

# Module Catalogue

for the Subject

## Experimental medicine

as a Master's with 1 major  
with the degree "Master of Science"  
(120 ECTS credits)

Examination regulations version: 2009  
Responsible: Faculty of Medicine

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## The subject is divided into

section / sub-section	ECTS credits	starting page
Compulsory Courses	30	6
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Practical Experimental Medicine	45	12
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Thesis	30	24

## Content and Objectives of the Programme

No translation available.

## Abbreviations used

Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

## Conventions

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

## Notes

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should the module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

## In accordance with

the general regulations governing the degree subject described in this module catalogue:

**ASPO2009**

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

**o6-Dec-2011 (2011-109)**

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

## Compulsory Courses

(30 ECTS credits)

Module title		Abbreviation
Microbiology, Virology, Hygiene		03-EM-MVH-092-m01
Module coordinator		Module offered by
Institute of Hygiene and Microbiology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Foundations of clinical and theoretical medicine in microbiology, virology and hygiene with examination of one candidate each.		
<b>Intended learning outcomes</b>		
Students gain a deeper understanding of infection and immunity with a view to research application.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
V (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
oral examination of one candidate each (approx. 25 minutes)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		
Master's degree (1 major) Experimental medicine (2013)		

Module title		Abbreviation
Pathology		03-EM-PA-092-m01
Module coordinator		Module offered by
holder of the Chair of Pathology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Foundations of clinical and theoretical medicine in pathology with examination of one candidate each.		
<b>Intended learning outcomes</b>		
Students gain a deeper understanding of pathology with a view to research application.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
V (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
oral examination of one candidate each (approx. 25 minutes)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		
Master's degree (1 major) Experimental medicine (2013)		



Module title		Abbreviation
Pharmacology and Toxicology		03-EM-PT-092-m01
Module coordinator		Module offered by
holder of the Chair of Pharmacology and Toxicology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
2 semester	graduate	--
<b>Contents</b>		
Foundations of clinical and theoretical medicine in pharmacology and toxicology with examination of one candidate each.		
<b>Intended learning outcomes</b>		
Students gain a deeper understanding of pharmacology and toxicology with a view to research application.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
V (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
oral examination of one candidate each (approx. 25 minutes)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		
Master's degree (1 major) Experimental medicine (2013)		

Module title		Abbreviation
Molecular biological methods		03-EM-MP-092-m01
Module coordinator		Module offered by
Institute of Hygiene and Microbiology / RVZ		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
15	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Students complete a four-week, full-time molecular biology basic lab course with a focus on DNA, RNA, bioinformatics, proteins, cell biology, microscopy in theory as well as practical exercises.		
<b>Intended learning outcomes</b>		
The students have developed a deep knowledge of fundamental analysis/investigative methods of molecular and cell biology. They are able to discuss their results.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
P (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
term paper (written elaboration of lab reports, minimum 20 pages total)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		

## Compulsory Electives

(60 ECTS credits)

## Practical Experimental Medicine

(45 ECTS credits)

Module title		Abbreviation
Infection and Immunity		03-EM-InIm-092-m01
Module coordinator		Module offered by
Institute of Virology and Immunobiology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
15	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
Contents		
Students spend 4 to 6 weeks working on their own small, well-defined scientific lab project in the area of infection and immunity and present the results of the laboratory project at the Institute seminar.		
Intended learning outcomes		
Participating in clinically-oriented research projects, students gain initial hands-on experience. They reinforce previously acquired lab skills, acquire new lab techniques, and learn how to apply theoretical knowledge in the lab. Students gain expertise in the analysis and presentation of raw data.		
Courses (type, number of weekly contact hours, language — if other than German)		
This module comprises 2 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"> <li>03-EM-InIm-1-092: P (no information on SWS (weekly contact hours) and course language available)</li> <li>03-EM-InIm-2-092: K (no information on SWS (weekly contact hours) and course language available)</li> </ul>		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.		
<b>Assessment in module component 03-EM-InIm-1-092: Practical Training Infection and Immunity</b> <ul style="list-style-type: none"> <li>10 ECTS, Method of grading: numerical grade</li> <li>term paper (ready-to-publish written summary of results of experiments, minimum 10 pages)</li> </ul> <b>Assessment in module component 03-EM-InIm-2-092: Colloquium Infection and Immunity</b> <ul style="list-style-type: none"> <li>5 ECTS, Method of grading: numerical grade</li> <li>oral presentation and discussion of results of lab course (approx. 15 to 20 minutes)</li> </ul>		
Allocation of places		
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Additional information		
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Workload		
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Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Master's degree (1 major) Experimental medicine (2009)		

