



# Module handbook of the PhD study programme “Environmental sciences and biodiversity”

<b>Focus:</b>	<b>Field:</b> Extending and improving technical knowledge / Verbreitung und Vertiefung von Fachwissen
<b>Module code:</b> olt401	<b>Title:</b> <b>Summer School / Congress / Workshop</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
<b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> One week  <b>Cycle:</b>  <b>Module type:</b> <b>Obligatory</b>  <b>Module should be attended:</b> After 2 <sup>nd</sup> semester	<b>Form of teaching/learning:</b>  <b>Language:</b> English  <b>ECTS-Credit points:</b> 3-9  <b>Workload:</b> 90 hours - 270 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b>
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of competence in the presentation and discussion of research findings in the international context. Obtaining an overview of related research fields. Social skills (networking) in the international scientific community should be developed.	
<b>Content of module:</b> The PhD students participate at international summer schools or international congresses or international workshops. They prepare their own presentation, show their work in the form of posters or oral presentations and discuss their findings with an audience. Since the participation at summer schools and workshops includes the cooperation with scientists from other national and/or international research institutions, the students extend their knowledge and socialize with the scientific community.	
<b>Literature:</b>	
<b>Comment:</b> Please plan the attendance of an international event in time (Be aware of deadlines for submission of abstracts or registration!)  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b> English language skills; Presentation skills; Software PowerPoint	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Oral report and/or record and/or discussion of poster and/or assessment of a test talk	
<b>Time of examination:</b>	
<b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Extending and improving technical knowledge / Verbreitung und Vertiefung von Fachwissen
<b>Module code:</b> olt402	<b>Title:</b> Lab visit abroad / Field work
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> At least three weeks  <b>Cycle:</b>  <b>Module type:</b> Required elective  <b>Module should be attended:</b>	<b>Form of teaching/learning:</b>  <b>Language:</b> English  <b>ECTS-Credit points:</b> 6 - 9  <b>Workload:</b> 180 or 270 hours <b>incl. attendance time:</b> 60 or 90 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Primary supervisor
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of competence in working in a foreign laboratory or in the field to extend and improve knowledge on sampling and analysis methods with adequate technologies. In addition, social skills (networking) should be developed.	
<b>Content of module:</b> The PhD students plan their schedule, prepare their practical work and organise their trips on a research vessel or stay at the laboratory of a foreign research institution. During their stay on the ship or in the lab, they are supposed to cooperate with the staff and handle the present equipment for several weeks.	
<b>Literature:</b>	
<b>Comment:</b> Please plan the research trip in time (Be aware of deadline for application!)  <b>Internet-Link for further information</b>  <b>Prerequisites for participation:</b> English language skills	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Oral report and/or record	
<b>Time of examination:</b>	
<b>Application formalities:</b>	

