Regulations on the Content and Examinations of Doctoral Degree Programmes and Structured Doctoral Programmes of School V: School of Mathematics and Science and School VI: School of Medicine and Health Sciences in the Graduate School for Science, Medicine and Technology of the University of Oldenburg

– UNOFFICIAL VERSION –

Based on Official Notices (ON) 3/2009, ON 7/2010, ON 1/2013, ON 4/2014, ON 3/2016, ON 5/2016, ON 070/2017, ON 054/2018, ON 082/2019

On 11 April 2018, the Faculty Council of School V - Mathematics and Science and the Faculty Council of School VI - Medicine and Health Sciences of the University of Oldenburg adopted the following, seventh, amendment to the Regulations on the Content and Examinations of Doctoral Degree Programmes and Structured Doctoral Programmes of School V - Mathematics and Science and School VI - Medicine and Health Sciences in the Graduate School for Science, Medicine and Technology of the University of Oldenburg. On 3 July 2018, these Regulations were approved by the Presidential Board in accordance with Section 44 (1) Sentence 3 of the Lower Saxony University Act (NHG).

Contents

Preamble

The purpose of establishing a multidisciplinary Graduate School for Science, Medicine and Technology is to prepare the graduates of doctoral degree programmes and structured doctoral programmes, as well as Research Training Groups from various disciplines of School V - Mathematics and Science and School VI – Medicine and Health Sciences of the University of Oldenburg for professional practice by offering them a cross-disciplinary network. This is not only supposed to enhance their professional qualifications at an international level, but also to enable them to acquire other skills that will allow them to compete successfully in professional life. The doctoral degree programmes and structured doctoral programmes also include the creation of structures and offers that will help and encourage women to continue their careers in science.

Section 1
Scope of application

(1) These Regulations will govern the aims, content, trajectories and degrees of doctoral degree programmes and structured doctoral programmes of the Graduate School of Science, Medicine and Technology (currently Neurosensory Science and Research Systems, Molecular and Nanoscale Science, Environmental Sciences and Biodiversity, Renewable Energy, Mathematics and Fundamental Physics and Medicine and Health Sciences) on the basis of the associated Regulations on Special Conditions for Entrance and Admission. By a decision of the competent Faculty Councils, the scope of these Regulations can also be extended to further doctoral degree programmes and structured doctoral programmes.

(2) In this part, the Regulations first lay down general rules applicable to all doctoral degree programmes and structured doctoral programmes of the Graduate School.

(3) Furthermore, the specific annexes on the doctoral degree programmes and structured doctoral programmes will deal with special characteristics of each programme.

(4) The procedure for doctoral studies is governed by the Joint Doctoral Degree Regulations of School II - Computing Science, Business Administration, Economics and Law (for its Department of Computing Science), School V - Mathematics and Science and School VI - Medicine and Health Sciences.

Section 2
Learning objectives

The aim of doctoral studies that accompany the work of doctoral students on their thesis is to promote their advanced development in the disciplines and methods of the Graduate School of Science, Medicine and Technology and its fields of application. As recommended by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany, in their Framework for Qualification (KMK, 21 April 2005), the degree programmes and structured doctoral programmes offer advanced opportunities for doctoral students to enhance their qualifications in the area of Deeper and Broader Knowledge and to help them develop better skills in the acquisition of knowledge. The doctoral students learn to identify scientific questions on their own, to design and carry out projects, and to present the results of their research. They are expected to learn to apply and expand the relevant hypotheses and theories of the field of study. In addition, their capacity for critical analysis and the development and synthesis of new ideas is to be fostered. The interdisciplinary nature of the programmes is intended to ensure that doctoral students will understand the wider societal ramifications of their own scientific research as well as its potential risks. All elements of the programme should work together and be used in such a way as to support the early scientific independence of the doctoral students. The international nature of the scientific community requires the active command of at least one foreign language (in practice this is usually English). The doctoral students need to gain confidence in discussions on scientific topics with their professional colleagues, but also with laypersons. Success in their careers will depend on their capacity to think in a structured manner, driven by hypotheses, their communication and leadership skills and their ability to work effectively in international teams. The modules of the doctoral degree programmes and structured doctoral programmes will serve to achieve these goals.

Section 3
Purpose of the module examinations

(1) The module examinations are intended to ascertain whether the doctoral students have acquired the necessary sound knowledge and skills for the transition to professional practice, whether they have a clear understanding of the subject and the ability to successfully apply scientific knowledge in practice and whether they are capable of independently conducting scientific research work.

(2) The examinations in the doctoral degree programme or the structured doctoral programme verify whether students have indeed acquired the desired additional qualifications that go beyond the required doctoral thesis. The requirements for the examinations ensure the standard of education with regard to the standard period of study, as well as the state of the art and the requirements of professional practice.

Section 4
Certificate of the doctoral degree programme and the structured doctoral programme, award of the university degree

(1) The School responsible for the doctoral degree programme or the structured doctoral programme will award a certificate (Annexes 7 and 8) in addition to the doctoral degree certificate. This acknowledges the results that the student achieved in examinations and the successful completion of the doctoral degree programme or structured doctoral programme. The degree programme or the structured doctoral programme is completed if the requirements of Section 19 have been fulfilled.

(2) After a positive final assessment of the doctorate by the responsible Doctorate Committee, the award of the degree of Doctor of Natural Sciences (Doctor rerum naturalium, abbreviated: Dr rer. nat.) or of a Doctor of Engineering (abbreviated: Dr ing.) or of a Doctor of Philosophy (Doctor philosophiae, abbreviated: Dr phil.) is based on the currently valid doctoral regulations of School V - Mathematics and Science, School VI - Medicine and Health Sciences, or other Schools of the University of Oldenburg. The Doctoral Degree Regulations also regulate the issuing of the doctoral certificate.

Section 5
Duration, scope and structure of doctoral studies

(1) The standard period of study is six semesters (three years of study). The degree programme comprises a total of 30 ECTS. The Admissions Committee may require doctoral students who want to enter a new area of specialization in their doctoral studies to do supplementary course work to learn the basics of the doctoral degree programme or the structured doctoral programme. The

supplementary subjects will not exceed a maximum of 30 ECTS and will be determined by the Admissions Committee.

