

Program-Specific Examination Regulations

For the Master's Degree Program

Laboratory Animal Science

At the RWTH Aachen

As of 4 April 2018

Note: This translated version of the Examination Regulations has no legal validity and serves for reading purposes only.

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I. General

Art. 1

Area of Application and Academic Degree

- (1) These examination regulations apply to the Master's degree program Laboratory Animal Science at RWTH Aachen. These regulations apply only in conjunction with the superseding examination regulations (ÜPO) in the respective current version and contain supplementary regulations specific to the program. In cases of doubt, the higher-level examination regulations are take precedent.
- (2) With the successful completion of the Master's degree program, the Faculty of Medicine will grant the academic degree of a Master of Science of RWTH Aachen University (M. Sc. RWTH) to the candidate.

Art. 2

Type and Goal of the Degree Program and Language Usage

- (1) This is an advanced education Master's degree program according to Art. 2 Sec. 4 ÜPO.
- (2) The higher-level study goals are determined in Art. 2 Sec. 1, 3 and 4 ÜPO. More detailed regulations regarding the goals of this Master's degree program are found in Appendix 3 of these examination regulations.
- (3) The program is conducted in English language.

Art. 3

Admission Requirements

- (1) Admission requirement is a recognized first university degree according to Art. 3 Sec. 4 ÜPO.
- (2) Regarding educational requirements in the field, it is necessary for the applicant to prove having acquired the specialist competencies needed for successful studies in the Master's degree Laboratory Animal Science:
 - Overall at least 60 CP in the subjects biology, biochemistry, chemistry, genetics, physics, mathematics, statistics or comparable subjects
 - Qualified work experience of usually not less than three years
- (3) For admission connected with additional requirements, Art. 3 Sec. 6 ÜPO applies. Should additional requirements of more than 30 CP be necessary, admission to the Master's degree program is not possible.

- (4) For this Master's degree program, a sufficient command of the English language has to be proven according to Art. 3 Sec. 9 ÜPO.
- (5) For the verification of these admission requirements, Art. 3 Sec. 12 ÜPO applies.
- (6) General regulations for the recognition of examination achievements are found in Art. 13 ÜPO.

Art. 4

Prescribed Program Duration, Structure of Degree Program, Credit Points and Range of Program

- (1) The prescribed program duration, including the writing of the master thesis, is four semesters (2 years). The program can only be started in the winter semester.
- (2) The program consists of a compulsory area, which is divided into the three blocks "Ethics and Legislation in Relation to the Use of Laboratory Animals", "Management and Planning of Animal Facilities and Animal Experiments" and "Laboratory Animal Science", and one elective area.

Compulsory Modules	55 CP
Elective Modules	5 CP
Master Thesis	30 CP
Total	90 CP

- (3) The program, including the module Master Thesis, contains 9 modules. All modules are defined in the module catalogue (Appendix 1). The weighting of the examination achievements with CP in the individual modules is implemented according to Art. 4 Sec. 4 ÜPO.
- (4) The RWTH International Academy gGmbH ensures through its curriculum that the Standard period of study can be complied with, in particular that the required modules and the associated exams as well as the master thesis can be completed within the time limits.

Art. 5

Obligatory Attendance at Teaching Events

- (1) According to Art. 5 Sec. 2 ÜPO, attendance can only be made obligatory in teaching events of the following types:
1. Exercises
 2. Seminars and Pro-Seminars
 3. Colloquia
 4. (Labour)training
 5. Excursions

- (2) Those teaching events for which attendance is required according to Sec. 1, are indicated as such in the module catalogue (Appendix 1).

Art. 6 Examinations and Examination Deadlines

- (1) General regulations regarding examinations and examination deadlines are found in Art. 6 ÜPO.
- (2) Insofar as the presence in modules are required according to Art. 6 Sec. 4 ÜPO, this is indicated as such in the module catalogue (Appendix 1).