<b>Focus:</b>	<b>Field:</b> Extending and improving technical knowledge / Verbreitung und Vertiefung von Fachwissen
<b>Module code:</b> olt403	<b>Title:</b> <b>Special techniques in „Environmental Sciences and Biodiversity”</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b>  <b>Cycle:</b>  <b>Module type:</b> <b>Required elective</b>  <b>Module should be attended:</b>	<b>Form of teaching/learning:</b>  <b>Language:</b>  <b>ECTS-Credit points:</b> 3 - 9  <b>Workload:</b> 90 - 270 hours <b>incl. attendance time:</b> 30, 60 or 90 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b>
<b>Jointly responsible person(s):</b> Dr. F. Esser	
<b>Objective of module/competences:</b> Development of improved or additional competences in special scientific techniques including methodologies for sampling, analysing samples as well as analysing, modling and interpreting data.	
<b>Content of module:</b> The PhD students extend their knowledge on special scientific techniques through participating at advanced courses including lectures, seminars or through practical training. If a PhD student completed his/her Master in a related subject, adequate courses of a Master programme can be attended to extend the knowledge of specific topics. It is possible to conduct the training on special techniques at a research institution if expertise in the scientific fields related to the doctoral project exists.	
<b>Literature:</b>	
<b>Comment:</b>  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b> English language skills	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Oral record and/or oral examination (30 min) or written examination (2 hrs) and/or seminar talk	
<b>Time of examination:</b>	
<b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Extending and improving technical knowledge / Verbreitung und Vertiefung von Fachwissen
<b>Module code:</b> olt404	<b>Title:</b> <b>International Colloquium</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> During semester term <b>Cycle:</b> Summer term or Winter term <b>Module type:</b> <b>Required elective</b> <b>Module should be attended:</b>	<b>Form of teaching/learning:</b> Colloquium <b>Language:</b> English <b>ECTS-Credit points:</b> 3 <b>Workload:</b> 90 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Prof. Dr. J.-O. Wolff (ICBM)
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of additional and improved knowledge on numerous topics of related scientific fields. Competences in discussing scientific topics should be developed.	
<b>Content of module:</b> The PhD students attend the colloquia regularly taking place at the institutes of Faculty V to extend and/or improve their knowledge in the fields of environmental sciences. Since experts from other research institutions are often invited to present their work, the students get an overview on projects currently conducted.	
<b>Literature:</b>	
<b>Comment:</b> E.g: ICBM-Colloquium, <b>Internet-Link for further information:</b> <a href="http://www.icbm.de/veranstaltungen/">http://www.icbm.de/veranstaltungen/</a> <b>Prerequisites for participation:</b> English language skills	<b>Useful knowledge:</b> <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Active participation and contributions to the discussions <b>Active participation:</b> Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice or the course supervisor. <b>Time of examination:</b>	
<b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Extending and improving technical knowledge / Verbreitung und Vertiefung von Fachwissen
<b>Module code:</b> olt405	<b>Title:</b> <b>Subject-related colloquium</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> During semester term <b>Cycle:</b> Summer term or Winter term <b>Module type:</b> <b>Obligatory</b> <b>Module should be attended:</b>	<b>Form of teaching/learning:</b> Colloquium <b>Language:</b> English <b>ECTS-Credit points:</b> 3 <b>Workload:</b> 90 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Prof. Dr. H. Cypionka, Prof. Dr. M. Simon (Microbial Colloquium)
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of additional and improved knowledge on specific research areas. Competences in discussing scientific topics should be developed.	
<b>Content of module:</b> The PhD students attend the colloquia of the scientific field related to their doctoral projects field, such as the microbiological colloquium or the geochemical seminar, to extend and/or improve their knowledge. Since experts from other research institutions are often invited to present their work, the students get an overview on projects currently conducted.	
<b>Literature:</b>	
<b>Comment:</b> <b>Internet-Link for further information:</b> <a href="http://www.icbm.de/veranstaltungen/">http://www.icbm.de/veranstaltungen/</a> <b>Prerequisites for participation:</b> English language skills	<b>Useful knowledge:</b> <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Active participation and/or seminar talk <b>Active participation:</b> Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice or the course supervisor. <b>Time of examination:</b>	
<b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Extending and improving technical knowledge / Verbreitung und Vertiefung von Fachwissen
<b>Module code:</b> olt406	<b>Title:</b> <b>Additional module “Subject-specific knowledge”</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> During semester term <b>Cycle:</b> Summer term or Winter term <b>Module type:</b> <b>Required elective</b> <b>Module should be attended:</b>	<b>Form of teaching/learning:</b> <b>Language:</b> English <b>ECTS-Credit points:</b> 3 - 6 <b>Workload:</b> 90 hours – 180 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b>
<b>Jointly responsible person(s):</b> Dr. F. Esser	
<b>Objective of module/competences:</b> Development of additional and improved knowledge on specific research areas. Competences in discussing scientific topics should be developed. Development of improved or additional competences in special scientific techniques including methodologies for sampling, analysing samples as well as analysing, modling and interpreting data.	
<b>Content of module:</b>	
<b>Literature:</b>	
<b>Comment:</b> <b>Internet-Link for further information:</b> <b>Prerequisites for participation:</b> English language skills	<b>Useful knowledge:</b> <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Active participation and/or seminar talk and/or record and/or oral examination (30 min) or written examination (2 hrs) and/or seminar talk	
<b>Time of examination:</b>	
<b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Communication and imparting of knowledge / Kommunikation und Wissensvermittlung
<b>Module code:</b> olt431	<b>Title:</b> <b>Didactics / Supervision of students</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b>  <b>Cycle:</b>  <b>Module type:</b> <b>Required elective</b>  <b>Module should be attended:</b>	<b>Form of teaching/learning:</b> Practical training  <b>Language:</b> German or English  <b>ECTS-Credit points:</b> 3-6  <b>Workload:</b> 90 hours – 180 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Primary supervisor
<b>Jointly responsible person(s):</b> Dr. F. Esser	
<b>Objective of module/competences:</b> Development of competences in didactics required for teaching or communicating scientific topics.	
<b>Content of module:</b> The PhD students assist in conducting practical trainings for students of related Bachelor and Master programmes. This includes teaching and the guidance of students during practical laboratory work. It is also possible to develop competences in didactics or communication of scientific issues through attending adequate courses offered at the University of Oldenburg or adequate institutions.	
<b>Literature:</b>	
<b>Comment:</b>  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b>	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>  <b>Criteria for admission:</b>  <b>Kind of examination:</b> Development of an experimental set-up and/or didactic conception in the respective special field and/or report  <b>Time of examination:</b>  <b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Communication and imparting of knowledge / Kommunikation und Wissensvermittlung
<b>Module code:</b> olt432	<b>Title:</b> PhD forum
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> During semester term <b>Cycle:</b> Summer term or Winter term <b>Module type:</b> <b>Obligatory</b> <b>Module should be attended:</b>	<b>Form of teaching/learning:</b> Seminar <b>Language:</b> English <b>ECTS-Credit points:</b> 3 <b>Workload:</b> 90 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Dr. F. Esser
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of competences in presenting and discussing scientific topics. Additional and improved knowledge on specific research areas should be generated.	
<b>Content of module:</b> The PhD students and advanced Master students attend the forums offered at several institutes of Faculty V. All students are requested to present their research projects and to discuss the topics with the participants of the forums to improve their presentation skills. Since numerous topics are presented in these forums, the students get an overview on projects currently conducted in the related research areas.	
<b>Literature:</b>	
<b>Comment:</b> E.g.: ICBM-PhD-Colloquium, ICBM-PhD-Day <b>Internet-Link for further information:</b> <a href="http://www.icbm.de/veranstaltungen/">http://www.icbm.de/veranstaltungen/</a> <b>Prerequisites for participation:</b> English language skills	<b>Useful knowledge:</b> <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Organization and active participation and seminar talk <b>Active participation:</b> Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice or the course supervisor. <b>Time of examination:</b> <b>Application formalities:</b>	