(2) The modules on offer in the doctoral degree studies comprise three areas:

a) **Broader and Deeper Knowledge**
The main focus in this area is the acquisition of both general and specific knowledge in a particular field required for the doctoral thesis. This involves regular participation in colloquia, conferences and summer schools. In lectures of the University of Oldenburg and other universities and institutions that focus specifically on the subject area concerned (e.g. workshops for learning certain techniques), students achieve a systematic understanding of the research field and the relevant methods, in line with the qualification framework for German university degrees. In laboratory visits abroad and by attending international conferences, the doctoral students establish international contacts and thus expand their professional network. The tables in the specific annexes on the doctoral degree programmes and structured doctoral programmes provide an overview of the corresponding modules in the respective doctoral degree programmes. Modules totalling at least **12 ECTS** must be taken from the area of Broader and Deeper Knowledge.

b) **Communication and Knowledge Transfer**
The second area is about the acquisition of communication and teaching skills, which includes teaching at a university. The doctoral students acquire and apply knowledge and experience regarding the transfer of knowledge. The teaching activities comprise lectures, discussions and exercises on, for instance, advanced presentation techniques, scientific publishing, German and English as scientific languages and teaching methods in higher education. Above all, the modules in this area foster the communicative competences mentioned in the qualification framework for German university degrees at the PhD level. The tables in the specific annexes on the doctoral degree programmes and structured doctoral programmes provide an overview of corresponding modules in the various doctoral degree programmes and structured doctoral programmes. Students must collect at least **6 ECTS** in modules from the area of Communication and Knowledge Transfer.

c**) Interdisciplinary Competences**
The third area includes, especially, general skills (not specific to the field of studies) that support the development of the candidates' scientific careers. These include, for example, the drawing up of structured research plans, the drafting of grant applications (e.g. for scholarships) and exercises in scientific publishing. Using a manuscript of their own as working material, students learn about publishing in internationally reviewed journals. Other modules in this area include training for job applications and the acquisition of other soft skills such as discussion, moderation and leadership, all of which are of paramount importance to career development. The listed modules strengthen the skills of doctoral candidates in the systemic and instrumental competences mentioned in the qualification framework for German university degrees at the doctoral level. The tables in the specific annexes on the doctoral degree programmes and structured doctoral programmes provide an overview of the corresponding modules in the respective doctoral degree programmes and structured doctoral programmes. Candidates must take modules with a total of at least **six ECTS** from the area of Interdisciplinary Competences.

(3) Study abroad. In order to best prepare for the international job market, candidates must get to know diverse research cultures and traditions. Therefore, at least one long or several shorter project-related research stays in laboratories outside the University of Oldenburg, preferably abroad, are recommended. A stay at a laboratory should be no shorter than three weeks.

(4) Thesis Committee: The substantive supervision of the doctoral students is the responsibility of a support body called the Thesis Committee. Pursuant to Section 9 of the Joint Doctoral Degree Regulations of School II - Computing Science, Business Administration, Economics and Law (for its Department of Computing Science), School V - Mathematics and Science and School VI - Medicine and Health Sciences, the members of the Thesis Committee are the principal supervisor and two other members, of whom at least one must be an external scientist. Usually, one of the members is the second assessor, in accordance with Section 11 of the doctoral degree regulations. Normally, the other member should have a doctorate. With the consent of the doctoral student, a fourth person can be added to the Thesis Committee. The composition of this body is agreed by the main supervisor and the doctoral student. Pursuant to Section 5 (5), the main supervisor will conclude a Supervision Agreement with the doctoral student as part of a doctoral degree programme or a structured doctoral programme.

(5) Supervision agreement: A supervision agreement aims to make the relationship between doctoral students and their supervisors transparent in terms of content and time. Employment and scholarship contracts remain unaffected by a Supervision Agreement. The planning and implementation of the doctoral project is to be designed independently by the structured cooperation between supervisors and doctoral students, in such a way that the high-quality project is completed within a

reasonable period. A Supervision Agreement specifies, at the minimum, the parties involved, the subject or working title of the thesis, a time and work schedule, as well as the rights and obligations of the doctoral student and the supervisor. Arrangements should also be put in place to ensure that the doctoral student is integrated into a working group or research network, that an appropriately equipped workplace is available, that the principles of good scientific practice are followed and that the scientific work can be reconciled with family life.

Section 6
Examining Board

(1) A separate Examining Board will be established for each doctoral degree programme and structured doctoral programme. It will be responsible for conducting examinations and performing the tasks specified in these Regulations. The Examining Board will consist of members of School V or School VI of the University of Oldenburg. It will have five members, three from the professors' group, one lecturer from the academic staff group who is teaching primarily or full-time, and one member from the students' group of the doctoral degree programme/structured doctoral programme. The members of the Examining Board and their permanent deputies will be elected by the respective group representatives in the Faculty Council of School V and School VI. The chair and vice-chair are elected by the Examination Committee from among its members. The chair must be a member of the group of professors. The member from the students' group will not attend meetings that deal with assessment or the award of credits for examinations and other accomplishments.

(2) The Examining Board will ensure that the examinations are conducted. It will also ensure compliance with the provisions of the Lower Saxony University Act (NHG) and with these Regulations. The Examining Board is supported by the Academic Examinations Office of the University of Oldenburg, which also keeps the examination records. It will report regularly to School V - Mathematics and Science and School VI - Medicine and Health Sciences on the development of exams and periods of study. In this regard, special attention must be paid to compliance with the standard period of study and assessment deadlines, and to the distribution of individual and overall grades. (3) The Examining Board will decide by a majority of valid votes cast. Abstentions are considered votes not cast. In the case of a tie, the vote of the chair will decide the matter. The Examining Board will have a quorum if three members, including two members from the group of professors, are present.

(4) The term of office of the members of the Examining Board is two years, that of the student member is one year.

(5) The general internal rules of procedure of the University of Oldenburg apply. A record is to be kept of the meetings of the Examining Board. The main subjects of discussion and the decisions of the Examining Board are to be recorded.

(6) The Examining Board may delegate powers to the chair and vice-chair. The chair will prepare and carry out the decisions of the Examining Board. The chair will regularly report to the Examining Board on this work.

(7) Examining Board meetings are not public. Members of the Examining Board and their deputies are bound to secrecy concerning their office. If they are not in public service, the chair must bind them to secrecy.

(8) The Examining Board will appropriately inform the doctoral students in writing of the essential examination Regulations that apply to them. (9) The Examining Board may decide that decisions and other measures taken in accordance with these Regulations, in particular concerning registration and examination dates, assessment deadlines and examination results, shall be published within the University. In doing so, data protection regulations must be observed.

Section 7
Examiners

(1) The module examinations will be conducted by members of the University of Oldenburg or another university who are authorized to independently teach in the field of studies that is to be examined, or a part of it. The Examining Board will verify that the examiners meet this requirement.

(2) Section 6 (8) applies accordingly to the examiners.

(3) The examination of a module should be conducted by teachers of the module who are authorized examiners according to (1). The module examinations are usually graded by one examiner.

(4) The examiners are appointed by the Faculty Council of School V - Mathematics and Science or School VI - Medicine and Health Sciences.

Section 8
Credits for course work and examinations

(1) Upon request, credits obtained for course work, work experience and passed examinations in comparable degree programmes at a university in the Federal Republic of Germany, the European Higher Education Area or beyond will be transferred, provided that there are no significant differences regarding the acquired competences. This needs to be verified bearing in mind the

purpose of recognition and the wider context. The level, scope, quality, profile and learning outcomes must all be considered. If there is a significant difference, the burden of evidence is on the University. The documents required for this investigation will be submitted by the doctoral student in German or English.

