



33155 Marine Biogeochemistry and Biology, Island of Giglio, Italy (4CP)



Spring semester 2024: Monday, 8. July (arrival day) to Friday, 19. July (departure day)

The course is part of the Biogeochemistry program at the Department of Environmental Sciences, University of Basel, but students from all fields of Environmental, Geo- and Biological Sciences are invited to enroll (also from other universities)

Location:

Field station of the [Institute for Marine Biology](#) in Campese, in the north-west corner of the Island of Giglio, Italy

Aims of this 10-day course:

- gain experience in working scientifically in a marine environment
- obtain knowledge of marine habitats and biodiversity
- learn about biogeochemical processes and element cycling that occur in marine sediments, the water column, and at their interface
- obtain integrative biological and biogeochemical insight into the coastal marine environment

Course program:

- the course covers four main topic blocks addressing specific habitats
 - the sediment-water interface (solute gradients, benthic fluxes, bioturbation, macrofauna)
 - inside the sediments (marine sediments and organic matter, respiration, microfauna)
 - primary production and decomposition (photosynthesis, seagrass, grazing, organic matter degradation/methanogenesis)
 - the water column (nutrient flows, plankton, marine food chain)
- each block involves **lectures, field activities, laboratory experiments**
- specifically, the practical work involves
 - collecting samples in the field (snorkeling, diving, sediment coring)
 - extracting and identifying marine organisms and understanding symbiotic interactions
 - quantifying biogeochemical fluxes and measuring typical oceanographic parameters (microsensor profiling, gas chromatography, spectrophotometry)
 - sharing of results and observations with the other course participants

Faculty:

- Prof. Dr. Moritz Lehmann, Biogeochemistry/Environmental Geosciences, Department of Environmental Sciences
- Dr. Claudia Frey, Biogeochemistry/Environmental Geosciences, Department of Environmental Sciences
- Dr. Anja Studer, Biogeochemistry/Environmental Geosciences, Department of Environmental Sciences
- Dr. Miriam Weber and Christian Lott, Hydra Marine Sciences



Requirements for participation:

- no special requirements, but students should feel comfortable being/snorkeling in the water
- priority is given to students who are enrolled (or will soon enroll) in one of the following UniBas MSc programs: Modul Environmental Geosciences and Biogeochemistry, Masterprogramm Ökologie (Master Ökologie 03), as well as PhD programs of the Department of Environmental Science, University of Basel
- pending available space, we will also consider UniBas BSc students and students from other Universities/research institutions within Switzerland as well as from EUCOR and EPICUR Universities.

Registration:

For **pre-registration starting now** contact Moritz Lehmann (moritz.lehmann-at-unibas.ch). The official registration opens on Monday, 26. February 2024. There will be lists in the deputy-secretary office of the Biogeochemistry/Environmental Sciences (Bernoullistrasse 30, Office 201, Silvia Leupin). The course is limited to 18 students (ideally with geoscience and/or biology background).

Preparatory Meeting:

The registered students have to attend a preparatory meeting, which will be held in hybrid form on Wednesday, **20.03.2024, 12:15 o'clock, lecture room 103, Bernoullianum.**

Travel:

We expect students to arrive independently at the Field station on the island of Giglio on Monday, 8. July 2024 around 17:00. See this [link](#) for detailed travel instructions.

Accommodation and meals:

During the course, students are accommodated near the field station, in apartments near the beautiful Campese beach. Most dinners are planned in a nearby restaurant. For breakfast, lunch and some dinners, respectively, apartment groups will shop and cook by themselves.

Diving:

Diving during the course will be possible, but it has to be coordinated with the staff of the field station and the costs have to be covered separately by the participants.

Further Information:

Contact Moritz Lehmann (moritz.lehmann-at-unibas.ch) if you require additional information.

Costs:

We currently expect that the costs will be about **970.- CHF** for the accommodation in apartments, 5-7 two-course dinners in a nearby restaurant, and the course itself (use of labs and infrastructure at the Biological Station). The costs are calculated including expected subventions. For students who require snorkeling equipment (i.e. neoprene suit, mask, snorkel, fins, and booties) an extra fee of ca. 50.- Euros will be charged for the rent over the full duration of the course. If possible, own wetsuits should be brought (then, obviously, no/reduced costs apply).

Credit points:

4 credit points. Active and dedicated participation (e.g. presentation of results and observations) is mandatory.

International Students:

The course is open to students of the [Eucor](#) and [EPICUR](#) universities. In the event of over-subscription, Basel students will be given priority. Students of the University of Strasbourg can apply for a subsidy of EUR 150. The application must be received by the International Office of the University of Strasbourg by June 1, 2024 at the latest. The electronic application form and further information can be obtained from the following [link](#).

Basel, January 9, 2024