Art. 7 Types of Examinations

- (1) General regulations regarding the types of examinations are found in Art. 7 ÜPO.
- (2) The duration of an examination when awarding
- Up to 5 CP is 45 to 90 minutes
 - From 6 to 7 CP 90 to 120 minutes
 - From 8 to more CP 120 minutes and more
- (3) The duration of an oral examination per candidate for a module with up to 5 CP is at least 15 minutes and at most 45 minutes, and for a module with more than 5 CP, it is at least 30 and at most 60 minutes. An oral examination as a group examination is conducted with no more than four candidates.
- (4) The length of a written paper of a presentation is to be up from 6 to 8 pages.
- (5) The length of the written elaboration of a presentation is to be 6 to 8 pages. The duration of the presentation is 20 minutes.
- (6) For colloquiums, the following applies specifically: The duration of a colloquium is at least 15 and at most 60 minutes.
- (7) For internships, the following applies: Internships are subject to attendance according to Art. 5 Sect. 1. The exact attendance times can be found in the internship plan.
- (8) The examiner determines the duration as well as possible further modalities of the respective examination achievements at the start of the associated teaching event.
- (9) The admission to module examinations may be linked to passing so-called module elements as examination pre-conditions as per Art. 7 Sec. 15 ÜPO. This is indicated for the respective modules in the module catalogue (Appendix 1). The specific criteria for a possible

improvement of grades by completing module elements, in particular the number and type of exercises that may be completed for possible bonuses as well as the mode of correction and assessment, will be stated by the lecturer at the start of the semester, or at the latest at the date of the first event, in the CMS.

Art. 8

Assessment of Examination Achievements and Determination of Grades

- (1) General regulations for the assessment of examination achievements and determination of grades are found in Art. 10 ÜPO.
- (2) Should an examination consist of several partial achievements, each partial achievement has to be passed with at least the grade "sufficient" (4.0) or completed successfully.
- (3) A module is completed successfully if all associated partial achievements are passed with at least the grade "sufficient" (4.0) and all further associated CP or module elements according to the program-specific examination regulations have been achieved.
- (4) The overall grade will be determined based on the grades of the modules and the grade of the master thesis as per Art. 10 Sec. 10 ÜPO.

Art. 9

Examination Committees

The examination committee responsible for this program is per Art. 11 ÜPO the examination committee Laboratory Animal Science of the Faculty of Medicine.

Art. 10

Re-Sitting Examinations, the Master Thesis and Lapse of the Right to Examination

- (1) General regulations on re-sitting examinations, the master thesis and the lapse of the right to examination are found in Art. 14 ÜPO.
- (2) Freely selectable modules within the elective area can be replaced as long as the exam performance of the module was not graded "failed" and the relevant module catalogue allows so. The changing of compulsory modules is not possible.

Art. 11

Deregistration, Absence, Withdrawal, Fraud, Breach of Regulations

- (1) General regulations regarding deregistration, absence, withdrawal, fraud and breaches of regulation are found in Art. 15 ÜPO.

- (2) For the deregistration of examinations according to § 15 Abs. 1 ÜPO, the following applies: A deregistration from an examination up to 3 working days before an examination is written must be communicated to both the program manager and the examiner by email.
- (3) For the deregistration of internships and seminars, the following applies: A deregistration from an block event is possible up to 3 working days before the first teaching event. This must be done in writing by mail to the programme manager or the responding lecturer.

II. Master Examination and Master Thesis

Art. 12

Type and Length of Master Examination

- (1) The master examination consists of
 1. The examinations which have to be completed successfully according to the structure of the program as per Art. 4 Sec. 2 and are listed in the module catalogue as per Appendix 1 as well as
 2. The master thesis and the master colloquium.
- (2) The sequence of teaching events is oriented along the study schedule (Appendix 2). The topic of the master thesis may only be released until 42 CP have been achieved.

Art. 13

Master Thesis

- (1) General regulations regarding the master thesis are found in Art. 17 ÜPO.
- (2) Regarding the supervision of the master thesis, Art. 17 Sec. 2 ÜPO applies.
- (3) The master thesis is written in English. It may also be written in German with the agreement of the respective examiner.
- (4) The time for working on the master thesis ordinarily consists of six months alongside the program. Upon special request to the Examination Board, a processing can take place within a maximum period of 12 months. In justified exceptional cases, the processing period may be extended by a maximum of six weeks upon request to the Examination Board in accordance with § 17 (7) ÜPO.
- (5) The results of the master thesis are presented by the candidate within a master's degree colloquium. Execution is subject to Art. 7 Sec. 12 ÜPO. It is possible to complete the master colloquium before submitting the master thesis.

- (6) The assessment volume for the execution and written elaboration of the master thesis and the master colloquium is 30 CP. The grading of the master thesis cannot be done until the master colloquium was held.