In order to clarify the factual and legal situation, the Central Office for Foreign Education (ZAB) may be consulted. Rules for credit transfer based on agreements with foreign universities (cooperation agreements, university partnerships) will remain unaffected.

(2) Non-academic accomplishments (e.g. work experience or exam certificates for vocational training and further education) may be accepted for credit transfer if they are equivalent and have the required scholarly foundations. If there is insufficient evidence, a knowledge test may be required.

(3) If the requirements of (1) and (2) are met, the doctoral student is legally entitled to a credit transfer. At the request of the doctoral candidate, the Examining Board will decide on the application.

(4) Credit transfer as in (2) is possible up to a maximum of 15 ECTS.

(5) When transferring credit for course and examination work, the ECTS credits will be recorded as 'passed', on the condition that the credit point systems are comparable.

Section 9
Admission to modules and module examinations

(1) Modules can be attended by doctoral students enrolled in the associated doctoral degree programme or structured doctoral programme of the Graduate School, as well as doctoral students in doctoral degree programmes and structured doctoral programmes of other universities that have entered into a cooperation agreement with the University of Oldenburg. Anyone who enrols in a module will also be admitted to all examinations related to this module.

(2) Students will register for a module examination in writing and shortly before the examination is held.

(3) The student's performance in each module will be graded. Examinations focus on the module and accompany the programme concerned. They should be completed at the end of the semester in which the last teaching event of the module took place.

Section 10
Types of module examinations

(1) The Type/number of module examinations and assignments carried out for module examinations will be determined by the examiners within the scope of the options described in Section 5 and are communicated to the PhD students in the module descriptions.

(2) Module examinations in the form of group work by two persons should in principle be permitted if conducted in an appropriate manner. The work by each individual doctoral student to be assessed must meet the requirements for the examination. It must also be clearly distinguishable as individual examination work on the basis of sections, page numbers or other objective criteria and must allow individual assessment.

(3) By its course offerings, the School will ensure that the module examinations can be taken.

(4) If a student credibly argues that they are unable to sit for module examinations in whole or in part in the required manner due to a prolonged or permanent physical complaint or disability, or due to the need to look after a child living in their household, the Examining Board may allow the student to sit for equivalent module examinations in another form. The student may be required to show a medical certificate for this purpose.

Section 11
Absence, withdrawal, fraud and violation of Regulations

(1) A doctoral student will be deemed to have failed an examination or examination assignment if they, 1. do not attend the examination and fail to provide a valid excuse, or 2. withdraw from an examination after it has begun.

(2) The reasons offered for withdrawal or absence must be reported without delay, convincingly and in writing, to the Examining Board. Otherwise, the student's exam performance will be graded 'failed'. An exmatriculation and a leave of absence are not in themselves valid excuses. In the case of illness, a medical certificate must be presented, unless the illness is manifest. The Examining Board may require the submission of a certificate by a public health officer. If the excuse is accepted, a resit will be scheduled, usually at the next regular exam date. In this case, examination assignments already submitted are to be credited.

(3) If the doctoral student attempts to influence the outcome of an examination performance by fraud or the use of unauthorized aids, they will be deemed to have failed the examination. Any person who is guilty of having breached the exam regulations may be barred from continuing the part of the examination concerned. In this case, the student shall be deemed to have failed that part of the examination. Decisions as in Sentences 1

and 2 shall be taken by the Examining Board after hearing the doctoral student. Pending the decision of the Examining Board, the doctoral student shall continue the examination, unless the supervisor of the examination decides that the provisional exclusion of the doctoral student is essential for the proper continuation of the examination. In particularly serious cases of fraud, the Examining Board may exclude the doctoral student from continuing the exam procedure and carrying out any more exam assignment.

(4) If the deadline for submission of an exam assignment is not met, and no valid excuse is given, that assignment will be given a failing grade. Paragraph 2, Sentences 1 to 4 will apply accordingly. If there are valid reasons for the student's inability to meet a submission deadline, the Examining Board will decide whether to extend the deadline for submission of the assignment accordingly. In doing so, it will give due consideration to the principle of equal opportunity and the precedence of scholarly accomplishment over compliance with rules of procedure.

Section 12
Assessment of examinations

(1) Usually, module examinations are not graded in the conventional manner, but graded 'pass' or 'fail'. The examiners must carry out the assessment within three weeks and forward the results to the responsible academic examination office.

(2) If a module exam is graded, the following scale should be used:

1 = sehr gut, an outstanding performance,

2 = gut, a performance significantly above average,

3 = befriedigend, an average, satisfactory performance,

4 = ausreichend, a sufficient performance with flaws,

5 = nicht bestanden, an inadequate performance with considerable flaws (fail).

The grades can be raised or lowered by 0.3 for more differentiated marking, but the grades 0.7, 4.3, 4.7 and 5.3 are excluded. A student is considered to have passed a graded module examination if they were awarded the grade ausreichend or higher.

(3) The grades of graded module examinations are not considered in the assessment under (4).

(4) The thesis is graded according to the current doctoral regulations of the Schools of the University of Oldenburg.

Section 13
Resits of module examinations

(1) Students have two opportunities to retake module examinations that they have failed. If the student's performance in the third examination is graded 'failed', or if it is deemed to have been graded 'failed', and a resit option according to (2) is no longer available, the student will be deemed to have definitively failed the examination.

(2) A resit exam is conducted by at least one examiner and one co-examiner, as an individual examination. The examiner must have at least a Dr rer. nat., Dr ing. or Dr phil. or a comparable or higher degree. The main topics of the examination, the assessment of the exam performance and the main considerations of the assessment decision shall be recorded in a report to be signed by the examiner and the co-examiner. Resits of examinations and repetitions of module exam assignments are to be held within an appropriate period. They should be held at the latest within one academic year. At the latest four years after enrolment in the doctoral degree programme or the structured doctoral programme, students should have passed all module examinations.

(3) If the required modules or credit points have not been attained before submission of the thesis, this will have no consequences for the continuation of the doctorate according to the doctoral regulations of the respective School. The title Doktor der Naturwissenschaften (Dr rer. nat.), Doktor der Ingenieurwissenschaft (Dr ing.) or Doktor der Philosophie of the University of Oldenburg can be awarded without the student having passed a completed doctoral degree programme or a completed structured doctoral programme. However, in such cases no certificate will be issued for the advanced qualifications acquired in the doctoral degree programme and the structured doctoral programme.

Section 14
Diplomas and certificates

(1) The certificate for the advanced qualifications acquired through the doctoral degree programme or the structured doctoral programme is awarded with the PhD certificate. Its date is the day on which the thesis defence took place.

(2) If students leave the University or change their degree programme or structured doctoral programme, a certificate will be issued on request, listing the examination results and, if applicable, their grades. For the purpose of job applications, a provisional certificate of the examinations may be issued upon request.

