.de.