Art. 14
Acceptance and Assessment of the Master Thesis

- (1) General regulations regarding the acceptance and assessment of the master thesis are found in Art. 18 ÜPO.
- (2) The master thesis has to be provided in triplicate to the Examination Board in time. Printed and bound copies are to be submitted. Furthermore, the work is to be handed in stored on a data carrier as a PDF file. In addition, all collected data must be stored and handed out on a data carrier.

III. Final Provisions

Art. 15 Inspection of Examination Files

The examination files may be inspected by the student as per Art. 22 ÜPO.

Art. 16 Taking Effect, Publication and Transition Regulations

- (1) These examination regulations take effect as of the winter semester 2017/2018 and will be published in the Official Announcements of RWTH Aachen.
- (2) The examination regulations for the Master's degree program Laboratory Animal Science dated November 7, 2014 will be transferred to these examination regulations.
- (3) These examination regulations apply to all students enrolled in the Master's degree program Laboratory Animal Science at RWTH Aachen.
- (4) Module components that have been passed before the winter semester 2015/2016 are valid for all examinations offered for a course.
- (5) From the winter semester 2017/2018 the module catalogue will be replaced by the corresponding version (Appendix 1).
- (6) Students who have begun one or more modules from the examination regulations of November 7, 2014 before the entry into force of these examination regulations can finish these under the previous conditions.

Issued as per the decision of the faculty council of the Faculty of Medicine on December 4, 2017.

Appendix 1: Module Catalogue

Module Catalogue for the Master's degree program 'Laboratory Animal Science' (M.Sc.)

Appendix 1 - Modulkatalog

This module catalogue reflects the current state of affairs according to the day of the resolution of the examination regulations.

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Compulsory Modules

I. Ethics and Legislation in Relation to the Use of Laboratory Animals

Module: M1 – Ethics and Philosophy; National and International Law [MSLAS-101]

MODULE TITLE: ETHICS AND PHILOSOPHY; NATIONAL AND INTERNATIONAL LAW					
Term	1	Credit Points	7	Language	English
Title	Curricular Embedding		Term	CP	SWS
Examination: Ethics and Philosophy [MSLAS-101.a]	Semester fixed compulsory course		1	3,5	0
Lecture: Ethics and Philosophy [MSLAS-101.b]	Semester fixed compulsory course		1	0	2
Exercise: Ethics and Philosophy [MSLAS-101.c]	Semester fixed compulsory course		1	0	2
Examination: National and International Law [MSLAS-101.d]	Semester fixed compulsory course		1	3,5	0
Lecture: National and International Law [MSLAS-101.e]	Semester fixed compulsory course		1	0	2
Exercise: National and International Law [MSLAS-101.f]	Semester fixed compulsory course		1	0	2
Requirements	Grading/Duration				
-none-	<ul style="list-style-type: none"> • Ethics and Philosophy Written paper (6-8 pages) • Ethics and Philosophy Presentation (20 minutes) 				

Module: M2 – Regulatory Affairs [MSLAS-202]

MODULE TITLE: REGULATORY AFFAIRS						
Term	2 and 3	Credit Points	12	Language	English	
Title	Curricular Embedding		Term	CP	SWS	
Examination: REACH [MSLAS-202.a]	Semester fixed compulsory course		2	4	0	
Lecture: REACH [MSLAS-202.b]	Semester fixed compulsory course		2	0	2	
Exercise: REACH [MSLAS-202.c]	Semester fixed compulsory course		2	0	2	
Examination: OECD, ICH, FELASA, GV-SOLAS [MSLAS-202.d]	Semester fixed compulsory course		2	4	0	
Lecture: OECD, ICH, FELASA, GV-SOLAS [MSLAS-202.e]	Semester fixed compulsory course		2	0	2	
Exercise: OECD, ICH, FELASA, GV-SOLAS [MSLAS-202.f]	Semester fixed compulsory course		2	0	2	
Examination: Pre-clinical and Clinical Studies and Approval of Medical Products, Pharmaceuticals and Biologicals [MSLAS-202.g]	Semester fixed compulsory course		3	4	0	
Lecture: Pre-clinical and Clinical Studies and Approval of Medical Products, Pharmaceuticals and Biologicals [MSLAS-202.h]	Semester fixed compulsory course		3	0	2	
Exercise: Pre-clinical and Clinical Studies and Approval of Medical Products, Pharmaceuticals and Biologicals [MSLAS-202.i]	Semester fixed compulsory course		3	0	2	
Requirements	Grading/Duration					
-none-	<ul style="list-style-type: none"> • REACH Presentation (20 minutes) • OECD, ICH, FELASA, GV-SOLAS Presentation (20 minutes) • Pre-clinical and Clinical Studies and Approval of Medical Products, Pharmaceuticals and Biologicals Written examination (60 minutes) 					