Section 15
Invalidity of examination results

(1) If fraud was committed during an examination, and this fact becomes known only after the certificate has

been issued, the Examining Board may, after the fact, correct the grades for those examinations in which the doctoral student committed fraud and declare that the student in question is deemed to have failed the examination in whole or in part.

(2) If the requirements for admission to an examination were not met, but this did not involve any fraud on the part of the doctoral student, and this fact becomes known only after the certificate has been issued, this flaw will be remedied by the passing of the examination. If the admission was deliberately obtained on false grounds, the Examining Board will decide on the withdrawal of unlawful administrative documents in compliance with the law.

(3) Before a decision is taken, the doctoral student must be given the opportunity to discuss the matter with the Examining Board.

(4) The incorrect examination certificate must be withdrawn and replaced by a proper certificate or a declaration according to Section 15. With the incorrect examination certificate, the diploma must also be withdrawn if the student was declared to have failed the examination due to fraud. A decision under (1) and (2) Sentence 2 is only possible during a period of five years from the date of the examination certificate.

Section 16
Access to examination records

(1) Upon request, the doctoral student will be informed of partial results before completing an examination.

(2) Upon completion of an examination, the doctoral student will, at the doctoral student's request, be granted access to their own written examination work, the related comments of the examiners and the minutes of the examination.

(3) The application must be submitted to the chair of the Examining Board no later than one year after the result of the examination has been announced. The chair will determine the place and time of the inspection. The Examining Board may delegate duties under Sentence 1 and 2 to the examiners.

Section 17
University-wide announcements by the Examining Board

(1) The Examining Board will publish these Regulations within the University and inform the doctoral students in an appropriate manner of the examination provisions that apply to them.

(2) The Examining Board may decide that the decisions and other measures taken in accordance with these Regulations, in particular admission to the examination, refusal of admission, registration and examination dates and deadlines, as well as examination results, are to be published within the University in the customary manner. In doing so, data protection regulations must be observed. This decision is to be published within the University in the customary manner.

Section 18
Decisions on exceptional cases, appeal procedure

(1) Rejections and other administrative actions with a negative impact taken in accordance with these regulations shall be substantiated in writing, shall provide information on options for legal remedy and shall be announced in accordance with Section 41 of the Administrative Procedures Act (VwVfG). In accordance with Sections 68 ff. of the Administrative Court Regulations (VwGO), within one month after receipt of notification, the student may appeal to the Examining Board against an exam decision based on an assessment of the student's performance.

(2) The Examining Board will decide on the appeal.

(3) The Examining Board shall forward the appeal to the examiner for review and comments. If the examiner modifies the assessment in accordance with the objection, the Examining Board will have definitively dealt with the objection. Otherwise, the Examining Board will examine the decision on the basis of the comments of the examiner, paying particular attention to the following matters: 1. whether the examination procedure was carried out properly, 2. whether the assessment was based on incorrect information, 3. whether common assessment principles were observed, 4. whether an acceptable answer, reasonably substantiated by weighty arguments, was judged incorrect, 5. whether the examiner was guided by extraneous considerations. The same applies if the objection is directed against an assessment by several examiners.

(4) At the request of the doctoral student, the Examining Board will appoint an assessor for the appeal procedure. This assessor must possess the qualifications stated in Section 7 (1). The doctoral student and the assessor must be given the opportunity to comment before the decision mentioned in (2) and (6) is taken.

(5) If the Examining Board confirms the error of the assessment in accordance with (3), but the examiner does not change their decision accordingly, the exam work will be reassessed by other examiners who were not previously involved in the examination, or the oral examination will repeated.

(6) The Examining Board shall rule on the appeal within one month of the receipt of the grounds of the objection. If the appeal is not upheld, the refusal must be substantiated in writing and options for legal remedy must be indicated.

(7) The appeal may not lead to a worsening of the examination grade.

Section 19
Completion of doctoral degree programmes and structured doctoral programmes

The doctoral degree programme or the structured doctoral programme is completed when modules with a total of at least 30 ECTS in the ratio specified in Section 5 (2) have been passed successfully, any requirements of the Admissions Committee have been met and, with the submission of a thesis to a School of the University, the doctoral degree procedure has been opened.

Section 20
Admission to the doctorate

The admission to the doctorate is governed by the doctoral degree regulations of the School at which admission is requested.

Section 21
Effective date

These Regulations enter into force after their approval by the Presidential Board of the University of Oldenburg on the day after their publication in the Official Notices of the University of Oldenburg.

Annexes to the Regulations:

Annex 1: Special features of the doctoral degree programme in Neurosensory Science and Systems

Annex 2: Special features of the doctoral degree programme in Molecular and Nanoscale Science

Annex 3: Special features of the doctoral degree programme in Environmental Sciences and Biodiversity

Annex 4: Special features of the structured doctoral programme in Renewable Energy

Annex 5: Special features of the structured doctoral programme in Mathematics and Fundamental Physics

Annex 6: Special features of the structured doctoral programme in Medicine and Health Sciences

Annex 7: Certificate of Doctoral Studies in German

Annex 8: Certificate of Doctoral Studies in English

Annex 1: Special features of the doctoral degree programme in Neurosensory Science and Systems

Re: Section 5 (1)

Supplementary information for doctoral candidates in the Function and Pathophysiology of the Auditory System (Hören = Hearing) doctoral programme:

One-week laboratory rotations are offered on a regular basis. In these, students familiarize themselves with and learn to apply the doctoral programme's spectrum of methods. A menu of offerings is assembled for the participants of the doctoral programme, from which they can choose. It is continually updated on the basis of current research on methodology by the working groups involved. In order to collect the required number of ECTS, students are required to take two compulsory modules and, usually, three elective modules or five seminars or lab rotations, as well as participation in at least one summer school.

Supplementary information for doctoral candidates in the doctoral programme, Auditory Sciences (Joint Research Academy, JRA, Cluster of Excellence Hearing4all):

A menu of course offerings at three locations will be assembled, from which participants of the doctoral programme in Auditory Sciences can choose. The locations are the Joint Research Academy at the University of Oldenburg, the Hannover Medical School and Leibniz University, Hannover.

In order to achieve the required total number of credits for the doctoral degree programme, students are required to complete the three compulsory courses of the doctoral degree programme in Neurosensory Science, and, usually, at least four Optional compulsory courses of the doctoral programme in Auditory Sciences (JRA Curriculum). In doing so, they can choose from the modules offered by the doctoral degree programme and from those of the doctoral programme.

Supplementary information for students in the doctoral programme in Signals and Cognition:

A menu of course offerings will be assembled for the participants in the doctoral programme, from which they can choose. In order to collect the total required number of credits, students are required to complete the compulsory SigCog courses (SigCog Curriculum) offered by the University of Oldenburg and the Jade University of Applied Sciences, as well as the compulsory and, as a rule, Optional compulsory courses.

