

## Module

### olt133 - Language courses

<b>Module label</b>	Language courses		
<b>Modulkürzel</b>	olt133		
<b>Credit points</b>	6.0 KP		
<b>Workload</b>	180 h		
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>		
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Hettwer, Klaudia (module responsibility)</li> </ul>		
<b>Prerequisites</b>			
<b>Skills to be acquired in this module</b>	Development and/or improvement of language skills.		
<b>Module contents</b>	The PhD student should improve his or her language skills in a language not being his or her mother tongue. If the student is going for a lab visit abroad other languages than English or German can be choosen.		
<b>Literatureempfehlungen</b>			
<b>Links</b>			
<b>Languages of instruction</b>	German, English		
<b>Duration (semesters)</b>	1 Semester		
<b>Module frequency</b>	halbjährlich		
<b>Module capacity</b>	unlimited		
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>	
<b>Final exam of module</b>		Active participation	
<b>Lehrveranstaltungsform</b>	VA-Auswahl		
<b>SWS</b>			
<b>Frequency</b>	SoSe und WiSe		

**olt134 - Additional module in communication**

<b>Module label</b>	Additional module in communication		
<b>Modulkürzel</b>	olt134		
<b>Credit points</b>	6.0 KP		
<b>Workload</b>	180 h		
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>		
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>• Hettwer, Klaudia (module responsibility)</li> </ul>		
<b>Prerequisites</b>			
<b>Skills to be acquired in this module</b>			
<b>Module contents</b>			
<b>Literaturempfehlungen</b>			
<b>Links</b>			
<b>Languages of instruction</b>	English , German		
<b>Duration (semesters)</b>	1 Semester		
<b>Module frequency</b>			
<b>Module capacity</b>	unlimited		
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>	
<b>Final exam of module</b>		BE	
<b>Lehrveranstaltungsform</b>	VA-Auswahl		
<b>SWS</b>			
<b>Frequency</b>	SoSe und WiSe		

## olt161 - Transferable skills / Scientific career

<b>Module label</b>	Transferable skills / Scientific career		
<b>Modulkürzel</b>	olt161		
<b>Credit points</b>	12.0 KP		
<b>Workload</b>	360 h		
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>		
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>• Hettwer, Klaudia (module responsibility)</li> </ul>		
<b>Prerequisites</b>			
<b>Skills to be acquired in this module</b>			
<b>Module contents</b>			
<b>Literaturempfehlungen</b>			
<b>Links</b>			
<b>Languages of instruction</b>	English , German		
<b>Duration (semesters)</b>	1 Semester		
<b>Module frequency</b>			
<b>Module capacity</b>	unlimited		
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>	
<b>Final exam of module</b>		Active participation	
<b>Lehrveranstaltungsform</b>	VA-Auswahl		
<b>SWS</b>	2		
<b>Frequency</b>	SoSe und WiSe		
<b>Workload Präsenzzeit</b>	28 h		

---

## olt164 - Mentoring

<b>Module label</b>	Mentoring	
<b>Modulkürzel</b>	olt164	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"><li>• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li><li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li></ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"><li>• Hettwer, Klaudia (module responsibility)</li></ul>	
<b>Prerequisites</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>		
<b>Literaturempfehlungen</b>		
<b>Links</b>		
<b>Languages of instruction</b>	German, English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>		
<b>Module capacity</b>	unlimited	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		KL
<b>Lehrveranstaltungsform</b>	VA-Auswahl	
<b>SWS</b>		
<b>Frequency</b>	SoSe und WiSe	

---

**olt165 - Additional module "Transferable Skills"**

<b>Module label</b>	Additional module "Transferable Skills"	
<b>Modulkürzel</b>	olt165	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"><li>• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li><li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li></ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"><li>• Hettwer, Klaudia (module responsibility)</li></ul>	
<b>Prerequisites</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>	Development of additional and improved knowledge on transferable skills.	
<b>Literaturempfehlungen</b>		
<b>Links</b>		
<b>Languages of instruction</b>	German, English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		Active participation
<b>Lehrveranstaltungsform</b>	VA-Auswahl	
<b>SWS</b>		
<b>Frequency</b>	SoSe und WiSe	