II. Management and Planning of Animal Facilities and Animal Experiments

Module: M3 – Biostatistics and Biometrics; Design and Evaluation of Animal Experiments; Architecture and Facility Design; Financial, Hygiene and Quality Management [MSLAS-103]

MODULE TITLE: BIOSTATISTICS AND BIOMETRICS; DESIGN AND EVALUATION OF ANIMAL EXPERIMENTS; ARCHITECTURE AND FACILITY DESIGN; FINANCIAL, HYGIENE AND QUALITY MANAGEMENT					
Term	1, 2 and 3	Credit Points	11	Language	English
Title	Curricular Embedding		Term	CP	SWS
Examination: Biostatistics and Biometrics [MSLAS-103.a]	Semester fixed compulsory course		1	4	0
Lecture: Biostatistics and Biometrics [MSLAS-103.b]	Semester fixed compulsory course		1	0	2
Exercise: REACH [MSLAS-202.c]	Semester fixed compulsory course		1	0	2
Examination: Design and Evaluation of Animal Experiments [MSLAS-103.d]	Semester fixed compulsory course		2	3	0
Lecture: Design and Evaluation of Animal Experiments [MSLAS-103.e]	Semester fixed compulsory course		2	0	2
Examination: Architecture and Facility Design; Financial, Hygiene and Quality Management [MSLAS-103.f]	Semester fixed compulsory course		3	4	0
Lecture: Architecture and Facility Design; Financial, Hygiene and Quality Management [MSLAS-103.g]	Semester fixed compulsory course		3	0	2
Excursion, Workshop: Architecture and Facility Design; Financial, Hygiene and Quality Management [MSLAS-103.h]	Semester fixed compulsory course		3	0	2
Requirements	Grading/Duration				
Basic knowledge in statistics	<ul style="list-style-type: none"> • Biostatistics and Biometrics Written examination (60 minutes) • Design and Evaluation of Animal Experiments Written paper (6-8 pages) • Architecture and Facility Design; Financial, Hygiene and Quality Management Written examination (60 minutes) 				

**Modul: M4 – Replacement, Supplementation and Alternatives to Animal Experiments
[MSLAS-204]**

MODULE TITLE: REPLACEMENT, SUPPLEMENTATION AND ALTERNATIVES TO ANIMAL EXPERIMENTS						
Term	2	Credit Points	5	Language	English	
Title		Curricular Embedding		Term	CP	SWS
Examination: Replacement, Supplementation and Alternatives to Animal Experiments [MSLAS-204.a]		Semester fixed compulsory course		2	5	0
Lecture: Replacement, Supplementation and Alternatives to Animal Experiments [MSLAS-204.b]		Semester fixed compulsory course		2	0	2
Exercise: Replacement, Supplementation and Alternatives to Animal Experiments [MSLAS-204.c]		Semester fixed compulsory course		2	0	2
Requirements		Grading/Duration				
-none-		<ul style="list-style-type: none"> Replacement, Supplementation and Alternatives to Animal Experiments Written examination (60 minutes) 				

III. Laboratory Animal Science

Module: M5 – Genetics and Breeding; Anatomy and Physiology [MSLAS-105]

MODULE TITLE: GENETICS AND BREEDING; ANATOMY AND PHYSIOLOGY					
Term	1	Credit Points	6	Language	English
Title	Curricular Embedding		Term	CP	SWS
Examination: Genetics and Breeding [MSLAS-105.a]	Semester fixed compulsory course		1	3	0
Lecture: Genetics and Breeding [MSLAS-105.b]	Semester fixed compulsory course		1	0	2
Exercise: Genetics and Breeding [MSLAS-105.c]	Semester fixed compulsory course		1	0	2
Examination: Anatomy and Physiology [MSLAS-105.d]	Semester fixed compulsory course		1	3	0
Lecture: Anatomy and Physiology [MSLAS-105.e]	Semester fixed compulsory course		1	0	2
Exercise: Anatomy and Physiology [MSLAS-105.e]	Semester fixed compulsory course		1	0	2
Requirements	Grading/Duration				
-none-	<ul style="list-style-type: none"> • Genetics and Breeding Written examination (60 minutes) • Anatomy and Physiology Written examination (60 minutes) 				

