

## Modules for Neurosensory Science and Systems

Date 08/04/20

### Module

#### olt133 - Language courses

<b>Module label</b>	Language courses	
<b>Module code</b>	olt133	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Interface Science (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Klaudia Hettwer</li> </ul>	
<b>Entry requirements</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 chosen.	
<b>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	Wahlpflicht / Elective	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		Active participation
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	SuSe and WiSe	
<b>Workload attendance</b>	0 h	

## olt134 - Additional module in communication

<b>Module label</b>	Additional module in communication	
<b>Module code</b>	olt134	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Interface Science (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Klaudia Hettwer</li> </ul>	
<b>Entry requirements</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>		
<b>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	Wahlpflicht / Elective	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		BE
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	SuSe and WiSe	
<b>Workload attendance</b>	0 h	

## olt161 - Transferable skills / Scientific career

<b>Module label</b>	Transferable skills / Scientific career	
<b>Module code</b>	olt161	
<b>Credit points</b>	12.0 KP	
<b>Workload</b>	360 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Interface Science (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Klaudia Hettwer</li> </ul>	
<b>Entry requirements</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>		
<b>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	Wahlpflicht / Elective	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		Active participation
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	2.00	
<b>Frequency</b>	SuSe and WiSe	
<b>Workload attendance</b>	28 h	

## olt164 - Mentoring

<b>Module label</b>	Mentoring	
<b>Module code</b>	olt164	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Interface Science (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	<p>Module responsibility</p> <ul style="list-style-type: none"> <li>◦ Klaudia Hettwer</li> </ul>	
<b>Entry requirements</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>		
<b>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	Wahlpflicht / Elective	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		KL
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	SuSe and WiSe	
<b>Workload attendance</b>	0 h	

## olt165 - Additional module "Transferable Skills"

<b>Module label</b>	Additional module "Transferable Skills"	
<b>Module code</b>	olt165	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Interface Science (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Klaudia Hettwer</li> </ul>	
<b>Entry requirements</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>	Development of additional and improved knowledge on transferable skills.	
<b>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	Wahlpflicht / Elective	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		Active participation
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	SuSe and WiSe	
<b>Workload attendance</b>	0 h	

## olt201 - Summer School / Congress

<b>Module label</b>	Summer School / Congress			
<b>Module code</b>	olt201			
<b>Credit points</b>	6.0 KP			
<b>Workload</b>	180 h			
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>			
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>Georg Martin Klump</li> <li>Henrik Mouritsen</li> </ul> Module counseling <ul style="list-style-type: none"> <li>Klaudia Hettwer</li> </ul>			
<b>Entry requirements</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>Reader's advisory</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			
<b>Modullevel</b>	Prom (Promotion)			
<b>Modulart</b>	Wahlpflicht / Elective			
<b>Lern-/Lehrform / Type of program</b>				
<b>Vorkenntnisse / Previous knowledge</b>				
<b>Examination</b>	Time of examination		Type of examination	
<b>Final exam of module</b>			at congresses: active participation with posterpresentation and/or talk at summer schools: active participation	
<b>Course type</b>	<b>Comment</b>	<b>SWS</b>	<b>Frequency</b>	<b>Workload attendance</b>
Lecture		2.00	SuSe and WiSe	28 h
VA-Auswahl		0.00	WiSe	0 h
<b>Total time of attendance for the module</b>				28 h

## olt202 - Lab visit abroad

<b>Module label</b>	Lab visit abroad	
<b>Module code</b>	olt202	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Georg Martin Klump</li> </ul>	
<b>Entry requirements</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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		oral or written report
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	--	
<b>Workload attendance</b>	0 h	

## olt203 - Special techniques in Neurosensory Science and Systems

<b>Module label</b>	Special techniques in Neurosensory Science and Systems	
<b>Module code</b>	olt203	
<b>Credit points</b>	12.0 KP	
<b>Workload</b>	360 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Georg Martin Klump</li> </ul>	
<b>Entry requirements</b>		
<b>Skills to be acquired in this module</b>	Development of improved or additional competences in special scientific techniques including laboratory methodologies as well as analysing, modling and interpreting data. 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.	
<b>Module contents</b>	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.	
<b>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		Active participation
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	--	
<b>Workload attendance</b>	0 h	



## olt204 - Medical basics of Neurosensory Sciences and Systems

<b>Module label</b>	Medical basics of Neurosensory Sciences and Systems	
<b>Module code</b>	olt204	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Birger Kollmeier</li> </ul>	
<b>Entry requirements</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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		Active participation
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	--	
<b>Workload attendance</b>	0 h	

## olt205 - Data analysis using Matlab

<b>Module label</b>	Data analysis using Matlab	
<b>Module code</b>	olt205	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Jutta Kretzberg</li> </ul>	
<b>Entry requirements</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>		
<b>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		Active participation
<b>Course type</b>	Seminar	
<b>SWS</b>		
<b>Frequency</b>		
<b>Workload attendance</b>	0 h	

## olt206 - Journal club

<b>Module label</b>	Journal club	
<b>Module code</b>	olt206	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Karl-Wilhelm Koch</li> </ul>	
<b>Entry requirements</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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>	Active participation and seminar talk.	
<b>Course type</b>	Seminar	
<b>SWS</b>		
<b>Frequency</b>		
<b>Workload attendance</b>	0 h	

## olt207 - Colloquium Neurosensory Science and Systems

<b>Module label</b>	Colloquium Neurosensory Science and Systems	
<b>Module code</b>	olt207	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Georg Martin Klump</li> <li>◦ Birger Kollmeier</li> <li>◦ Kathrin Henrichs</li> <li>◦ Beate Grünberg</li> </ul>	
<b>Entry requirements</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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<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>Course type</b>	Seminar	
<b>SWS</b>		
<b>Frequency</b>		
<b>Workload attendance</b>	0 h	

