



Subject-specific study and examination regulations for the English-taught master's programme in Molecular Medicine offered by the Medical Faculty at Ulm University of 7 June 2019

On the basis of § 32 (3) sentence 1 of the Baden-Württemberg Federal State Higher Education Act (Landeshochschulgesetz – LHG) in the version of Article 1 of the third act amending higher education regulations (Drittes Hochschulrechtsänderungsgesetz - 3. HRÄG) of 1 April 2014 (law gazette no. 6 p.99ff), last amended by article 1 of the act of 13 March 2018 (law gazette no. 5 p.85ff), the Senate of Ulm University, at the proposal of the Medical Faculty, adopted the following subject-specific study and examination regulations in its meeting on 15 May 2019. The President of Ulm University gave his consent on 7 June 2019 in accordance with § 32 (3) sentence 1 of the *LHG*.

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I. General Provisions

§ 1 Scope of application

- (1) These Subject-specific study and examination regulations contain specific regulations for the master's programme in Molecular Medicine.
- (2) The Subject-specific study and examination regulations supplement the General Provisions for Study and Examination Regulations regarding Bachelor's and Master's Programmes at Ulm University (General Framework). In cases of doubt, the General Framework has precedence.

§ 2 Programme objectives, academic degrees (§ 2 General Framework)

- (1) The master's programme in Molecular Medicine is a research-oriented programme. Building upon biomedical, molecularly oriented undergraduate studies, it aims to enable graduates to solve biomedical issues independently applying the methods of molecular and cell biology. The aim of the programme is the acquisition of knowledge and skills qualifying graduates for activities in research, development and application in the areas of molecular medicine, in particular at universities, research institutes and in relevant research industries.
- (2) Participants in the joint/double degree master's programme should also acquire additional intercultural skills and enhanced communication and cooperation skills with international scientists.
- (3) The Medical Faculty at Ulm University, in the area of Molecular Medicine, offers the consecutive master's programme in Molecular Medicine, leading to the degree of "Master of Science" (short, "MSc").

§ 3 Start of the programme (§ 3 General Framework)

Studies in the master's programme in Molecular Medicine begin in the winter semester.

§ 4 Standard period of study, credit points (§ 5 General Framework)

- (1) The standard period of study of the master's programme is four semesters.
- (2) The overall minimum volume necessary for the successful completion of the master's programme in compulsory and elective areas without the master's thesis and disputation is 90 credit points. With the master's thesis and disputation, a further 30 credit points are required.

§ 5 Transition to the PhD Programme

If, in accordance with § 15 para. 1, exam results in modules nos. 1 to 14 achieved within the standard period of study have an average grade of better than 2.0 weighted by credit points,

the student can apply for admission to the PhD programme at the end of the 3rd semester and complete his or her master's programme during the PhD programme. Admission to the PhD programme is governed by the applicable admission regulations, study and examination regulations and doctoral regulations for doctoral studies in the International PhD Programme in Molecular Medicine offered by the Medical Faculty of Ulm University with the aim of obtaining a PhD through the admissions committee of the PhD study programme.

§ 6 Deadlines (§ 6 (9) General Framework)

Students who have not completed their master's degree by the end of the examination period of their 6th semester lose their right to examination unless they are not responsible for exceeding the deadline.

§ 7 Courses, examination achievements

(1) Study objectives and contents are conveyed in the following types of courses:

- lectures
- laboratory courses
- seminars
- practice classes (Übungen)

In seminars, practice classes and laboratory courses, regular attendance is a prerequisite for being admitted to exam registration, since the learning outcomes and skills defined in the module handbook can only be achieved through attendance. Students failing to attend, as a rule, 85% of such courses are not entitled to take the corresponding module examinations. This also applies if their absence is due to reasons beyond their control. If they fail to comply with their obligation to attend as defined in sentence 1 above, they are deemed to have failed to do their their coursework; courses can be repeated at the next possible date. The module handbook specifies the courses in which it is possible to recognise already completed parts of previous courses depending to their content. Already completed parts of the previous course can only be recognised if the absence was for reasons beyond their control. Attendance checks are up to the lecturers responsible for the course.