## olt201 - Summer School / Congress

<b>Module label</b>	Summer School / Congress		
<b>Modulkürzel</b>	olt201		
<b>Credit points</b>	6.0 KP		
<b>Workload</b>	180 h		
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>		
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Klump, Georg Martin (module responsibility)</li> <li>Mouritsen, Henrik (module responsibility)</li> <li>Hettwer, Klaudia (Module counselling)</li> </ul>		
<b>Prerequisites</b>	English language skills; Presentation skills;		
<b>Skills to be acquired in this module</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>Module contents</b>	The PhD students participate at summer schools or international congresses. 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 socialise with the scientific community.		
<b>Literatureempfehlungen</b>			
<b>Links</b>			
<b>Language of instruction</b>	English		
<b>Duration (semesters)</b>	1 Semester		
<b>Module frequency</b>	unregelmäßig		
<b>Module capacity</b>	unlimited		
Examination	Prüfungszeiten	Type of examination	
<b>Final exam of module</b>	at congresses: active participation with posterpresentation and/or talk at summer schools: active participation		
Lehrveranstaltungsform	Comment	SWS	Workload of compulsory attendance
Lecture		2	28
VA-Auswahl			0
<b>Präsenzzeit Modul insgesamt</b>			<b>28 h</b>

---

## olt202 - Lab visit abroad

<b>Module label</b>	Lab visit abroad	
<b>Modulkürzel</b>	olt202	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"><li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li></ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"><li>Klump, Georg Martin (module responsibility)</li></ul>	
<b>Prerequisites</b>		
<b>Skills to be acquired in this module</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, teamwork, cross-cultural competence) should be developed.	
<b>Module contents</b>	The PhD students plan their schedule, prepare their practical work and organize their stay at the laboratory of a foreign research institution.	
<b>Literatureempfehlungen</b>		
<b>Links</b>		
<b>Languages of instruction</b>		
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Reference text</b>	Please plan the research trip in time.	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		oral or written report
<b>Lehrveranstaltungsform</b>	VA-Auswahl	
<b>SWS</b>		
<b>Frequency</b>	--	

## olt203 - Special techniques in Neurosensory Science and Systems

<b>Module label</b>	Special techniques in Neurosensory Science and Systems		
<b>Modulkürzel</b>	olt203		
<b>Credit points</b>	12.0 KP		
<b>Workload</b>	360 h		
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>		
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Klump, Georg Martin (module responsibility)</li> </ul>		
<b>Prerequisites</b>			
<b>Skills to be acquired in this module</b>	<p>Development of improved or additional competences in special scientific techniques including laboratory methodologies as well as analysing, modling and interpreting data.</p> <p>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.</p>		
<b>Module contents</b>	<p>The PhD students extend their knowledge on special scientific techniques or good scientific practice through participating at advanced courses including lectures, seminars or intensive courses. Intensive courses can be part of a summer school.</p>		
<b>Literaturempfehlungen</b>			
<b>Links</b>			
<b>Languages of instruction</b>	German, English		
<b>Duration (semesters)</b>	1 Semester		
<b>Module frequency</b>	halbjährlich		
<b>Module capacity</b>	unlimited		
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>	
<b>Final exam of module</b>		Active participation	
<b>Lehrveranstaltungsform</b>	VA-Auswahl		
<b>SWS</b>			
<b>Frequency</b>	--		

## olt204 - Medical basics of Neurosensory Sciences and Systems

<b>Module label</b>	Medical basics of Neurosensory Sciences and Systems	
<b>Modulkürzel</b>	olt204	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Kollmeier, Birger (module responsibility)</li> </ul>	
<b>Prerequisites</b>		
<b>Skills to be acquired in this module</b>	Development of additional and improved knowledge on numerous topics of scientific field of medicine. The knowledge of the medical bases of neurosensory should be developed.	
<b>Module contents</b>		
<b>Literatureempfehlungen</b>		
<b>Links</b>		
<b>Language of instruction</b>	English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		Active participation
<b>Lehrveranstaltungsform</b>	VA-Auswahl	
<b>SWS</b>		
<b>Frequency</b>	--	

