Modulhandbuch

Neurosensory Science and Systems - Structured Doctoral Programme

im Wintersemester 2018/2019

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Module

olt133 - Language courses

Module label		Language courses	
Modulkürzel		olt133	
Credit points		6.0 KP	
Workload		180 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) > Module • Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Hettwer, Klaudia (module responsibility)	
Prerequisites			
Skills to be acquired in this module		Development and/or improvement of language skills.	
Module contents		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.	
Literaturempfehlungen			
Links			
Languages of instruction		German, English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Active participation
Form of instruction	VA-Auswahl		
SWS			
Frequency	SoSe und WiSe		

olt134 - Additional module in communication

Module label		Additional module in communication	
Modulkürzel		olt134	
Credit points		6.0 KP	
Workload		180 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) > Module • Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Hettwer, Klaudia (module responsibility)	
Prerequisites			
Skills to be acquired in this module			
Module contents			
Literaturempfehlungen			
Links			
Languages of instruction		English , German	
Duration (semesters)		1 Semester	
Module frequency			
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			BE
Form of instruction	VA-Auswahl		
SWS			
Frequency	SoSe und WiSe		

olt161 - Transferable skills / Scientific career

Module label		Transferable skills / Scientific career	
Modulkürzel		olt161	
Credit points		12.0 KP	
Workload		360 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) > Module • Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Hettwer, Klaudia (module responsibility)	
Prerequisites			
Skills to be acquired in this module			
Module contents			
Literaturempfehlungen			
Links			
Languages of instruction		English , German	
Duration (semesters)		1 Semester	
Module frequency			
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Active participation
Form of instruction	VA-Auswahl		
SWS	2		
Frequency	SoSe und WiSe		

olt164 - Mentoring

Module label		Mentoring	
Modulkürzel		olt164	
Credit points		6.0 KP	
Workload		180 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) > Module • Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Hettwer, Klaudia (module responsibility)	
Prerequisites			
Skills to be acquired in this module			
Module contents			
Literaturempfehlungen			
Links			
Languages of instruction		German, English	
Duration (semesters)		1 Semester	
Module frequency			
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			KL
Form of instruction	VA-Auswahl		
SWS			
Frequency	SoSe und WiSe		

olt165 - Additional module "Transferable Skills"

Module label		Additional module "Transferable Skills"	
Modulkürzel		olt165	
Credit points		6.0 KP	
Workload		180 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Environmental Sciences and Biodiversity (Doctoral Programme) > Module • Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Hettwer, Klaudia (module responsibility)	
Prerequisites			
Skills to be acquired in this module			
Module contents		Development of additional and improved knowledge on transferable skills.	
Literaturempfehlungen			
Links			
Languages of instruction		German, English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Active participation
Form of instruction	VA-Auswahl		
SWS			
Frequency	SoSe und WiSe		

olt201 - Summer School / Congress

Module label	Summer School / Congress
Modulkürzel	olt201
Credit points	6.0 KP
Workload	180 h
Verwendbarkeit des Moduls	• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module
Zuständige Personen	• Klump, Georg Martin (module responsibility) • Mouritsen, Henrik (module responsibility) • Hettwer, Klaudia (Module counselling)
Prerequisites	English language skills; Presentation skills;
Skills to be acquired in this module	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.
Module contents	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.
Literaturempfehlungen	
Links	
Language of instruction	English
Duration (semesters)	1 Semester
Module frequency	unregelmäßig
Module capacity	unlimited

Examination	Prüfungszeiten	Type of examination
Final exam of module		at congresses: active participation with posterpresentation and/or talk at summer schools: active participation

Form of instruction	Comment	SWS	Frequency	Workload of compulsory attendance
Lecture		2	SoSe und WiSe	28
VA-Auswahl			WiSe	0
Präsenzzeit Modul insgesamt				28 h

olt202 - Lab visit abroad

Module label		Lab visit abroad	
Modulkürzel		olt202	
Credit points		6.0 KP	
Workload		180 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Klump, Georg Martin (module responsibility)	
Prerequisites			
Skills to be acquired in this module		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.	
Module contents		The PhD students plan their schedule, prepare their practical work and organize their stay at the laboratory of a foreign research institution.	
Literaturempfehlungen			
Links			
Languages of instruction			
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Reference text		Please plan the research trip in time.	
Examination	Prüfungszeiten		Type of examination
Final exam of module			oral or written report
Form of instruction	VA-Auswahl		
SWS			
Frequency	--		