Note on the Type/number of module examinations

* Active participation means regular, active and documented participation in courses (workshops, internships, exercises, seminars, excursions). This includes, for example, the regular submission of exercises, the preparation of solutions for exercise assignments, the logging of the various experiments and practical work sessions, the presentation and discussion of seminar papers or presentations of tasks or contents in the course in the form of short reports. These requirements are specified in the module descriptions.

Table 1) Modules in the area of Broader and Deeper Knowledge

Module name	Code	Type	ECTS	Type/number of module examinations
olt201 Summer school/conference	A-1	Optional compulsory	2-6	Active participation (summer school) or lecture and/or poster presentation (conference)
olt202 Lab visit abroad	A-2	Optional compulsory	2 - 6	Oral report and/or minutes
olt203 Special techniques in Neurosensory Science and Systems	A-3	Optional compulsory	3-12	Active participation
olt204 Medical Basics of Neurosensory Science and Systems	A-4	Optional compulsory	3-6	Active participation
Olt 209 Laboratory Animal Science		Optional compulsory	3	Web-based written exam and active participation in the practical part of the module
olt205 Data analysis using Matlab	A-5	Optional compulsory	3	Active participation
olt206 Journal club	A-6	Optional compulsory	3	Active participation and seminar presentation
olt207 Colloquium "Neurosensory Science and Systems"	A-7	Compulsory	3	Active participation and/or seminar presentation
olt208 Additional module: Specific knowledge	A-8	Optional compulsory	3-6	Module examination depending on the module

Upon request, the person responsible for the degree programme can acknowledge additional work in the area of Broader and Deeper Knowledge in module olt208.

Table 2) Modules in the area of Communication and Knowledge Transfer

Module name	Code	Type	ECTS	Type/number of module examinations
olt231 Advanced presentation techniques	B-1	Optional compulsory	3	Active participation and two presentations
olt232 Summer school/conference	B-2	Compulsory	2-4	Active participation (summer school) or speech and/or poster presentation (conference)
olt133 Language courses	B-3	Optional compulsory	1-6	Active participation
olt233 Didactics	B-4	Optional compulsory	1-6	Active participation, active teaching, if this has not already been credited in the framework of an employment contract
olt134 Additional module: Communication	B-5	Optional compulsory	1-6	Module examination depending on the module

On request, the person responsible for the degree programme can acknowledge further achievements in the area of Communication and Knowledge Transfer in the module olt134.

Table 3) Modules in the area of Interdisciplinary Competences

Module name	Code	Type	ECTS	Type/number of module examinations
olt261 Basics of distribution-free statistics	C-1	Optional compulsory	3	Active participation
olt262 Experimental design and variance analysis	C-2	Optional compulsory	3	Active participation
olt263 Numeric and computer skills	C-3	Optional compul-sory	3	Active participation
olt264 Scientific publishing	C-4	Compulsory	6	Graded manuscript or active participation in a workshop **and** published article
olt161 Transferable skills/Scientific career	C-5	Optional compulsory	1 - 9	Active participation
olt164 Mentoring	C-6	Optional compulsory	6	Active participation
olt165 Additional module: Transferable skills	C-7	Optional compulsory	1- 6	Module examination depending on the mod-ule

The person responsible for the degree programme can, on request, acknowledge further accomplishments in the area of Interdisciplinary Competences in the module olt165.

Re: Section 6 Examining Board

Re: (1): The Examining Board is composed of members of the School V - Mathematics and Science and/or School VI - Medicine and Health Sciences of the University of Oldenburg and the Research Centre for Neurosensory Sciences.

Re: (2): The Examining Board reports to School V, School VI and the Research Centre for Neurosensory Sciences.

Annex 2: Special features of the doctoral degree programme in Molecular and Nanoscale Science

Re: Section 5 (1)

In addition to the general qualification objectives, the doctoral students should acquire the following capacities and qualifications:

- Graduates of the degree programme have a systematic understanding of interfaces, the preparation especially of functional interfaces, even within nanoscale molecular interfaces and materials with controllable and switchable properties, their use in technical applications such as energy conversion, catalysis and photonics, including biological and biomimetic interfaces. They are familiar with relevant methods and have the skills to apply them independently. In addition, they have a comprehensive knowledge of the relevant literature.
- The graduates have an overview of the neighbouring disciplines.
- They can conceptually develop, design and implement a research project.
- As part of their doctoral work, they have expanded the boundaries of knowledge through a substantial research contribution that largely meets the standards of national and international peer-reviewed publications and goes significantly beyond the reproduction of what is already known.
- The graduates are capable of critical analysis, evaluation and synthesis of new and complex ideas.
- The graduates have the appropriate professional and interdisciplinary qualifications to enable them to work inside and outside the university.
- The graduates can deliberately and actively foster the social, scientific and technical advancement of the knowledge society.
- The graduates can assess the implications of their research results for society.
- The graduates can communicate about their field of work and its outcomes in their own narrow scientific environment, in the wider scientific community, and in society at large.

The modules offered in the degree programme serve to achieve these goals. They include socially, ecologically and economically relevant aspects of interfaces and the materials and applications that are based on these aspects, as well as interdisciplinary teaching contents. Other aspects of interfaces explored at the Centre of Interface Science (CIS) and cooperating institutions may be included in the degree programme.

Note on the Type/number of module examinations

* Active participation means regular, active and documented participation in courses (workshops, internships, exercises, seminars, excursions). This includes, for example, the regular submission of exercises, the preparation of solutions for exercise assignments, the logging of the various experiments and practical work sessions, the presentation and discussion of seminar papers or presentations of tasks or contents in the course in the form of short reports. These requirements are specified in the module descriptions.

Table 1): Modules in the area of Broader and Deeper Knowledge

Module name	Code	Type	ECTS	Type/number of module examinations
olt301 Surfaces and nanomaterials	A-1-1-	Optional compulsory	3	Oral examination, max. 45 mins.
olt302 Integrated chemical systems	A-1-2	Optional compulsory	3	Oral examination, max. 30 mins.
olt303 Art of synthesis	A-1-3	Optional compulsory	6	Oral presentations with audiovisual aids, discussion, minutes
olt304 Practice of synthesis (iSynthesis)	A-1-4	Optional compulsory	6	Oral presentations with audiovisual aids, discussion, minutes
olt306 Biological membranes and cellular signalling	A-1-6	Optional compulsory	3	Presentation in the seminar and active participation
olt307 Many-body theory	A-1-7	Optional compulsory	6	written examination (2 hours) or 30-minute oral examination
olt308 Quantum solar energy conversion	A-1-8	Optional compulsory	3	Oral examination, max. 45 mins.
olt309 Radiation propagation in small-scale structured matter	A-1-9	Optional compulsory	3	Oral examination, max. 45 mins.
olt310 Molecular reaction dynamics	A-1-10	Optional compulsory	6	written examination (2 hours) or 30-minute oral examination
olt311 Introduction to quantum chemistry	A-1-11	Optional compulsory	3	written examination (2 hours) or 30-minute oral examination
olt312 Micro-robotics II	A-1-12	Optional compulsory	6	Active participation, oral examination, exercises
olt313 Fundamentals of nanostructured matter	A-1-13	Optional compulsory	3	Oral examination, max. 30 mins.
olt314 Applied nanotechnology	A-1-14	Optional compulsory	2	Presentation in the seminar and active participation
olt315 Laser physics	A-1-15	Optional compulsory	2	Oral examination, max. 30 mins.
olt316 Ultrafast optics and spectroscopy	A-1-16	Optional compulsory	3	Oral examination, max. 30 mins.
olt317 Modern techniques of optics and spectroscopy	A-1-17	Optional compulsory	3	Oral examination, max. 30 mins.
olt318 Synthesis and characterization of catalysts	A-1-18	Optional compulsory	3	Oral examination, max. 30 mins.
olt319 Special topics of Interface Science	A-2	Optional compulsory	1-9	Depending on the presentation, oral exam max. 45 mins., written exam max. 135 mins., written report and test logs