- (2) In addition to the master's thesis and the disputation, study achievements are written exams (written tests, laboratory reports, course papers, lab notebooks) multiple-choice tests and/or oral exams, as well as presentations followed by discussions. The study commission Molecular Medicine decides on any changes in the conduct of courses and examination achievements.
- (3) The type of examination achievement according to paragraph 2 is announced by the examiner in good time before the examination.
- (4) The examination board can set a minimum of 5 participants for compulsory electives. In case of fewer than 5 students, a compulsory elective course marked as such in §16 can be cancelled.
- (5) The subject examination board can decide which courses in Molecular Medicine programme are opened up to students in other programmes.

§ 8 Courses and examinations in English (§ 7 General Framework)

The language of instruction and examination is English.

§ 9 Subject examination board (§ 10 General Framework)

- (1) A subject examination board is formed for the bachelor's and master's programme in Molecular Medicine.
- (2) The subject examination board consists of 8 members. It is composed of five full-time lecturers and habilitated members working full-time at Ulm University, one scientific staff member and two students in an advisory capacity. One student should be from the bachelor's programme in Molecular Medicine, and one from the master's programme in Molecular Medicine. The term of office is three years for the university lecturers, the habilitated members working full-time at Ulm University and the scientific staff member and one year for the student members. Reappointment is possible.

§ 10 Organisation of module examinations (§ 13 General Framework)

Deviating from the recommendation in § 13 subsection 1 General Framework, written module examinations in the master's programme are offered each semester, usually in the last two weeks of the lecture period and the following four weeks; the repeat examinations are conducted in the two weeks prior to the start of the lecture period of the following semester.

§ 11 Related study programmes (§ 14 General Framework)

Related subjects in accordance with § 14 General Framework are biochemistry, biomedicine, human biology, molecular biology, molecular biotechnology and molecular life science.

§ 12 Regulations governing the master's thesis and disputation (§ 16c General Framework)

- (1) The time from the assignment of the topic to the submission of the master's thesis is six months. It is not permitted to start work on the master's thesis before registration.
- (2) The master's thesis is written in English.
- (3) An external master's thesis is possible. At least one reviewer (examiner) must be employed by Ulm University and supervise and account for the content of the thesis. He or she must be qualified to conduct examinations in accordance with § 11 (2) General Framework. The subject examination board grants admission to an external master's thesis. Application for admission to an external master's thesis must be submitted to the subject examination board before work on the thesis has begun, presenting a one-page exposé and written confirmation of supervision by a reviewer from Ulm University.
- (4) One reviewer is the supervisor of the master's thesis; the second reviewer must not be from the same institute. He or she must be qualified to conduct examinations in accordance with § 11 (2) General Framework.
- (5) The master's thesis must be submitted to the *Studiensekretariat* (student administration and examinations office) in two bound copies and one electronic version.
- (6) The Journal Club and Progress Report must have been successfully completed by the time of submission of the master's thesis.

- (7) The master's thesis is supplemented by a public disputation. The disputation takes place before two members of the subject examination board who are not themselves reviewers, and before the two reviewers of the master's thesis; together they form the examination committee. The discussion on the candidate's performance is not public. As a rule, the disputation should not exceed 60 minutes and takes place in English.
- (8) During the disputation, the student speaks freely, delivers an oral presentation of up to 25 minutes about his or her master's thesis, and is subjected to questions by the examination committee.
- (9) Immediately after the disputation, the examination committee discusses the oral performance. Each member assesses the performance of the master's student awarding a grade in accordance with § 17 General Framework. The overall evaluation for the performance during the oral examination is the mean of the examiners' individual evaluations. The oral examination is a pass if the final evaluation is at least "sufficient - 4.0".

§ 13 Evaluation of module examinations (§ 17 General Framework)

- (1) Examinations taking the form of a multiple choice test are passed if the students answers a minimum of 60% of the test questions correctly. The following grading system applies:

- 1.0 = excellent; the minimum must be 95%
- 1.3 = very good; minimum 90% but less than 95%
- 1.7 = good (upper); minimum 86.6% but less than 90%
- 2.0 = good; minimum 83.3% but less than 86.6%
- 2.3 = good (lower); minimum 80% but less than 83.3%
- 2.7 = satisfactory (upper); minimum 76.6% but less than 80%
- 3.0 = satisfactory; minimum 73.3% but less than 76.6%
- 3.3 = satisfactory (lower); minimum 70% but less than 73.3%
- 3.7 = sufficient (upper); minimum 65% but less than 70%
- 4.0 = sufficient; minimum 60% but less than 65%
- 5.0 = not sufficient; less than 60%

The examination is also a pass if the number of points achieved by the examinee falls only 10% or less below the examination average of all examinees in this examination (relative pass grade - escalation clause). If the escalation clause is applied, a minimum of 50% of the questions must still be answered correctly.