---

## olt205 - Data analysis using Matlab

<b>Module label</b>	Data analysis using Matlab	
<b>Modulkürzel</b>	olt205	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"><li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li></ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"><li>• Kretzberg, Jutta (module responsibility)</li></ul>	
<b>Prerequisites</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>		
<b>Literatureempfehlungen</b>		
<b>Links</b>		
<b>Languages of instruction</b>	German, English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		Active participation
<b>Lehrveranstaltungsform</b>	Seminar	
<b>Frequency</b>		

---

## olt206 - Journal club

<b>Module label</b>	Journal club	
<b>Modulkürzel</b>	olt206	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"><li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li></ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"><li>Koch, Karl-Wilhelm (module responsibility)</li></ul>	
<b>Prerequisites</b>	English language skills	
<b>Skills to be acquired in this module</b>	Development of additional and improved knowledge on specific research areas. Competences in discussing scientific topics and the general outline of a scientific publication should be developed.	
<b>Module contents</b>		
<b>Literatureempfehlungen</b>		
<b>Links</b>		
<b>Language of instruction</b>	English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		Active participation and seminar talk.
<b>Lehrveranstaltungsform</b>	Seminar	
<b>Frequency</b>		

---

## olt207 - Colloquium Neurosensory Science and Systems

<b>Module label</b>	Colloquium Neurosensory Science and Systems	
<b>Modulkürzel</b>	olt207	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Klump, Georg Martin (module responsibility)</li> <li>Kollmeier, Birger (module responsibility)</li> <li>Henrichs, Kathrin (module responsibility)</li> <li>Grünberg, Beate (module responsibility)</li> </ul>	
<b>Prerequisites</b>		
<b>Skills to be acquired in this module</b>	Development of scientific knowledge, networking skills and presentation skills.	
<b>Module contents</b>	PhD Students present their research topics and results to other PhD Students and discuss them. PhD Students participate in research seminars and get insight in current research topics.	
<b>Literaturempfehlungen</b>		
<b>Links</b>		
<b>Language of instruction</b>	English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		SFB-Research seminar: Active participation Hot Topic Seminar and GK-Colloquium: Active participation with at least one talk or poster presentation
<b>Lehrveranstaltungsform</b>	Seminar	
<b>Frequency</b>		

---

## olt208 - Additional module "Specific knowledge"

<b>Module label</b>	Additional module "Specific knowledge"		
<b>Modulkürzel</b>	olt208		
<b>Credit points</b>	6.0 KP		
<b>Workload</b>	180 h		
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"><li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li></ul>		
<b>Zuständige Personen</b>	<ul style="list-style-type: none"><li>• Henrichs, Kathrin (module responsibility)</li></ul>		
<b>Prerequisites</b>			
<b>Skills to be acquired in this module</b>	Development of additional and improved knowledge on specific research areas.		
<b>Module contents</b>			
<b>Literatureempfehlungen</b>			
<b>Links</b>			
<b>Languages of instruction</b>	German, English		
<b>Duration (semesters)</b>	1 Semester		
<b>Module frequency</b>	halbjährlich		
<b>Module capacity</b>	unlimited		
<b>Reference text</b>	Courses of the modules olt201- olt207 or comparable courses can be accepted		
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>	
<b>Final exam of module</b>		See description of the module, from which the course was chosen	
<b>Lehrveranstaltungsform</b>	VA-Auswahl		
<b>SWS</b>			
<b>Frequency</b>	--		

## olt231 - Advanced presentation techniques

<b>Module label</b>	Advanced presentation techniques	
<b>Modulkürzel</b>	olt231	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Mouritsen, Henrik (module responsibility)</li> </ul>	
<b>Prerequisites</b>	English language skills; Software PowerPoint	
<b>Skills to be acquired in this module</b>	Development of competences in presenting scientific topics.	
<b>Module contents</b>	<p>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>Literatureempfehlungen</b>		
<b>Links</b>		
<b>Languages of instruction</b>		
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>	Active participation: Assessment of a poster and/or assessment of two talks.	
<b>Lehrveranstaltungsform</b>	VA-Auswahl	
<b>SWS</b>		
<b>Frequency</b>	WiSe	