Module title			Abbreviation
Molecular Oncology			03-EM-MO-092-mo1
Module coordinator		Module offered by	
holder of the Chair of Biochemistry and Molecular Biology			
ECTS	Method of grading	Only after succ. compl. of module(s)	
15	numerical grade	--	
Duration	Module level	Other prerequisites	
1 semester	graduate	--	
Contents			
Students spend 4 to 6 weeks working on their own small, well-defined scientific lab project in the area of molecular oncology and present the results of the laboratory project at the Institute seminar.			
Intended learning outcomes			
Participating in clinically-oriented research projects, students gain initial hands-on experience. They reinforce previously acquired lab skills, acquire new lab techniques, and learn how to apply theoretical knowledge in the lab. Students gain expertise in the analysis and presentation of raw data.			
Courses (type, number of weekly contact hours, language — if other than German)			
This module comprises 2 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"><li>03-EM-MO-1-092: P (no information on SWS (weekly contact hours) and course language available)</li><li>03-EM-MO-2-092: K (no information on SWS (weekly contact hours) and course language available)</li></ul>			
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)			
Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.			
<b>Assessment in module component 03-EM-MO-1-092:</b> Practical Training Molecular Oncology <ul style="list-style-type: none"><li>10 ECTS, Method of grading: numerical grade</li><li>term paper (ready-to-publish written summary of results of experiments, minimum 10 pages)</li></ul>			
<b>Assessment in module component 03-EM-MO-2-092:</b> Colloquium Molecular Oncology <ul style="list-style-type: none"><li>5 ECTS, Method of grading: numerical grade</li><li>oral presentation and discussion of results of lab course (approx. 15 to 20 minutes)</li></ul>			
Allocation of places			
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Additional information			
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Workload			
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Teaching cycle			
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Referred to in LPO I (examination regulations for teaching-degree programmes)			
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Module appears in			
Master's degree (1 major) Experimental medicine (2009)			

Module title		Abbreviation
Structure and Function of Proteins		03-EM-SFP-092-m01
Module coordinator		Module offered by
holder of the Chair of Structural Biology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
15	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Students spend 4 to 6 weeks working on their own small, well-defined scientific lab project in the area of the structure and function of proteins and present the results of the laboratory project at the Institute seminar.		
<b>Intended learning outcomes</b>		
Participating in clinically-oriented research projects, students gain initial hands-on experience. They reinforce previously acquired lab skills, acquire new lab techniques, and learn how to apply theoretical knowledge in the lab. Students gain expertise in the analysis and presentation of raw data.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
This module comprises 2 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"> <li>03-EM-SFP-1-092: P (no information on SWS (weekly contact hours) and course language available)</li> <li>03-EM-SFP-2-092: K (no information on SWS (weekly contact hours) and course language available)</li> </ul>		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.		
<b>Assessment in module component 03-EM-SFP-1-092: Practical Training Structure and Function of Proteins</b> <ul style="list-style-type: none"> <li>10 ECTS, Method of grading: numerical grade</li> <li>term paper (ready-to-publish written summary of results of experiments, minimum 10 pages)</li> </ul> <b>Assessment in module component 03-EM-SFP-2-092: Colloquium Structure and Function of Proteins</b> <ul style="list-style-type: none"> <li>5 ECTS, Method of grading: numerical grade</li> <li>oral presentation and discussion of results of lab course (approx. 15 to 20 minutes)</li> </ul>		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		

