

Module Name	Doing Science	
Module Number	MNF-bioc-110	
Person in Charge	Prof. Dr. Martin Wahl Phone: +49-(0)431-600-4500, E-mail: mwahl@geomar.de	
Semester / Duration	1. semester / one semester	Status Compulsory
Regular Cycle	annual in winter semester	
Study Programme	Master of Science in Biological Oceanography	
Classes	Class Title (Teaching Form) Lecturers	Contact Time / Group Size
	<u>Key Scientific Skills</u> (Lecture) Prof. Dr. Martin Wahl Dr. Mark Lenz	1 hr per week / 35 students
	<u>Key Scientific Skills</u> (Practical Exercise) Prof. Dr. Martin Wahl Dr. Mark Lenz	2 hrs per week / 35 students
Credit Points / Workload	6 ECTS / 180 hours	
Prerequisites	A bachelor's degree and participation in a master study programme in a scientific discipline.	
Completion Module	None.	
Following Module	None.	
Educational Objectives	This module will equip students to pursue independent scientific research, be able to critically read and judge scientific literature and communicate their results lucidly in oral and verbal form.	
Content of Teaching	This module aims at teaching and practicing specific skills necessary for participating in scientific research. Topics to be covered are: Recognition of scientifically interesting questions, formulation of hypotheses, gathering data and designing experiments. Analysis of results and graphic presentation. Written and Oral Scientific Communication. Critical review of scientific literature. Writing a proposal.	
Examination	Oral presentation (33%, Homework (67%).	
Literature	Doing Science - Design, Analysis and Communication of Scientific Research von Ivan Valiela, Oxford, University Press, 2001. Quinn, G.P. and Keough, M.J. Experimental design and data analysis for biologists, Cambridge University Press.	
Additional Information	This module will consist of mostly interactive modes of learning including periodic home assignments, giving short talks and refereeing individual topics.	