## olt232 - Summer School / Congress

<b>Module label</b>	Summer School / Congress	
<b>Modulkürzel</b>	olt232	
<b>Credit points</b>	4.0 KP	
<b>Workload</b>	120 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Klump, Georg Martin (module responsibility)</li> <li>Mouritsen, Henrik (module responsibility)</li> </ul>	
<b>Prerequisites</b>	English language skills, presentation skills	
<b>Skills to be acquired in this module</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>Module contents</b>	The PhD students participate at summer schools or international congresses. 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 socialise with the scientific community.	
<b>Literatureempfehlungen</b>		
<b>Links</b>		
<b>Language of instruction</b>	English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Reference text</b>	Module should be attended: At any time of the PhD work	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		at congresses: active participation with posterpresentation and/or talk at summer schools: active participation
<b>Lehrveranstaltungsform</b>	VA-Auswahl	
<b>SWS</b>		
<b>Frequency</b>	--	

---

## olt233 - Didactics

<b>Module label</b>	Didactics		
<b>Modulkürzel</b>	olt233		
<b>Credit points</b>	6.0 KP		
<b>Workload</b>	180 h		
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"><li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li></ul>		
<b>Zuständige Personen</b>			
<b>Prerequisites</b>			
<b>Skills to be acquired in this module</b>			
<b>Module contents</b>			
<b>Literatureempfehlungen</b>			
<b>Links</b>			
<b>Languages of instruction</b>			
<b>Duration (semesters)</b>	1 Semester		
<b>Module frequency</b>			
<b>Module capacity</b>	unlimited		
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>	
<b>Final exam of module</b>		BE	
<b>Lehrveranstaltungsform</b>	Seminar		
<b>Frequency</b>			

## olt261 - Basics in distribution-free statistics

<b>Module label</b>	Basics in distribution-free statistics	
<b>Modulkürzel</b>	olt261	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Klump, Georg Martin (module responsibility)</li> <li>Langemann, Ulrike (Module counselling)</li> </ul>	
<b>Prerequisites</b>		
<b>Skills to be acquired in this module</b>	Basics in distribution-free statistics	
<b>Module contents</b>	Basic concepts of distribution-free statistics are introduced to the PhD student. Includes exercises.	
<b>Literatureempfehlungen</b>		
<b>Links</b>		
<b>Language of instruction</b>	English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		Active participation
<b>Lehrveranstaltungsform</b>	Seminar	
<b>Frequency</b>		

## olt262 - Experimental design and variance analysis

<b>Module label</b>	Experimental design and variance analysis			
<b>Modulkürzel</b>	olt262			
<b>Credit points</b>	3.0 KP			
<b>Workload</b>	90 h			
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>			
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Colonus, Hans (module responsibility)</li> </ul>			
<b>Prerequisites</b>				
<b>Skills to be acquired in this module</b>	<p>Students should:</p> <ul style="list-style-type: none"> <li>understand the basic logic of statistical inference and experimental designs</li> <li>and be able to correctly interpret empirical statistical results;</li> <li>become familiar with the most common types of analysis of variance and experimental designs,</li> <li>be able to develop an appropriate experimental design for a given research question,</li> <li>and be able to correctly perform the statistical analyses of empirical data.</li> </ul>			
<b>Module contents</b>	<p>Principles of statistical inference, principals of analysis of variance; Contrasts and comparisons among means; single- and two-factor independent group designs; repeated measures designs; multivariate statistical methods</p> <p>Lecturers give input on basic and special topics of experimental designs and analysis of variance</p> <p>Data are analysed in class using SPSS and/or R.</p> <p>Students work in groups in order to prepare a statistical analysis on self-collected data. This is presented and the analysis is carried out by the participants in class.</p>			
<b>Literaturempfehlungen</b>				
<b>Links</b>				
<b>Language of instruction</b>	English			
<b>Duration (semesters)</b>	1 Semester			
<b>Module frequency</b>	halbjährlich			
<b>Module capacity</b>	unlimited			
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>		
<b>Final exam of module</b>			Active participation	
<b>Lehrveranstaltungsform</b>	<b>Comment</b>	<b>SWS</b>	<b>Frequency</b>	<b>Workload of compulsory attendance</b>
Lecture		2	WiSe	28
Seminar				
Tutorial		2	SoSe und WiSe	28
<b>Präsenzzeit Modul insgesamt</b>				56 h