Module name	Code	Type	ECTS	Type/number of module examinations
olt320 Colloquia series of CIS/GdCh/Chemistry /Physics	A-3	Compulsory	3	Participation in 30 events
olt321 Aspects of modern inorganic chemistry	A-4-1	Optional compulsory	3	Seminar lecture, elaborations, participation in 14 events
olt322 Modern electrochemistry	A-4-2	Optional compulsory	1-2	Active participation and seminar lecture in mother tongue or foreign language
olt323 Retrosynthesis and synthesis planning (iSynthesis)	A-4-3	Optional compulsory	3	Evaluation of exercises, oral lectures with audio-visuals and discussion
olt324 Temporary embedding in other working groups	A-5	Optional compulsory	2-6	Written report
olt325 Introduction to new working area	A-6	Optional compulsory	6-24	Module examination depending on the module
olt326 Temporary embedding in enterprises outside the university	A-7	Optional compulsory	2-6	Written report
olt327 Additional module: Specific knowledge	A-8	Optional compulsory	3-6	Module examination depending on the module
olt328 Modern aspects of organic chemistry	A-4-4	Optional compulsory	3	Evaluation of speeches and exercises
olt329 Modern theoretical chemistry	A-4-5	Optional compulsory	2	Presentation (ungraded)
olt330 Modern aspects of industrial chemistry	A-4-6	Optional compulsory	2	Presentation (ungraded)

In the modules olt319, olt326, olt326 and olt327, credit can be awarded for company courses, summer courses of other graduate schools and summer courses in the framework of European education and networking initiatives. Their acknowledgement in the framework of the doctoral degree programme will depend on the duration of the courses and proof of success.

Upon request, the person responsible for the degree programme can acknowledge additional work from the area of Broader and Deeper Knowledge in module olt327.

Table 2) Modules in the area of Communication and Knowledge Transfer

Module name	Code	Type	ECTS	Type/number of module examinations
olt331 Conference	B-1	Optional compulsory	1-10	Talk or poster presentation
olt332 Scientific publishing	B-2	Optional compulsory	1-6	Scientific article
olt333 Special topics in communication and the imparting of knowledge	B-3	Optional compulsory	6-10	Depending on the module
olt334 Motivation and imparting of knowledge	B-4	Optional compulsory	1-12	Written report
olt231 Advanced presentation techniques		Optional compulsory	3	Active participation and two presentations
olt133 Language courses		Optional compulsory	3-6	Active participation
olt335 Additional module: Communication	B-5	Optional compulsory	0.5 - 6	Module examination depending on the module

On request, the person responsible for the degree programme can acknowledge further achievements in the area of Communication and Knowledge Transfer in the module olt335.

Table 3) Modules in the area of Interdisciplinary Competences

Module name	Code	Type	ECTS	Type/number of module examinations
olt161 Transferable skills/Scientific career	C-1	Optional compulsory	0.5 - 12	Module examination depending on the module
olt162 Foundation of an enterprise	C-2	Optional compulsory	2	Written exam 90 min or creation of a business plan
olt164 Mentoring	C-3	Optional compulsory	6	Active participation
olt165 Additional module: Transferable skills	C-4	Optional compulsory	0.5 - 6	Module examination depending on the module

The person responsible for the degree programme can, on request, acknowledge further accomplishments in the area of Interdisciplinary Competences in the module olt165.

Re: Section 6 Examining Board:

Re: (1): The Examining Board is composed of members of the School V - Mathematics and Science of the University of Oldenburg and the Centre of Interface Science.

Annex 3: Special features of the doctoral degree programme in Environmental Sciences and Biodiversity

Note on the Type/number of module examinations

* Active participation means regular, active and documented participation in courses (workshops, internships, exercises, seminars, excursions). This includes, for example, the regular submission of exercises, the preparation of solutions for exercise assignments, the logging of the various experiments and practical work sessions, the presentation and discussion of seminar papers or presentations of tasks or contents in the course in the form of short reports. These requirements are specified in the module descriptions.

Table 1): Modules in the area of Broader and Deeper Knowledge

At least one module has to be completed from the A-1 and A-2 modules.

Module name	Code	Type	ECTS	Type/number of module examinations
olt401 Summer school/conference/workshop	A-1	Compulsory	3-9	Oral report and/or minutes and/or discussion of the poster and/or evaluation of a trial presentation
olt402 Lab visit abroad/field work	A-2	Optional compulsory	6-9	Oral or written report
olt403 Special techniques in Environmental Sciences and Biodiversity	A-3	Optional compulsory	3-9	Oral or written report or written exam
olt404 International colloquium	A-4	Optional compulsory	3	Active participation and discussion contributions
olt405 Subject-related colloquium	A-5	Compulsory	3	Active participation and/or seminar presentation
olt406 Additional module: Subject-specific knowledge	A-6	Optional compulsory	3-6	Module examination depending on the module
olt408 Thesis Committee meetings	A-7	Compulsory	3-4	Minimum of two Thesis Committee meetings per year, incl. minutes

Upon request, the person responsible for the degree programme can acknowledge additional work from the area of Broader and Deeper Knowledge in module olt406.

Table 2): Modules in the area of Communication and Knowledge Transfer

Module name	Code	Type	ECTS	Type/number of module examinations
olt431 Didactics/supervision of students	B-1	Optional compulsory	3-6	Development of an internship experiment and/or a didactic concept in the respective subject area and/or report and/or supervision of doctoral students
olt432 PhD forum	B-2	Compulsory	3	Organization and active participation and seminar presentation
olt131 Advanced presentation techniques	B-3	Optional compulsory	3	Oral report and/or evaluation of a poster and/or evaluation of a trial
olt133 Language courses	B-4	Optional compulsory	2-6	Active participation
olt134 Additional module: Communication	B-5	Optional compulsory	0.5 - 6	Module examination depending on the module

On request, the person responsible for the degree programme can acknowledge further achievements in the area of Communication and Knowledge Transfer in the module olt134.