Module title		Abbreviation
Cardiovascular Biology		03-EM-KVB-092-m01
Module coordinator		Module offered by
holder of the Chair of Experimental Biomedicine		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
15	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Students spend 4 to 6 weeks working on their own small, well-defined scientific lab project in the area of cardiovascular biology and present the results of the laboratory project at the Institute seminar.		
<b>Intended learning outcomes</b>		
Participating in clinically-oriented research projects, students gain initial hands-on experience. They reinforce previously acquired lab skills, acquire new lab techniques, and learn how to apply theoretical knowledge in the lab. Students gain expertise in the analysis and presentation of raw data.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
This module comprises 2 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"> <li>03-EM-KVB-1-092: P (no information on SWS (weekly contact hours) and course language available)</li> <li>03-EM-KVB-2-092: K (no information on SWS (weekly contact hours) and course language available)</li> </ul>		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.		
<b>Assessment in module component 03-EM-KVB-1-092: Practical Training Cardiovascular Biology</b> <ul style="list-style-type: none"> <li>10 ECTS, Method of grading: numerical grade</li> <li>term paper (ready-to-publish written summary of results of experiments, minimum 10 pages)</li> </ul> <b>Assessment in module component 03-EM-KVB-2-092: Colloquium Cardiovascular Biology</b> <ul style="list-style-type: none"> <li>5 ECTS, Method of grading: numerical grade</li> <li>oral presentation and discussion of results of lab course (approx. 15 to 20 minutes)</li> </ul>		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		



Module title		Abbreviation
Neurobiology and Neurophysiology		03-EM-NBP-092-m01
Module coordinator		Module offered by
holder of the Chair of Clinical Neurobiology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
15	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Students spend 4 to 6 weeks working on their own small, well-defined scientific lab project in the area of neurobiology and neurophysiology and present the results of the laboratory project at the Institute seminar.		
<b>Intended learning outcomes</b>		
Participating in clinically-oriented research projects, students gain initial hands-on experience. They reinforce previously acquired lab skills, acquire new lab techniques, and learn how to apply theoretical knowledge in the lab. Students gain expertise in the analysis and presentation of raw data.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
This module comprises 2 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"> <li>03-EM-NBP-1-092: P (no information on SWS (weekly contact hours) and course language available)</li> <li>03-EM-NBP-2-092: K (no information on SWS (weekly contact hours) and course language available)</li> </ul>		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments.		
<b>Assessment in module component 03-EM-NBP-1-092: Practical Training Neurobiology and Neurophysiology</b> <ul style="list-style-type: none"> <li>10 ECTS, Method of grading: numerical grade</li> <li>term paper (ready-to-publish written summary of results of experiments, minimum 10 pages)</li> </ul> <b>Assessment in module component 03-EM-NBP-2-092: Colloquium Neurobiology and Neurophysiology</b> <ul style="list-style-type: none"> <li>5 ECTS, Method of grading: numerical grade</li> <li>oral presentation and discussion of results of lab course (approx. 15 to 20 minutes)</li> </ul>		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		

## **Subfield Theoretical Experimental Medicine**

(15 ECTS credits)

Module title		Abbreviation
Seminar Infection and Immunity		03-EM-Sem1-092-m01
Module coordinator		Module offered by
Institute of Virology and Immunobiology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Semester-long, integrated scientific seminar in small groups with exercise, discussion and presentations/talks by students, among others on current literature and/or selected special lectures covering the fields of virology and immunobiology.		
<b>Intended learning outcomes</b>		
Advanced insights into the focuses chosen for the in-depth scientific study of the selected specialist area. Students are able to evaluate relevant specific information, to present it in a professional manner and to discuss it with others. Students acquire a critical understanding of the most important theories, principles and methods of individual issues within the subject.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
S (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
presentation (approx. 15 to 20 minutes) and written summary (approx. 1 page)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		

Module title		Abbreviation
Seminar Molecular Oncology		03-EM-Sem2-092-m01
Module coordinator		Module offered by
holder of the Chair of Biochemistry and Molecular Biology		
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Semester-long, integrated scientific seminar in small groups with exercise, discussion and presentations/talks by students, among others on current literature and/or selected special lectures covering the field of molecular oncology.		
<b>Intended learning outcomes</b>		
Advanced insights into the focuses chosen for the in-depth scientific study of the selected specialist area. Students are able to evaluate relevant specific information, to present it in a professional manner and to discuss it with others. Students acquire a critical understanding of the most important theories, principles and methods of individual issues within the subject.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
S (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
presentation (approx. 15 to 20 minutes) and written summary (approx. 1 page)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		