<b>Focus:</b>	<b>Field:</b> Communication and imparting of knowledge / Kommunikation und Wissensvermittlung
<b>Module code:</b> olt131	<b>Title:</b> <b>Advanced presentation techniques</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
<b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> One or two days  <b>Cycle:</b>  <b>Module type:</b> <b>Required elective</b>  <b>Module should be attended:</b>	<b>Form of teaching/learning:</b>  <b>Language:</b>  <b>ECTS-Credit points:</b> 3  <b>Workload:</b> 90 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Dr. F Esser
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of competences in presenting scientific topics.	
<p><b>Content of module:</b> Courses on advanced presentation skills provide a practical opportunity to enhance current presentation skills and add finesse to the delivery of presentations. The training looks at how to make a presentation persuasive and includes structuring and designing of contributions for conferences, self-evaluation and body language.</p> <p>Other courses of this module focus on voice training for improving economic breathing and for generating an accurate pronunciation or on the formation of strategic networks in the community as key for successful careers in science and industry.</p> <p>The generation of knowledge on the use of special equipment and techniques or the design of a web page for presenting research findings are also included in this module.</p>	
<b>Literature:</b>	
<b>Comment:</b>  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b> English language skills; Software PowerPoint	<b>Useful knowledge:</b>  <b>Linked with module:</b> A-1, A-5, B-2
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Oral report and/or assessment of a poster and/or assessment of a test talk	
<b>Time of examination:</b>	
<b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Communication and imparting of knowledge / Kommunikation und Wissensvermittlung
<b>Module code:</b> olt133	<b>Title:</b> Language courses
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
<b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> One or two days  <b>Cycle:</b>  <b>Module type:</b> Required elective  <b>Module should be attended:</b>	<b>Form of teaching/learning:</b>  <b>Language:</b>  <b>ECTS-Credit points:</b> 2-6  <b>Workload:</b> 60 – 180 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b>
<b>Jointly responsible person(s):</b> Dr. F Esser	
<b>Objective of module/competences:</b> Development of competences in language skills / competencies, Support for the mobility of students.	
<b>Content of module:</b> Language courses to improve your language skills for scientific research, presentation and scientific writing.	
<b>Literature:</b>	
<b>Comment:</b>  <b>Internet-Link for further information:</b> <a href="https://www.uni-oldenburg.de/sprachenzentrum/">https://www.uni-oldenburg.de/sprachenzentrum/</a> <b>Prerequisites for participation:</b>	<b>Useful knowledge:</b>  <b>Linked with module:</b> B-5
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Active participation: Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice or the course supervisor.	
<b>Time of examination:</b>	
<b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Communication and imparting of knowledge / Kommunikation und Wissensvermittlung
<b>Module code:</b> olt134	<b>Title:</b> <b>Additional module "Communication"</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> During semester term  <b>Cycle:</b> Summer term or Winter term  <b>Module type:</b> <b>Obligatory</b>  <b>Module should be attended:</b>	<b>Form of teaching/learning:</b>  <b>Language:</b> English  <b>ECTS-Credit points:</b> 0,5 - 6  <b>Workload:</b> 15 – 180 hours <b>incl. attendance time:</b> 15 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b>
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of additional and improved knowledge on communication skills.	
<b>Content of module:</b>	
<b>Literature:</b>	
<b>Comment:</b>  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b> English language skills	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Active participation and/or seminar talk and/or record and/or oral examination (30 min) or written examination (2 hrs) and/or seminar talk Active participation: Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice or the course supervisor. <b>Time of examination:</b> <b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Interdisciplinary competences / Fachübergreifende Kompetenzen
<b>Module code:</b> olt461	<b>Title:</b> <b>Scientific publishing</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b>  <b>Cycle:</b>  <b>Module type:</b> <b>Required elective</b>  <b>Module should be attended:</b> Second year	<b>Form of teaching/learning:</b>  <b>Language:</b> English  <b>ECTS-Credit points:</b> 2-6  <b>Workload:</b> 60-180 hours <b>incl. attendance time:</b> 40 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Primary supervisor
<b>Jointly responsible person(s):</b> Dr. F. Esser	
<b>Objective of module/competences:</b> Development of competences in publishing research findings in international peer-reviewed scientific journals	
<b>Content of module:</b> The PhD students get support in publishing their research findings in a scientific journal. First, the students learn to search for adequate literature and manage them by means of a special software. The knowledge of presenting measured data in form of graphs and tables as well as English language skills will be improved. The module also includes an introduction to the processes of preparing, writing and submitting a manuscript to a peer-reviewed scientific journal.	
<b>Literature:</b>	
<b>Comment:</b>  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b> First research findings should be available; English language skills; Statistical knowledge	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>  <b>Criteria for admission:</b>  <b>Kind of examination:</b> Reviewed manuscript  <b>Time of examination:</b>  <b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Interdisciplinary competences / Fachübergreifende Kompetenzen
<b>Module code:</b> olt161	<b>Title:</b> <b>Transferable skills / scientific career</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b>  <b>Cycle:</b>  <b>Module type:</b> <b>Required elective</b>  <b>Module should be attended:</b> First to third year	<b>Form of teaching/learning:</b>  <b>Language:</b> English  <b>ECTS-Credit points:</b> 3  <b>Workload:</b> 90 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Dr. F. Esser