Module: M6 – Pathology and Diseases; Biochemistry, Hematology and Molecular Biology in Biomedicine [MSLAS-106]

MODULE TITLE: PATHOLOGY AND DISEASES; BIOCHEMISTRY, HEMATOLOGY AND MOLECULAR BIOLOGY IN BIOMEDICINE						
Term	1	Credit Points	6	Language	English	
Title		Curricular Embedding		Term	CP	SWS
Examination: Pathology and Diseases [MSLAS-106.a]		Semester fixed compulsory course		1	3	0
Lecture: Pathology and Diseases [MSLAS-106.b]		Semester fixed compulsory course		1	0	2
Exercise: Pathology and Diseases [MSLAS-106.c]		Semester fixed compulsory course		1	0	2
Examination: Biochemistry, Hematology and Molecular Biology in Biomedicine [MSLAS-106.d]		Semester fixed compulsory course		2	3	0
Lecture: Biochemistry, Hematology and Molecular Biology in Biomedicine [MSLAS-106.e]		Semester fixed compulsory course		2	0	2
Exercise: Biochemistry, Hematology and Molecular Biology in Biomedicine [MSLAS-106.f]		Semester fixed compulsory course		2	0	2
Requirements		Grading/Duration				
-none-		<ul style="list-style-type: none"> • Pathology and Diseases Written examination (60 minutes) • Biochemistry, Hematology and Molecular Biology in Biomedicine Written examination (60 minutes) 				

Module: M7 – Animal Models in Biomedical Research; Anaesthesia and Experimental Surgery [MSLAS-207]

MODULE TITLE: ANIMAL MODELS IN BIOMEDICAL RESEARCH; ANAESTHESIA AND EXPERIMENTAL SURGERY					
Term	2 and 3	Credit Points	8	Language	English
Title		Curricular Embedding		Term	CP
Examination: Animal Models in Biomedical Research [MSLAS-207.a]		Semester fixed compulsory course		2	4
Lecture: Animal Models in Biomedical Research [MSLAS-207.b]		Semester fixed compulsory course		2	0
Exercise: Animal Models in Biomedical Research [MSLAS-207.c]		Semester fixed compulsory course		2	2
Examination: Anaesthesia and Experimental Surgery [MSLAS-207.d]]		Semester fixed compulsory course		3	4
Lecture: Anaesthesia and Experimental Surgery [MSLAS-207.e]		Semester fixed compulsory course		3	0
Exercise: Anaesthesia and Experimental Surgery [MSLAS-207.f]		Semester fixed compulsory course		3	2
Requirements		Grading/Duration			
-none-		<ul style="list-style-type: none"> • Animal Models in Biomedical Research Presentation (20 minutes) • Anaesthesia and Experimental Surgery Written examination (60 minutes) 			

Elective Modules

IV. Elective Courses

Module: M8 – Applied Anaesthesia and Microsurgery; Medical Technology and Imaging [MSLAS-308]

MODULE TITLE: APPLIED ANAESTHESIA AND MICROSURGERY; MEDICAL TECHNOLOGY AND IMAGING					
Term	3	Credit Points	5	Language	English
Title	Curricular Embedding		Term	CP	SWS
Examination: Applied Anaesthesia and Microsurgery [MSLAS-308.a]	Semester fixed elective course		3	2	0
Lecture: Applied Anaesthesia and Microsurgery [MSLAS-308.b]	Semester fixed elective course		3	0	2
Exercise: Applied Anaesthesia and Microsurgery [MSLAS-308.c]	Semester fixed elective course		3	0	2
Examination: Medical Technology and Imaging [MSLAS-308.d]	Semester fixed elective course		3	3	0
Lecture: Medical Technology and Imaging [MSLAS-308.e]	Semester fixed elective course		3	0	2
Exercise: Medical Technology and Imaging [MSLAS-308.f]	Semester fixed elective course		3	0	2
Excursion: Medical Technology and Imaging [MSLAS-308.g]	Semester fixed elective course		3	0	2
Requirements	Grading/Duration				
Recommendation for participation by the respective module lecturer	<ul style="list-style-type: none"> • Applied Anaesthesia and Microsurgery Written examination (45 minutes) • Medical Technology and Imaging Written examination (60 minutes) 				