## olt263 - Numeric and computer Skills

<b>Module label</b>	Numeric and computer Skills	
<b>Modulkürzel</b>	olt263	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>Hohmann, Volker (module responsibility)</li> </ul>	
<b>Prerequisites</b>		
<b>Skills to be acquired in this module</b>	Students acquire theoretical knowledge of basic numerical methods and practical skills to apply these methods on physical problems within all areas of experimental, theoretical and applied physics.	
<b>Module contents</b>	Basic concepts of numerical mathematics are introduced and applied to physics problems. Topics include: finite number representation and numerical errors linear and nonlinear systems of equations numerical differentiation and integration function minimization and model fitting discrete Fourier analysis ordinary and partial differential equations.	
<b>Literatureempfehlungen</b>		
<b>Links</b>		
<b>Language of instruction</b>	German	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Reference text</b>	Language: English materials, including extensive script, tutorials in English; lecture in German	
	Module should be attended: At any time during the PhD project	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		Active participation
<b>Lehrveranstaltungsform</b>	VA-Auswahl	
<b>SWS</b>		
<b>Frequency</b>	--	

## olt264 - Scientific publishing

<b>Module label</b>	Scientific publishing	
<b>Modulkürzel</b>	olt264	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Zuständige Personen</b>	<ul style="list-style-type: none"> <li>• Thiel, Christiane Margarete (module responsibility)</li> <li>• Klump, Georg Martin (Module counselling)</li> <li>• Kollmeier, Birger (Module counselling)</li> <li>• van de Par, Steven (Module counselling)</li> </ul>	
<b>Prerequisites</b>	English language skills, PhD Studets should have data to publish.	
<b>Skills to be acquired in this module</b>	Development of competences in scientific writing for publishing in international peer-reviewed scientific journal.	
<b>Module contents</b>	The students learn about the importance and structure of scientific publications. For wirting their own (first) publication the PhD Students work together in tandems, small teams or intensive writing classes.	
<b>Literaturempfehlungen</b>		
<b>Links</b>		
<b>Language of instruction</b>	English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	halbjährlich	
<b>Module capacity</b>	unlimited	
<b>Reference text</b>	Events of this module including dates and locations: According to agreement with lecturers	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		skript to publish
<b>Lehrveranstaltungsform</b>	Seminar	
<b>Frequency</b>		

---

## olt209 - Laboratory Animal Science

<b>Module label</b>	Laboratory Animal Science	
<b>Modulkürzel</b>	olt209	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Verwendbarkeit des Moduls</b>	<ul style="list-style-type: none"><li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li></ul>	
<b>Zuständige Personen</b>		
<b>Prerequisites</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>		
<b>Literatureempfehlungen</b>		
<b>Links</b>		
<b>Language of instruction</b>	English	
<b>Duration (semesters)</b>	1 Semester	
<b>Module frequency</b>	jährlich	
<b>Module capacity</b>	unlimited	
<b>Examination</b>	<b>Prüfungszeiten</b>	<b>Type of examination</b>
<b>Final exam of module</b>		Webbasierte schriftliche Prüfung und aktive Teilnahme am praktischen Teil des Moduls
<b>Lehrveranstaltungsform</b>	Seminar	
<b>SWS</b>	2	
<b>Frequency</b>	SoSe oder WiSe	
<b>Workload Präsenzzeit</b>	28 h	