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of personal competences and other skills for creating a scientific career	
<b>Content of module:</b> The PhD students improve their skills in coordinating a project as well as in managing time and staff members. They develop leadership skills to guide a team of scientists and will be trained in conflict management and appraisal interviews. Information on career strategies including self-evaluation, planning of further activities and personal coaching that help the students to develop their career in the scientific field. Training on preparing an application letter and the performance of interviews are also included. An overview of funding agencies is provided and the students learn how to develop projects, rise own funds by designing a concept as well as preparing a research proposal including new scientific hypotheses and a grant proposal.	
<b>Literature:</b>	
<b>Comment:</b> One of the listed courses can be chosen.  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b>	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b> <b>Criteria for admission:</b>  <b>Kind of examination:</b> Active participation: Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice or the course supervisor.  <b>Time of examination:</b>  <b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Interdisciplinary competences / Fachübergreifende Kompetenzen
<b>Module code:</b> olt463	<b>Title:</b> <b>Good scientific practice</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b>  <b>Cycle:</b>  <b>Module type:</b> <b>Obligatory</b>  <b>Module should be attended:</b> First to third year	<b>Form of teaching/learning:</b>  <b>Language:</b> English  <b>ECTS-Credit points:</b> 0,5  <b>Workload:</b> 15 hours <b>incl. attendance time:</b> 10 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Dr. F. Esser
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Improvement of knowledge regarding good scientific practice skills in Germany.	
<b>Content of module:</b> This Module will introduce the recommendations on good scientific practice of the German Science Foundation (DFG), and the official procedures for dealing with scientific misconduct at the University of Oldenburg. It will also be discussed which mechanisms contribute to misconduct, and how every researcher can help to uphold the principles for good scientific practice in his/her day-to-day activity. Trust the system of science is based and depends on the honesty of all members of the scientific community. However, every now and then the media report on scientific misconduct, and besides such widely publicized affairs, more or less serious breaches of rules occur in the immediate environment of many a scientist. But what are the rules?	
<b>Literature:</b>	
<b>Comment:</b> One of the listed courses can be chosen.  <b>Internet-Link for further information:</b> <b>Prerequisites for participation:</b>	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b> <b>Kind of examination:</b> Active participation: Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice or the course supervisor.  <b>Time of examination:</b>  <b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Interdisciplinary competences / Fachübergreifende Kompetenzen
<b>Module code:</b> olt464	<b>Title:</b> <b>Scientific writing</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b>  <b>Cycle:</b>  <b>Module type:</b> <b>Obligatory</b>  <b>Module should be attended:</b> First to third year	<b>Form of teaching/learning:</b>  <b>Language:</b> English  <b>ECTS-Credit points:</b> 1-2  <b>Workload:</b> 30-60 hours <b>incl. attendance time:</b> 20 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Dr. F. Esser
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of competences in scientific writing for publishing in international peer-reviewed scientific journals or writing a PhD thesis.	
<b>Content of module:</b> The students know the importance and structure of scientific publications. They have learned to critically read those, and know the requirements of different parts. They are trained to give oral presentations and know how to produce scientific reports and posters. They know how to use the library and how to find relevant literature on the internet, and how to use data banks like Endnote. They have learned how to present themselves for an application.	
<b>Literature:</b>	
<b>Comment:</b> One of the listed courses can be chosen.  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b>	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>  <b>Criteria for admission:</b>  <b>Kind of examination:</b> Concept of publication  <b>Time of examination:</b>  <b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Interdisciplinary competences / Fachübergreifende Kompetenzen
<b>Module code:</b> olt163	<b>Title:</b> <b>Fundraising project management</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b>  <b>Cycle:</b>  <b>Module type:</b> <b>Required elective</b>  <b>Module should be attended:</b> First to third year	<b>Form of teaching/learning:</b>  <b>Language:</b> English  <b>ECTS-Credit points:</b> 2  <b>Workload:</b> 60 hours <b>incl. attendance time:</b> 30 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Dr. F. Esser
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of competences in project management in regard of preparing a research proposal or scientific projects during the PhD.	
<b>Content of module:</b> The PhD students learn how to use project management tools to prepare their own research proposal or scientific project during their PhD. Mainly they learn how to plan, organize, motivate and control resources to achieve specific goals. The primary challenge of project management is to achieve all of the project goals and objectives while honoring the preconceived constraints. The primary constraints are scope, time, quality and budget. The secondary —and more ambitious— challenge is to optimize the allocation of necessary inputs and integrate them to meet pre-defined objectives.	
<b>Literature:</b>	
<b>Comment:</b> One of the listed courses can be chosen.  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b>	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>  <b>Criteria for admission:</b>  <b>Kind of examination:</b> Concept of a research proposal  <b>Time of examination:</b>  <b>Application formalities:</b>	