olt203 - Special techniques in Neurosensory Science and Systems

Module label		Special techniques in Neurosensory Science and Systems	
Modulkürzel		olt203	
Credit points		12.0 KP	
Workload		360 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Klump, Georg Martin (module responsibility)	
Prerequisites			
Skills to be acquired in this module		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 Germen Science Foundation (DFG), and the official procedures for dealing with scientific misconduct at the University of Oldenburg.	
Module contents		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.	
Literaturempfehlungen			
Links			
Languages of instruction		German, English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Active participation
Form of instruction	VA-Auswahl		
SWS			
Frequency	--		

olt204 - Medical basics of Neurosensory Sciences and Systems

Module label		Medical basics of Neurosensory Sciences and Systems	
Modulkürzel		olt204	
Credit points		6.0 KP	
Workload		180 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Kollmeier, Birger (module responsibility)	
Prerequisites			
Skills to be acquired in this module		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.	
Module contents			
Literaturempfehlungen			
Links			
Language of instruction		English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Active participation
Form of instruction	VA-Auswahl		
SWS			
Frequency	--		

olt205 - Data analysis using Matlab

Module label		Data analysis using Matlab	
Modulkürzel		olt205	
Credit points		3.0 KP	
Workload		90 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Kretzberg, Jutta (module responsibility)	
Prerequisites			
Skills to be acquired in this module			
Module contents			
Literaturempfehlungen			
Links			
Languages of instruction		German, English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Active participation
Form of instruction	Seminar		
Frequency			

olt206 - Journal club

Module label		Journal club	
Modulkürzel		olt206	
Credit points		3.0 KP	
Workload		90 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Koch, Karl-Wilhelm (module responsibility)	
Prerequisites		English language skills	
Skills to be acquired in this module		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.	
Module contents			
Literaturempfehlungen			
Links			
Language of instruction		English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Active participation and seminar talk.
Form of instruction	Seminar		
Frequency			

olt207 - Colloquium Neurosensory Science and Systems

Module label		Colloquium Neurosensory Science and Systems	
Modulkürzel		olt207	
Credit points		3.0 KP	
Workload		90 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Klump, Georg Martin (module responsibility) • Kollmeier, Birger (module responsibility) • Henrichs, Kathrin (module responsibility) • Grünberg, Beate (module responsibility)	
Prerequisites			
Skills to be acquired in this module		Development of scientific knowledge, networking skills and presentation skills.	
Module contents		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.	
Literaturempfehlungen			
Links			
Language of instruction		English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			SFB-Research seminar: Active participation Hot Topic Seminar and GK-Colloquium: Active participation with at least one talk or poster presentation
Form of instruction	Seminar		
Frequency			

olt208 - Additional module "Specific knowledge"

Module label		Additional module "Specific knowledge"	
Modulkürzel		olt208	
Credit points		6.0 KP	
Workload		180 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Henrichs, Kathrin (module responsibility)	
Prerequisites			
Skills to be acquired in this module		Development of additional and improved knowledge on specific research areas.	
Module contents			
Literaturempfehlungen			
Links			
Languages of instruction		German, English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Reference text		Courses of the modules olt201- olt207 or comparable courses can be accepted	
Examination	Prüfungszeiten		Type of examination
Final exam of module			See description of the module, from which the course was choosen
Form of instruction	VA-Auswahl		
SWS			
Frequency	--		

olt231 - Advanced presentation techniques

Module label		Advanced presentation techniques	
Modulkürzel		olt231	
Credit points		3.0 KP	
Workload		90 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Mouritsen, Henrik (module responsibility)	
Prerequisites		English language skills; Software PowerPoint	
Skills to be acquired in this module		Development of competences in presenting scientific topics.	
Module contents		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. 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.	
Literaturempfehlungen			
Links			
Languages of instruction			
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Active participation: Assessment of a poster and/or assessment of two talks.
Form of instruction	VA-Auswahl		
SWS			
Frequency	WiSe		

olt232 - Summer School / Congress

Module label		Summer School / Congress	
Modulkürzel		olt232	
Credit points		4.0 KP	
Workload		120 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Klump, Georg Martin (module responsibility) • Mouritsen, Henrik (module responsibility)	
Prerequisites		English language skills, presentation skills	
Skills to be acquired in this module		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.	
Module contents		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.	
Literaturempfehlungen			
Links			
Language of instruction		English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Reference text		Module should be attended: At any time of the PhD work	
Examination	Prüfungszeiten		Type of examination
Final exam of module			at congresses: active participation with posterpresentation and/or talk at summer schools: active participation
Form of instruction	VA-Auswahl		
SWS			
Frequency	--		