- (2) The overall grade of the master's examination is the credit point-weighted average of all module examinations identified as "relevant for the final grade" in § 15 (1).

§ 14 Repetition of module examinations (§ 20 General Framework)

- (1) Failed module and module part examinations may be repeated twice each, but only during the two semesters following the unsuccessful attempt. If students do not take a module examination by the time stipulated in sentence 1, they lose their right to examination unless they are not responsible for exceeding the deadline. The subject examination board takes this decision upon request.
- (2) A disputation graded as "not passed" (5.0) may be repeated once – at the earliest 1 month, and at the latest 3 months after the failed attempt. A disputation repeated outside of the permitted time is deemed "not passed".

II. MASTER'S EXAMINATION

§ 15 Study contents, admission to module and module part examinations

(1) The following modules must be completed in the master's programme:

No.	Module	CP	C/CE	Course Type	CHW	Sem.	Type of Examination	Counting towards final grade
	Compulsory courses	21	C					
1	Practical Training in Laboratory Methods	9	C	S,LC	13	1	wr+p	yes
2	Bioethics, Philosophy and Good Practice of Science	6	C	S	4	2	wr+o	yes
3	Clinical Trials/Project Management and Funding	6	C	S	4	3	wr/o	yes
	Compulsory elective area	21	CE					
4	Current Concepts in Stem Cell Biology and Regenerative Medicine	6	CE	S	4	1	o	yes
5	New Drug Discovery, Development, and Evaluation	6	CE	S	3	1	o	yes
6	Bioinformatics and Systems Biology	6	CE	S,PC	4	1	w	yes
7	Translational Imaging	3	CE	L,LC	2	1	w	yes
8	Additional compulsory elective course(s) of other study programmes	3/6	CE	L/S/PC/LC	2/4	1	wr/o	yes
	In-depth practical part	48	C					
9	Module 1 in 2nd Semester	12	C					
9a	<i>Four Week Research Course</i>	9	CE	LC	10	2	p	yes
9b	<i>Seminar</i>	3	C	S	4	2	o	
10	Module 2 in 2nd Semester	12	C					
10a	<i>Four Week Research Course</i>	9	CE	LC	10	2	p	yes
10b	<i>Seminar</i>	3	C	S	4	2	o	
11	Module 1 in 3rd Semester	12	C					
11a	<i>Four Week Research Course</i>	9	CE	LC	10	3	p	yes
11b	<i>Seminar</i>	3	C	S	4	3	o	
12	Module 2 in 3rd Semester	12	C					
12a	<i>Four Week Research Course</i>	9	CE	LC	10	3	p	yes
12b	<i>Seminar</i>	3	C	S	4	3	o	
	Practical final project	30	CE					
13	Master's thesis and disputation	30	CE			4	wr+o	yes
13a	<i>Master's thesis (including Journal Club and Progress Report)</i>	20	CE			4	w	yes

13b	Disputation	10	CE			4	o	yes
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CP = Credit Points; C = Compulsory Course; CE = Compulsory Elective Course; L = Lecture; S = Seminar; LC = Laboratory Course; PC = Practice Class (*Übung*); CHW = Classroom Hour(s) per Week; Sem = Semester in the programme; wr = written; o = oral; p = practical work

- (2) The thematic content of modules equivalent in terms of volume in accordance with paragraph 1 nos. 9, 10, 11, 12 and the practical training offered therein are determined by the subject examination board and updated and published no later than four weeks before the start of the semester.
- (3) The subject examination board determines which modules can be taken as compulsory electives. These modules are then taken up in the module handbook.
- (4) At the proposal of the study commission, the Faculty Council can decide on the specialisations. A specialisation is oriented to the research priorities of Molecular Medicine at Ulm University. The modules of a specialisation that can be selected in accordance with paragraph 1 nos. 9, 10, 11, and 12 are specified in the curriculum. On successful completion of the required modules of a specialisation, the student receives confirmation issued by the Studiensekretariat together with documentation relating to his or her final degree.
- (5) Upon request and after approval by the subject examination board, the completion of equivalent external laboratory courses (compulsory elective practical courses) is possible. The subject examination board can recognise up to 50% of such compulsory elective practical courses upon request.
- (6) In the modules governed by paragraph 1 nos. 9, 10, 11, and 12, the place in the four-week research laboratory course can no longer be changed once it has started.