<b>Focus:</b>	<b>Field:</b> Interdisciplinary competences / Fachübergreifende Kompetenzen
<b>Module code:</b> olt164	<b>Title:</b> <b>Mentoring</b>
<b>Structured PhD Programme: Environmental Sciences and Biodiversity</b>	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b>  <b>Cycle:</b>  <b>Module type:</b> <b>Required elective</b>  <b>Module should be attended:</b> First to third year	<b>Form of teaching/learning:</b>  <b>Language:</b> English  <b>ECTS-Credit points:</b> 6  <b>Workload:</b> 180 hours <b>incl. attendance time:</b> 90 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b> Dr. F. Esser
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of mentoring competences, career and networking strategies and specific skills and knowledge that will enhance the PhD professional and personal growth.	
<b>Content of module:</b> The module offers e.g. a PhD - mentoring program that brings senior or established scientists (mentors) together with PhD students who might be interested in learning about the profession getting new ideas for their future career. PhD students are able to get in contact with a mentor in a guided process. Mentors bring experience, perspective, objectivity and distance into the mentoring relationship. Mentoring offers a long term view for the organization of the individual PhD phase and the perspectives after PhD.	
<b>Literature:</b>	
<b>Comment:</b> One of the listed courses can be chosen.  <b>Internet-Link for further information:</b>  <b>Prerequisites for participation:</b>	<b>Useful knowledge:</b>  <b>Linked with module:</b>
<b>Maximal number of participants:</b>	
<b>Criteria for admission:</b>	
<b>Kind of examination:</b> Active participation: Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice or the course supervisor.	
<b>Time of examination:</b>	
<b>Application formalities:</b>	