olt233 - Didactics

Module label		Didactics	
Modulkürzel		olt233	
Credit points		6.0 KP	
Workload		180 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen			
Prerequisites			
Skills to be acquired in this module			
Module contents			
Literaturempfehlungen			
Links			
Languages of instruction			
Duration (semesters)		1 Semester	
Module frequency			
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			BE
Form of instruction	Seminar		
Frequency			

olt261 - Basics in distribution-free statistics

Module label		Basics in distribution-free statistics	
Modulkürzel		olt261	
Credit points		3.0 KP	
Workload		90 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen		• Klump, Georg Martin (module responsibility) • Langemann, Ulrike (Module counselling)	
Prerequisites			
Skills to be acquired in this module		Basics in distribution-free statistics	
Module contents		Basic concepts of distribution-free statistics are introduced to the PhD student. Includes exercises.	
Literaturempfehlungen			
Links			
Language of instruction		English	
Duration (semesters)		1 Semester	
Module frequency		halbjährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Active participation
Form of instruction	Seminar		
Frequency			

olt262 - Experimental design and variance analysis

Module label	Experimental design and variance analysis
Modulkürzel	olt262
Credit points	3.0 KP
Workload	90 h
Verwendbarkeit des Moduls	• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module
Zuständige Personen	• Colonius, Hans (module responsibility)
Prerequisites	
Skills to be acquired in this module	Students should: • understand the basic logic of statistical inference and experimental designs • and be able to correctly interpret empirical statistical results; • become familiar with the most common types of analysis of variance and experimental designs, • be able to develop an appropriate experimental design for a given research question, • and be able to correctly perform the statistical analyses of empirical data.
Module contents	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 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.
Literaturempfehlungen	
Links	
Language of instruction	English
Duration (semesters)	1 Semester
Module frequency	halbjährlich
Module capacity	unlimited

Examination	Prüfungszeiten	Type of examination
Final exam of module		Active participation

Form of instruction	Comment	SWS	Frequency	Workload of compulsory attendance
Lecture		2	WiSe	28
Seminar				
Tutorial		2	SoSe und WiSe	28
Präsenzzeit Modul insgesamt				56 h

olt263 - Numeric and computer Skills

Module label	Numeric and computer Skills	
Modulkürzel	olt263	
Credit points	3.0 KP	
Workload	90 h	
Verwendbarkeit des Moduls	• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen	• Hohmann, Volker (module responsibility)	
Prerequisites		
Skills to be acquired in this module	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.	
Module contents	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.	
Literaturempfehlungen		
Links		
Language of instruction	German	
Duration (semesters)	1 Semester	
Module frequency	halbjährlich	
Module capacity	unlimited	
Reference text	Language: English materials, including extensive script;, tutorials in English; lecture in German Module should be attended: At any time during the PhD project	
Examination	Prüfungszeiten	Type of examination
Final exam of module		Active participation
Form of instruction	VA-Auswahl	
SWS		
Frequency	--	

olt264 - Scientific publishing

Module label	Scientific publishing
Modulkürzel	olt264
Credit points	6.0 KP
Workload	180 h
Verwendbarkeit des Moduls	• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module
Zuständige Personen	• Thiel, Christiane Margarete (module responsibility) • Klump, Georg Martin (Module counselling) • Kollmeier, Birger (Module counselling) • van de Par, Steven (Module counselling)
Prerequisites	English language skills, PhD Studets should have data to publish.
Skills to be acquired in this module	Development of competences in scientific writing for publishing in international peer-reviewed scientific journal.
Module contents	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.
Literaturempfehlungen	
Links	
Language of instruction	English
Duration (semesters)	1 Semester
Module frequency	halbjährlich
Module capacity	unlimited
Reference text	Events of this module including dates and locations: According to agreement with lecturers

Examination	Prüfungszeiten	Type of examination
Final exam of module		skript to publish
Form of instruction	Seminar	
Frequency		

olt209 - Laboratory Animal Science

Module label		Laboratory Animal Science	
Modulkürzel		olt209	
Credit points		3.0 KP	
Workload		90 h	
Verwendbarkeit des Moduls		• Structured Doctoral Programme Neurosensory Science and Systems (Doctoral Programme) > Module	
Zuständige Personen			
Prerequisites			
Skills to be acquired in this module			
Module contents			
Literaturempfehlungen			
Links			
Language of instruction		English	
Duration (semesters)		1 Semester	
Module frequency		jährlich	
Module capacity		unlimited	
Examination	Prüfungszeiten		Type of examination
Final exam of module			Webbasierte schriftliche Prüfung und aktive Teilnahme am praktischen Teil des Moduls
Form of instruction	Seminar		
SWS	2		
Frequency	SoSe oder WiSe		