Module: M9 – In vivo Pharmacology and Applied Toxicology [MSLAS-309]

MODULE TITLE: IN VIVO PHARMACOLOGY AND APPLIED TOXICOLGOY					
Term	3	Credit Points	5	Language	English
Title	Curricular Embedding		Term	CP	SWS
Examination: In vivo Pharmacology [MSLAS-309.a]	Semester fixed elective course		3	2,5	0
Lecture: In vivo Pharmacology [MSLAS-309.b]	Semester fixed elective course		3	0	2
Exercise: In vivo Pharmacology [MSLAS-309.c]	Semester fixed elective course		3	0	2
Examination: Applied Toxicology [MSLAS-309.d]	Semester fixed elective course		3	2,5	0
Lecture: Applied Toxicology [MSLAS-309.e]	Semester fixed elective course		3	0	2
Exercise: Applied Toxicology [MSLAS-309.f]	Semester fixed elective course		3	0	2
Excursion: Applied Toxicology [MSLAS-309.g]	Semester fixed elective course		3	0	2
Requirements	Grading/Duration				
-none-	<ul style="list-style-type: none"> • In vivo Pharmacology Written examination (60 minutes) • Applied Toxicology Written examination (60 minutes) 				

Compulsory Module

V. Master Thesis

Module: M10 – Master Thesis [MSLAS-400]

MODULE TITLE: MASTER THESIS					
Term	2	Credit Points	30	Language	English
Title			Curricular Embedding	Term	CP
Master Thesis [MSLAS-400.a]			Semester variable elective course	2	28
Master Thesis Defense Colloquium [MSLAS-400.b]			Semester variable elective course	2	2
Requirements	Grading/Duration				
Students need to absolve at least 42 CP for the issue of the master thesis topic.	The grade of the Master thesis is calculated from the partial performances, whereby the individual grades are weighted according to the credit points.				

Appendix 3: Study structure

Master of Science in Laboratory Animal Science - Studienstruktur

1. Sem. (WS) - 20 CP	2. Sem. (SS) – 23 CP	3. Sem. (WS) – 17 CP	4. Sem. (SS) – 30 CP	
Compulsory course Ethics and Philosophy; National and International Law 7 CP	Compulsory course OECD, ICH, GV-SOLAS FELASA 4 CP	Compulsory course Pre-clinical and Clinical studies and the Approval of Medical Products, Pharmaceuticals and Biologicals 4 CP	30 CP Master Thesis	
Compulsory course Biostatistics and Biometrics 4 CP	Compulsory course REACH 4 CP	Compulsory course Architecture and Facility Design; Financial, Hygiene and Quality Mgmt. 4 CP		
Compulsory course Genetics and Breeding; Anatomy and Physiology 6 CP	Compulsory course Design and Evaluation of Animal Experiments 3 CP	Elective course Applied Anaesthesia and Microsurgery; Medical Technology and Imaging 5 CP		
Compulsory course Pathology and Diseases 3 CP	Compulsory course Replacement, Supplementation and Alternatives to Animal Experiments 5 CP	Elective course In vivo Pharmacology and Applied Toxicology 5 CP		
	Compulsory course Biochemistry, Hematology and Molecular Biology 3 CP	Compulsory course Anaesthesia and Experimental Surgery 4 CP		
	Compulsory course Animal Models in Biomedical Research 4 CP			
	Module Block II: Management and Planning of Animal Facilities and Animal Experiments 16 CP	Module Block III: Laboratory Animal Science 20 CP		Module Block IV: Elective Modules 5 CP
Module Block I: Ethics and Legislation in Relation to the Use of Laboratory Animals 19 CP				

Appendix 4: Program objectives

In the master's program Laboratory Animal Science those in the Bachelor's degree program acquired knowledge on medical-scientific, experimental animal studies aspects specialized, broadened and deepened. The graduate has a detailed and specialized animal experimentation based on the latest scientific findings of laboratory animal science. This includes everyone Areas of planning, implementation, assessment and improvement of animal experiments in compliance with the latest legal provisions and ethical criteria and one animal welfare, care and supply of experimental animals. The graduates are thus used to treat complex experimental methods and interdisciplinary issues and, in particular, the self-employed scientific work in the field of laboratory animal science. Through the integrated application-oriented practical and multimedia study components (skill training). Graduates are given a comprehensive professional aptitude in the field of experimental animal science, the application of highly specialized investigation methods and animal experimental techniques.