## olt208 - Additional module "Specific knowledge"

<b>Module label</b>	Additional module "Specific knowledge"	
<b>Module code</b>	olt208	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Kathrin Henrichs</li> </ul>	
<b>Entry requirements</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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		See description of the module, from which the course was chosen
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	--	
<b>Workload attendance</b>	0 h	

## olt231 - Advanced presentation techniques

<b>Module label</b>	Advanced presentation techniques	
<b>Module code</b>	olt231	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Interface Science (Doctoral Programme) &gt; Module</li> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Henrik Mouritsen</li> </ul>	
<b>Entry requirements</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. 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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>	Active participation: Assessment of a poster and/or assessment of two talks.	
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	WiSe	
<b>Workload attendance</b>	0 h	

## olt232 - Summer School / Congress

<b>Module label</b>	Summer School / Congress	
<b>Module code</b>	olt232	
<b>Credit points</b>	4.0 KP	
<b>Workload</b>	120 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Georg Martin Klump</li> <li>◦ Henrik Mouritsen</li> </ul>	
<b>Entry requirements</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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		at congresses: active participation with posterpresentation and/or talk at summer schools: active participation
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	--	
<b>Workload attendance</b>	0 h	

## olt233 - Didactics

<b>Module label</b>	Didactics	
<b>Module code</b>	olt233	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>		
<b>Entry requirements</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>		
<b>Reader's advisory</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>Modullevel</b>	---	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		BE
<b>Course type</b>	Seminar	
<b>SWS</b>		
<b>Frequency</b>		
<b>Workload attendance</b>	0 h	



## olt261 - Basics in distribution-free statistics

<b>Module label</b>	Basics in distribution-free statistics	
<b>Module code</b>	olt261	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>◦ Georg Martin Klump</li> </ul> Module counseling <ul style="list-style-type: none"> <li>◦ Ulrike Langemann</li> </ul>	
<b>Entry requirements</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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		Active participation
<b>Course type</b>	Seminar	
<b>SWS</b>		
<b>Frequency</b>		
<b>Workload attendance</b>	0 h	

## olt262 - Experimental design and variance analysis

<b>Module label</b>	Experimental design and variance analysis			
<b>Module code</b>	olt262			
<b>Credit points</b>	3.0 KP			
<b>Workload</b>	90 h			
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>			
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>Hans Colonius</li> </ul>			
<b>Entry requirements</b>				
<b>Skills to be acquired in this module</b>	Students should: <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>	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>Lecturers give input on basic and special topics of experimental designs and analysis of variance            Data are analysed in class using SPSS and/or R.            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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)			
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht			
<b>Lern-/Lehrform / Type of program</b>				
<b>Vorkenntnisse / Previous knowledge</b>				
Examination	Time of examination		Type of examination	
<b>Final exam of module</b>			Active participation	
Course type	Comment	SWS	Frequency	Workload attendance
Lecture		2.00	WiSe	28 h
Seminar				0 h
Tutorial		2.00	SuSe and WiSe	28 h
<b>Total time of attendance for the module</b>				56 h

## olt263 - Numeric and computer Skills

<b>Module label</b>	Numeric and computer Skills	
<b>Module code</b>	olt263	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	Module responsibility <ul style="list-style-type: none"> <li>Volker Hohmann</li> </ul>	
<b>Entry requirements</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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		Active participation
<b>Course type</b>	VA-Auswahl	
<b>SWS</b>	0.00	
<b>Frequency</b>	--	
<b>Workload attendance</b>	0 h	

## olt264 - Scientific publishing

<b>Module label</b>	Scientific publishing	
<b>Module code</b>	olt264	
<b>Credit points</b>	6.0 KP	
<b>Workload</b>	180 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>	<p>Module responsibility</p> <ul style="list-style-type: none"> <li>◦ Christiane Margarete Thiel</li> </ul> <p>Module counseling</p> <ul style="list-style-type: none"> <li>◦ Georg Martin Klump</li> <li>◦ Birger Kollmeier</li> <li>◦ Steven van de Par</li> </ul>	
<b>Entry requirements</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>Reader's advisory</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>Modullevel</b>	Prom (Promotion)	
<b>Modulart</b>	je nach Studiengang Pflicht oder Wahlpflicht	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
Examination	Time of examination	Type of examination
<b>Final exam of module</b>		skript to publish
<b>Course type</b>	Seminar	
<b>SWS</b>		
<b>Frequency</b>		
<b>Workload attendance</b>	0 h	

## olt209 - Laboratory Animal Science

<b>Module label</b>	Laboratory Animal Science	
<b>Module code</b>	olt209	
<b>Credit points</b>	3.0 KP	
<b>Workload</b>	90 h	
<b>Used in course of study</b>	<ul style="list-style-type: none"> <li>Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) &gt; Module</li> </ul>	
<b>Contact person</b>		
<b>Entry requirements</b>		
<b>Skills to be acquired in this module</b>		
<b>Module contents</b>		
<b>Reader's advisory</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>Modullevel</b>	AC (Aufbaucurriculum / Composition)	
<b>Modulart</b>	Wahlpflicht / Elective	
<b>Lern-/Lehrform / Type of program</b>		
<b>Vorkenntnisse / Previous knowledge</b>		
<b>Examination</b>	Time of examination	Type of examination
<b>Final exam of module</b>		Webbasierte schriftliche Prüfung und aktive Teilnahme am praktischen Teil des Moduls
<b>Course type</b>	Seminar	
<b>SWS</b>	2.00	
<b>Frequency</b>	SuSe or WiSe	
<b>Workload attendance</b>	28 h	