<b>Focus:</b>	<b>Field:</b> Interdisciplinary competences / Fachübergreifende Kompetenzen
<b>Module code:</b> olt165	<b>Title:</b> <b>Additional module "Transferable skills"</b>
<b>Structured PhD Programme:</b> Environmental Sciences and Biodiversity	
▶ <b>Events of this module including dates and locations:</b> According to agreement with lecturers	
<b>Period:</b> During semester term <b>Cycle:</b> Summer term or Winter term <b>Module type:</b> <b>Obligatory</b> <b>Module should be attended:</b>	<b>Form of teaching/learning:</b> <b>Language:</b> English <b>ECTS-Credit points:</b> 0,5 - 6 <b>Workload:</b> 15 - 180 hours <b>incl. attendance time:</b> 10 hours
<b>Responsible lecturer(s):</b>	<b>Responsible(s) for module:</b>
<b>Jointly responsible person(s):</b>	
<b>Objective of module/competences:</b> Development of additional and improved knowledge on transferable skills.	
<b>Content of module:</b>	
<b>Literature:</b>	
<b>Comment:</b> <b>Internet-Link for further information:</b> <b>Prerequisites for participation:</b> English language skills	<b>Useful knowledge:</b> <b>Linked with module:</b>
<b>Maximal number of participants:</b> <b>Criteria for admission:</b> <b>Kind of examination:</b> Active participation and/or seminar talk and/or record and/or oral examination (30 min) or written examination (2 hrs) and/or seminar talk Active participation: Active and documented participation in practical courses (labs, exercises, seminars, field trips) and courses. These include e.g. the delivery of exercises, writing a lab report or seminar presentations according to the advice or the course supervisor. <b>Time of examination:</b> <b>Application formalities:</b>	



Institute for  
Chemistry and  
Biology of the  
Marine Environment  
(ICBM)



Integrated Research  
Training Group of the  
CRC Roseobacter



Research training group:  
Interdisciplinary approach to  
functional biodiversity  
research (IBR)



CARL  
VON  
OSSIEZKY  
OLDENBURG  
FAKULTÄT V  
MATHEMATIK UND  
NATURWISSENSCHAFTEN

## Contact:

Dr. Ferdinand Esser

*Scientific Coordinator of Integrated Research Training Group of the CRC Roseobacter*

*Scientific Coordinator of the PhD programme 'Environmental Sciences and Biodiversity'*

Institute for Chemistry and Biology of the Marine Environment (ICBM)

Carl von Ossietzky University Oldenburg

Carl-von-Ossietzky-Str. 9-11

26129 Oldenburg

Germany

Phone: +49 (0)441 / 798-3171

Room: W15 0-031

E-mail: [ferdinand.esser@uni-oldenburg.de](mailto:ferdinand.esser@uni-oldenburg.de)

[www.roseobacter.de](http://www.roseobacter.de)

[www.icbm.de](http://www.icbm.de)