

Quality concept Master Marine Biology

Program objectives

The M.Sc. program Marine Biology is strongly research-orientated. Thus, the graduates are trained to develop hypotheses-driven research concepts and to design appropriate experimental approaches in order to answer profound questions related to the large field of how marine ecosystems and organisms function and the potential impacts of local, regional, and global environmental change.

The M.Sc. program generates and offers a significant recruitment pool of excellently trained Ph.D. candidates for the marine research institutions in the Federal State of Bremen (AWI, ZMT, MPI). The M.Sc. Marine Biology is clearly defined as a consecutive program, as it builds the profile of marine biologists from the B.Sc. level towards a future career in research, academia or in the private environmental and/or economic sector. In the surroundings of the Hanseatic City of Bremen with its rich maritime ties the latter represents a potentially important job market.

It is the declared aim of the program to prepare students for a future careers in the area of marine science. It is therefore expected that a considerable number of graduates from the program are aiming for a Ph.D., either at the University of Bremen or at the collaborating research institutions. In line with its pronounced research-orientated profile, students in the M.Sc. program Marine Biology have the opportunity to closely interact with experienced scientists working at the forefront of research in their respective fields. Thus, due to such contact with the number of renowned experts from all disciplines of marine biology and related disciplines, latest research findings are directly integrated in the theory courses. The practical courses are characterized by their project- and research-orientated approach to learning. In addition, the program is complemented by courses in the soft skills considered essential for future research careers (e.g. on scientific communication and proposal writing).

Mutual learning outcomes of the M.Sc. program Marine Biology and EMBC+ are:

- Acquiring advanced knowledge and understanding of how marine ecosystem function in time and space and on different organizational levels from molecules to habitats.
- Acquiring expertise in state-of-the-art methodology for oceanographic and marine biological research from field experiments via sample processing, laboratory analytics and ecophysiological experiments to ecosystem modeling
- Developing communication skills to present research results and to discuss their implications with other scientists, stakeholders, decision makers and the general public in an interdisciplinary context. Being able to present and report the results of (one's own) research to fellow scientists and laypeople.
- Adopting a positive attitude towards lifelong learning and reflective evaluation of personal scientific understanding and implications.

Evaluation concept

Students on the program M.Sc. Marine Biology regularly participate in evaluations of the courses they attend. At the end of every block course, members of the teaching faculty distribute anonymized evaluation questionnaires and allow time to fill them in before being collected and passed on to the study program coordinator. The teaching faculty thus receive immediate and direct feedback on how their students evaluate their teaching. The course leaders also complete an evaluation questionnaire on how they perceive the course quality to have been. In the event that deficiencies in the quality of teaching become apparent (e.g. content redundancies between different courses) the study program coordinator talks with the member of the teaching faculty in question and together they seek a solution.

Problems and possible solutions are also discussed in meetings of the Study Program Commission, at which student representatives are also present. In addition to this, at the end of the second semester there is a meeting of students with the study program coordinator, at which the students are informed about possible consequences arising from the QM process. Furthermore, at this meeting students can voice criticism beyond the evaluation of individual courses and put forward proposals for improving the structure and design of any aspect of the study program they choose.