Table 3) Modules in the area of Interdisciplinary Competences

Module name	Code	Type	ECTS	Type/number of module examinations
olt461 Scientific publishing	C-1	Optional compulsory	2-6	Peer-reviewed manuscript (submitted to international scientific journal)
olt161 Transferable skills/Scientific career	C-2	Optional compulsory	3-9	Active participation
olt463 Good scientific practice	C-3	Compulsory	0.5	Active participation
olt464 Scientific writing	C-4	Compulsory	1-2	Drafting a publication
olt163 Fundraising /project management	C-5	Optional compulsory	2	Drafting a research proposal
olt164 Mentoring	C-6	Optional compulsory	6	Active participation
olt165 Additional module: Transferable skills	C-7	Optional compulsory	0.5 - 6	Module examination depending on the module

The person responsible for the degree programme can, on request, acknowledge further accomplishments in the area of Interdisciplinary Competences in the module olt165.

Re: Section 6 Examining Board

Re: (2): The Examining Board reports to School V - Mathematics and Science of the University of Oldenburg and to the institutes with a focus on environmental sciences. The Examining Board is composed of members of School V and other scientific institutions of the University with an environmental focus.

Annex 4: Special features of the structured doctoral programme in Renewable Energy

Re: Section 5 (1)

The structured doctoral programme in Renewable Energy is equivalent to 30 ECTS.
At the request of the doctoral candidate, external activities from the period of doctoral studies can be acknowledged for the structured doctoral programme. The request must include the title, duration and certificate of the activity.

Note on the Type/number of module examinations

* Active participation means regular, active and documented participation in courses (workshops, internships, exercises, seminars, excursions). This includes, for example, the regular submission of exercises, the preparation of solutions for exercise assignments, the logging of the various experiments and practical work sessions, the presentation and discussion of seminar papers or presentations of tasks or contents in the course in the form of short reports. These requirements are specified in the module descriptions.

Table 1): Modules in the area of Broader and Deeper Knowledge

Module name	Code	Type	ECTS	Type/number of the module examinations
olt502 Conference	A-2	Compulsory	1-6	Active participation with poster or presentation
olt503 Research stay	A-3	Optional compulsory	1-9	Presentation and/or log and/or report
olt508 Workshop/Summer School	A-4	Optional compulsory	1-6	Active participation and/or presentation of own research
olt505 Subject-oriented techniques/knowledge	A-5	Optional compulsory	1-9	Module examination depending on the module
olt506 Colloquia	A-6	Optional compulsory	1-3	Active participation and/or presentation of own research
olt507 Additional module: Specific knowledge	A-7	Optional compulsory	0.5 - 6	Module examination depending on the module

The person responsible for the programme can, upon request, acknowledge additional qualifications in the area of Broader and Deeper Knowledge in module olt507.

Table 2) Modules in the area of Communication and Knowledge Transfer

Module name	Code	Type	ECTS	Type/number of the module examinations
olt531 Didactics and communication	B-1	Optional compulsory	1-6	Active participation or teaching event
olt532 Doctorate and Master's students forum	B-2	Optional compulsory	1-3	Organization and/or presentation
olt533 Scientific publishing		Compul-sory	1-6	Manuscript submitted to a confer-ence or a journal
olt131 Advanced presentation techniques	B-3	Optional compulsory	1-3	Active participation
olt534 Intercultural communication/gen-der competence	B-4	Optional compulsory	1-3	Active participation
olt133 Language courses	B-5	Optional compulsory	1-3	Active participation and/or exam
olt134 Additional module: Communication	B-6	Optional compulsory	0.5 - 6	Module examination depending on the module

Upon request, the person responsible for the programme can acknowledge further accomplishments in the area of Communication and Knowledge Transfer in module olt134.

Table 3) Modules in the area of Interdisciplinary Competences

Module name	Code	Type	ECTS	Type/number of the module examinations
olt561 Steps to scientific publishing	C-1	Optional compulsory	1-6	Manuscript submitted to a confer-ence or a journal
olt161 Transferable skills/Scientific career	C-2	Optional compulsory	1 – 6	Active participation
olt164 Mentoring	C-3	Optional compulsory	1-6	Active participation
olt165 Additional module: Transferable skills	C-4	Optional compul-sory	0.5 - 6	Module examination depending on the module

The person responsible for the degree programme can, on request, acknowledge further accomplish-ments in the area of Interdisciplinary Competences in the module olt165.

Annex 5: Special features of the structured doctoral programme in Mathematics and Fundamental Physics

Re: Section 5 (1)

For doctoral students of the Research Training Group 1620 Models of Gravity, the curriculum that was countersigned in the Supervision Agreement applies. All Graduate School events (colloquia, peer groups, journal clubs, workshops and winter schools) are compulsory. Activities of doctoral centres of the external universities and institutes participating in the Research Training Group are recognized.

Note on the Type/number of module examinations

* Active participation means regular, active and documented participation in courses (workshops, internships, exercises, seminars, excursions). This includes, for example, the regular submission of exercises, the preparation of solutions for exercise assignments, the logging of the various experiments and practical work sessions, the presentation and discussion of seminar papers or presentations of tasks or contents in the course in the form of short reports. These requirements are specified in the module descriptions.

Table 1): Modules in the area of Broader and Deeper Knowledge

Module name	Type	ECTS	Type/number of the module examinations
olt601 Workshop	Optional compulsory	1-9	Talk
olt602 National or international conference	Compulsory	1-9	Presentation and/or poster presentation
olt603 Research visit abroad	Optional compulsory	1-12	Presentation and/or report
olt604 Core lectures	Compulsory	18	Active participation
olt605 Winter school/Summer school	Optional compulsory	1-9	Active participation
olt606 Colloquia	Compulsory	1-3	Active participation
olt607 Additional module: Special Knowledge	Optional compulsory	0.5 - 12	Module examination depending on the module

The person responsible for the programme can, upon request, acknowledge additional qualifications in the area of Broader and Deeper Knowledge in module olt607.

Table 2) Modules in the area of Communication and Knowledge Transfer

Module name	Type	ECTS	Type/number of the module examinations
olt131 Advanced presentation techniques	Optional compulsory	1-3	Active participation and a presentation
olt631 Didactics	Optional compulsory	1-6	Module examination depending on the module
olt632 doctoral student seminar	Optional compulsory	1-3	Active participation in a peer group seminar
olt633 Scientific publishing	Optional compulsory	1-6	Submitted articles in a peer-reviewed journal
olt133 Language course	Optional compulsory	1-6	Active participation
olt634 Journal club	Optional compulsory	1-3	Active participation
olt134 Additional module: Communication	Optional compulsory	0.5-3	Module examination depending on the module

Upon request, the person responsible for the degree programme can acknowledge further accomplishments in the area of Communication and Knowledge Transfer in module olt134.

