

<b>Module Name</b>	<b>Advanced course in Polar Ecology</b>	
<b>Module Number</b>	MNF-bioc-266	
<b>Person in Charge</b>	Prof. Dr. Dieter Piepenburg Phone: +49-(0)431-600-1264, E-mail: dpiepenburg@ecology.uni-kiel.de	
<b>Semester / Duration</b>	2. semester / one semester	<b>Status</b>
<b>Regular Cycle</b>	annually in summer semester	Optional
<b>Study Programme</b>	Master of Science in Biological Oceanography	
<b>Classes</b>	<b>Class Title (Teaching Form) Lecturers</b>	<b>Contact Time / Group Size</b>
	<u>Polar Ecology</u> (Lecture) Prof. Dr. Dieter Piepenburg Prof. Dr. Manfred Bölter Dr. Heike Link	2 hrs per week / 15 students
	<u>Polar Ecology</u> (Seminar) Prof. Dr. Dieter Piepenburg Prof. Dr. Manfred Bölter Dr. Heike Link	2 hrs per week / 15 students
	<u>Polar Ecology</u> (Excursion) Prof. Dr. Dieter Piepenburg	1 day-excursion / 15 students
<b>Credit Points / Workload</b>	5 ECTS / 150 hours	
<b>Prerequisites</b>	A bachelor's degree in a biological discipline and participation in a master study programme in a scientific discipline	
<b>Completion Module</b>	None	
<b>Following Module</b>	None	
<b>Educational Objectives</b>	The objective of this module is to introduce students to the marine biology and ecology of polar environments in different regions. After completion of the module, students should have a sound knowledge on scientific methods, diversity, habitats, life cycles, feeding ecology and adaptations in biology, physiology and behaviour of marine polar organisms.	
<b>Content of Teaching</b>	The module provides in-depth information about dominant sympagic, pelagic and benthic organisms (including micro-organisms) and their specific environments in the polar regions of both hemispheres. The course will also cover topics of land-sea interactions, e.g. in estuaries and shelf ecosystems, as well as ecological processes and methods specific for the polar marine environment. Besides presenting the current knowledge on the general biology and ecology of these organisms, special topics such as threats, population status and conservation issues of habitats for individual species are also addressed with special respect to warming and subsequent man-made changes. The course is a combination of a series of lectures, a literature seminar with oral presentations of the students and an excursion to the Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research Bremerhaven.	
<b>Examination</b>	Lecture: WE (50%) Seminar: OP (50%).	
<b>Literature</b>	Hempel, G., Hempel, I. (eds) 2009: Biological studies in polar Oceans – exploration of life in icy waters. Wirtschaftsverlag NW, Verlag für neue Wissenschaft, Bremerhaven. Seminar papers will be distributed during the course.	