§ 16 Subject-specific admission requirements for the master's thesis

Admission to the master's thesis requires successful completion of modules 1 to 12 in accordance with § 15 (1).

III. Provisions regarding the master's programme in joint supervision with a foreign university (joint master's programme)

§ 17 Joint/double-degree master's programme

- (1) A master's programme conducted jointly with a foreign university - joint master's programme - requires that
 - a) an agreement with the foreign university on the supervision of master's students has been concluded, and
 - b) admission to the master's programme has been granted in accordance with Ulm University or the university with which a contract regarding the completion of a joint master's programme has been concluded.
- (2) The master's thesis can be completed and submitted both at Ulm University, to which these regulations apply, and the foreign university with which an appropriate contract for the completion of a joint master's programme has been concluded.
- (3) Within the framework of the joint master's programme, students admitted to the programme may study for a maximum of 2 semesters (1 year) at the partner university. New

students properly enrolled at Ulm University must complete their first semester at Ulm University.

- (4) The university where the respective study part is completed determines the grades for such studies. The respective other university/institute determines the equivalent grades in accordance with its regulations.

§ 18 Master's thesis

- (1) One university lecturer of Ulm University and one university lecturer of the foreign university supervise the master's thesis during its completion.
- (2) If the master's thesis was accepted by Ulm University, it is then submitted to the foreign university for agreement on the proceedings.
- (3) If the foreign university consents, the disputation takes place at Ulm University in accordance with § 12 (6). In this case, one further member of the foreign university qualified to conduct examinations may join the examination board in addition to the foreign supervisor instead of a member of the examination board at Ulm University.
- (4) If the master's thesis was accepted by the foreign university, it is then submitted to the subject examination board to which these regulations apply for agreement on further proceedings. If agreement is given, the disputation takes place at the foreign university in accordance with the regulations applicable there.
- (5) If the master's thesis is completed at Ulm University in accordance with § 12, submission of the master's thesis is governed by the provisions of these regulations.
- (6) If the master's thesis is completed at a foreign university in accordance with paragraph 4, submission of the master's thesis is governed by the relevant provisions of the foreign university. § 16c (9) sentence 2 General Framework remains unaffected.

§ 19 Issuing of master's transcript and master's degree certificate

- (1) Upon the successful completion of a joint master's programme, Ulm University and the foreign university issue a joint certificate on the conferral of the Master of Science degree. This certificate carries the signatures and official seals of both institutes required according to the provisions of Ulm University and the foreign university.
- (2) Instead of a joint certificate, Ulm University and the foreign university can issue separate certificates; however, it must be clear that both certificates together form a joint master's certificate.
- (3) The joint certificate must show that the graduate is entitled to use the academic degree of Master in Germany and in the foreign country. The graduate is entitled to use only one master's degree.

§ 20 Effective date

- (1) These study and examination regulations apply with effect from the winter semester 2019/20. They are published in the Official Bulletin. At the same time, the Subject-specific study and examination regulations of Ulm University for the master's programme of 12 July 2017, published in the Official Bulletin of Ulm University no. 25 of 19 July 2017, pages 382-215 cease to be effective.

- (2) Paragraph 1 sentence 2 does not apply to students who, in the winter semester 2019/20, are enrolled in a higher semester than the first semester in the master's programme in Molecular Medicine and who, in the summer semester 2019, fall under the Subject-specific study and examination regulations of Ulm University of 12 July 2017. Such students complete their studies under the study and examination regulations of 12 July 2017.
- (3) Paragraph 1 sentence 2 does not apply to students who, in the winter semester 2019/20, are enrolled in a higher semester than the first semester in the bachelor's programme in Molecular Medicine and who, in the summer semester 2019, fall under the subject-specific study and examination regulations of Ulm University of 3 August 2015. Such students complete their studies under the study and examination regulations of 3 August 2015.

Ulm, 7 June 2019

signed

Professor Michael Weber (Dr.-Ing.)
- President -

Courtesy translation