Table 3) Modules in the area of Interdisciplinary Competences

Module name	Type	ECTS	Type/number of the module examinations
olt661 Good scientific practice	Compul-sory	0.5-1	Active participation
olt662 Scientific writing	Optional compulsory	1-3	Active participation
olt663 Starting up a business	Optional compulsory	1-2	Active participation
olt161 Transferable skills/Scientific career	Optional compulsory	0.5-12	Module examination depending on the module
Olt163 Fund-raising and project management	Optional compulsory	1-2	Active participation and/or submitted application for third-party funding
olt664 Management skills	Optional compulsory	1-6	Active participation
olt164 Mentoring	Optional compulsory	1-6	Active participation
olt665 Scientific management	Optional compulsory	1-9	Active participation in a committee
olt165 Additional module: Transferable skills	Optional compulsory	0.5-9	Module examination depending on the module

The person responsible for the degree programme can, on request, acknowledge further accomplishments in the area of Interdisciplinary Competences in the module olt165.

Annex 6: Special features of the structured doctoral programme in Medicine and Health Sciences

Re: Section 5 (1)
For the doctoral students of the Oldenburg-Groningen Research Training Group on Translational Research: From Pathological Mechanisms to Therapy, activities of the Graduate School of Medical Sciences of the UMCG are recognized for the structured doctoral programme in Medicine and Health Sciences.

Re: Section 5 (2):
For the doctoral students of the Oldenburg-Groningen Research Training Group on Translational Research: From Pathological Mechanisms to Therapy, the module olt703, Clinical Epidemiology and Biometry, is an Optional compulsory module.

Note on the Type/number of module examinations

* Active participation means regular, active and documented participation in courses (workshops, internships, exercises, seminars, excursions). This includes, for example, the regular submission of exercises, the preparation of solutions for exercise assignments, the logging of the various experiments and practical work sessions, the presentation and discussion of seminar papers or presentations of tasks or contents in the course in the form of short reports. These requirements are specified in the module descriptions.

Table 1): Modules in the area of Broader and Deeper Knowledge

Module name	Code	Type	ECTS	Type/number of the module examinations
olt701 Summer school/workshop	A-1	Optional compulsory	3	Active participation
olt702 Research visit abroad	A-2	Optional compulsory	6	Oral report and/or minutes
olt703 Clinical Epidemiology and Biometry	A-3	Compulsory	3	Active participation
olt704 Special Topics in Health Care Research	A-4	Optional compulsory	2-6	Active participation
olt705 Neuroscientific Techniques	A-5	Optional compulsory	2-6	Active participation
Olt 209 Laboratory Animal Science	A-6	Optional compulsory	3	Web-based written exam and active participation in the practical part of the module
olt706 Research Colloquium	A-7	Compulsory	3	Active participation and/or seminar presentation
olt707 Additional module: Specific knowledge	A-8	Optional compulsory	3-6	Module examination depending on the module

The person responsible for the degree programme can, upon request, acknowledge additional qualifications in the area of Broader and Deeper Knowledge in module olt707.

Table 2) Modules in the area of Communication and Knowledge Transfer

Module name	Code	Type	ECTS	Type/number of the module examinations
olt731 Conference	B-1	Compulsory	3	Presentation and/or poster presentation
olt732 Didactics	B-2	Optional compulsory	1-6	Active participation, active teaching
olt733 Advanced presentation techniques	B-3	Optional compulsory	3	Active participation and two presentations
olt133 Language courses	B-4	Optional compulsory	1-6	Active participation
olt734 Additional module: Communication	B-5	Optional compulsory	1-6	Module examination depending on the module

Upon request, the person responsible for the person responsible for the degree programme can acknowledge further accomplishments in the area of Communication and Knowledge Transfer in module olt734.

Table 3) Modules in the area of Interdisciplinary Competences

Module name	Code	Type	ECTS	Type/number of the module examinations
olt761 Data privacy, ethics, good clinical practice	C-1	Compulsory	2-6	Seminar lecture, report, written exam
olt762 Scientific writing and publishing	C-2	Compulsory	6	Own manuscript
olt763 Basics of distribution-free statistics	C-3	Optional compulsory	3	Active participation
olt764 Numeric and computer skills	C-4	Optional compulsory	3	Active participation
olt161 Transferable skills/Scientific career	C-5	Optional compulsory	1-9	Active participation
olt164 Mentoring	C-6	Optional compulsory	6	Active participation
olt165 Additional module: Transferable skills	C-7	Optional compulsory	1- 6	Module examination depending on the module

The person responsible for the degree programme can, on request, acknowledge further accomplishments in the area of Interdisciplinary Competences in the module olt165.

Annex 7: Zertifikat über das Promotionsstudium in deutscher Sprache

Carl von Ossietzky Universität Oldenburg

Zertifikat

[Name]*) .....
geboren am: .....in .....
hat den Promotionsstudiengang/das strukturierte Promotionsprogramm** ..... der Graduiertenschule Naturwissenschaft, Medizin und Technik (Oltech) an der Carl von Ossietzky Universität Oldenburg ..... erfolgreich abgeschlossen.

Für den erfolgreichen Abschluss des Promotionsstudiengangs/des strukturierten Promotionsprogramms** müssen verschiedene Module des Studiengangs/strukturierten Programms** im Umfang von mindestens 30 Kreditpunkten (ECTS) belegt werden.

[Name] … hat in den folgenden Modulen des Promotionsstudiengangs/des strukturierten Promotionsprogramms** insgesamt … Kreditpunkte erreicht.

Modul	Kreditpunkte
Themenfeld „Verbreiterung und Vertiefung von Fachwissen“	
.....	……
.....	……
Themenfeld „Kommunikation und Wissensvermittlung“	
.....	……..
.....	……..
Themenfeld „Fachübergreifende Kompetenzen“	
.....	……..
.....	……

Oldenburg, den .....

_____
Der / Die Vorsitzende des Prüfungsausschusses

_____
*Zutreffendes einfügen, ** nicht zutreffendes streichen

Annex 8: Certificate of Doctoral Studies in English

University of Oldenburg

Certificate

[Name] *).....born on: .....in .....
has successfully passed the PhD study programme ..... at the Graduate School Science, Medicine and Technology (Oltech) of the University of Oldenburg.

A successful completion of the PhD study programme requires the participation in different modules of the programme comprising at least …. credit points (ECTS).

[Name] … achieved a total of … credit points and participated in the following modules of the PhD study programme……..
……..

Modul	Credits
Specialized Scientific Knowledge	
.....	……..
.....	……..
Communicative Competences	
.....	……..
.....	……..
Interdisciplinary Competences and Transferable skills	
.....	……..
.....	……..

Oldenburg, ...

_____
Chairman Examination Committee

Chapter II

(1) These Regulations/this amendment shall enter into force after approval by the Presidential Board on the day following publication in the Official Notices of the University of Oldenburg.

(2) Doctoral students who are in the second or a subsequent semester at the time of entry into force can, upon request, also be examined in accordance with the previously valid provisions.

Please note: This is an unofficial translation provided for your convenience only and does not have any legal binding effects! Only the German version is legally binding!"