Module title		Abbreviation
Seminar Structure and Function of Proteins		03-EM-Sem3-092-m01
Module coordinator		Module offered by
holder of the Chair of Structural Biology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Semester-long, integrated scientific seminar in small groups with exercise, discussion and presentations/talks by students, among others on current literature and/or selected special lectures covering the field of structure and function of proteins.		
<b>Intended learning outcomes</b>		
Advanced insights into the focuses chosen for the in-depth scientific study of the selected specialist area. Students are able to evaluate relevant specific information, to present it in a professional manner and to discuss it with others. Students acquire a critical understanding of the most important theories, principles and methods of individual issues within the subject.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
S (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
presentation (approx. 15 to 20 minutes) and written summary (approx. 1 page)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		

Module title		Abbreviation
Seminar Cardiovascular Biology		03-EM-Sem4-092-m01
Module coordinator		Module offered by
holder of the Chair of Experimental Biomedicine		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Semester-long, integrated scientific seminar in small groups with exercise, discussion and presentations/talks by students, among others on current literature and/or selected special lectures covering the field of cardiovascular biology.		
<b>Intended learning outcomes</b>		
Advanced insights into the focuses chosen for the in-depth scientific study of the selected specialist area. Students are able to evaluate relevant specific information, to present it in a professional manner and to discuss it with others. Students acquire a critical understanding of the most important theories, principles and methods of individual issues within the subject.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
S (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
presentation (approx. 15 to 20 minutes) and written summary (approx. 1 page)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		

Module title		Abbreviation
Seminar Neurobiology and Neurophysiology		03-EM-Sem5-092-m01
Module coordinator		Module offered by
holder of the Chair of Clinical Neurobiology		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
<b>Contents</b>		
Semester-long, integrated scientific seminar in small groups with exercise, discussion and presentations/talks by students, among others on current literature and/or selected special lectures covering the field of neurobiology and neurophysiology.		
<b>Intended learning outcomes</b>		
Advanced insights into the focuses chosen for the in-depth scientific study of the selected specialist area. Students are able to evaluate relevant specific information, to present it in a professional manner and to discuss it with others. Students acquire a critical understanding of the most important theories, principles and methods of individual issues within the subject.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
S (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
presentation (approx. 15 to 20 minutes) and written summary (approx. 1 page)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Experimental medicine (2009)		

# Thesis

(30 ECTS credits)



Module title		Abbreviation
Final Examination Experimental Medicine		03-EM-MA-092-m01
Module coordinator		Module offered by
chairperson of examination committee of complementary non-degree programme Experimentelle Medizin (Experimental Medicine)		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
30	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
Contents		
Students conduct a scientific research project, using appropriate methods and adhering to the principles of good scientific practice. They document and discuss their work in a thesis and defend it in a final colloquium.		
Intended learning outcomes		
Students are able to independently carry out scientific work according to the rules of good scientific practice. They are able to document and, where necessary, adjust their research as well as to interpret their findings in a larger context. Students are able to defend their work in front of a professional audience.		
Courses (type, number of weekly contact hours, language — if other than German)		
This module has 2 components; information on courses listed separately for each component. <ul style="list-style-type: none"> <li>03-EM-MA-2-092: K (no information on language and number of weekly contact hours available)</li> <li>03-EM-MA-1-092: A (no information on language and number of weekly contact hours available)</li> </ul>		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
This module has the following 2 assessment components. Unless stated otherwise, students must pass all of these assessment components to pass the module as a whole..		
<b>Assessment component to module component 03-EM-MA-2-092:</b> Kolloquium zur Masterarbeit <ul style="list-style-type: none"> <li>5 ECTS credits, method of grading: numerical grade</li> <li>Abschlusskolloquium (approx. 45 minutes)</li> <li>Only after succ. compl. of module component(s): Teilmodul 03-EM-MA-2 setzt Bestehen von Teilmodul 03-EM-MA-1 voraus.</li> </ul>		
<b>Assessment component to module component 03-EM-MA-1-092:</b> Masterarbeit "Experimentelle Medizin" <ul style="list-style-type: none"> <li>25 ECTS credits, method of grading: numerical grade</li> <li>written thesis</li> </ul>		
Allocation of places		
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Additional information		
Additional information listed separately for each module component. <ul style="list-style-type: none"> <li>03-EM-MA-1-092: Additional information on module duration: 6 months.</li> <li>03-EM-MA-2-092: --</li> </ul>		
Workload		
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Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		

Master's degree (1 major) Experimental medicine (2009)