



Module handbook

**Master of Science
Molecular Cell Biology
and
Immunology**

**Department of Biology
Faculty of Science
University of Tübingen**

Examination Regulations 2015

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1. Master's Degree Course

Qualification Objectives

The M.Sc. degree course, Molecular Cell Biology and Immunology (MCBI), provides students with an understanding of the complex regulation of cellular and immunological processes in humans and animals. The focus of this programme is on the in-depth scientific investigation of the molecular mechanisms that regulate the function and behaviour of cells and cause disease if defective. The experimental subjects are model organisms, such as mouse, *Drosophila* or *Caenorhabditis* and cell cultures from animal or human cells. The experimental results provide insight into, e.g., cell functions in cell clusters, cell differentiation and organ development. The immunological processes are examined with particular reference to disease-related malfunctions, as they occur in cases of immunodeficiency or in the context of tumour immunology.

The broad scientific training provided by this course qualifies graduates for a variety of careers, particularly for research-related positions in scientific institutions specializing in cell biology or medicine.

Graduates have in-depth knowledge of the theoretical explanatory approaches, principles and methods in the life sciences, with a focus on the area of molecular cell biology and immunology. They are conversant with the current state of research and capable of challenging it. The extensive knowledge gained in the area of molecular cell biology and immunology is of benefit to graduates in the development and implementation of their own research ideas. They are able to derive concrete questions from general concepts in the life sciences and subject them to theoretical and practical analysis, test and interpretation. In this connection, they are capable of estimating the relevance and effects of their own professional practice with due regard to ethical principles.

Graduates are capable of presenting, elucidating and discussing the results of their research before a scientific audience-in written and oral form.

Requirements/Application

For admission to the M.Sc. course, Molecular Cell Biology and Immunology, a B.Sc. degree in biology with a grade of 2,5 or better is required. The language of study and examination is English. A few required elective modules are taught and examined in German. Proof of English language proficiency at level B2 (and, if applicable, German language proficiency at level B1) of the European Framework of Reference for Languages must be supplied. Further details on admission requirements and procedures can be found on the website of the Department of Biology.

Standard Period of Study

The standard period of study for the M.Sc. degree MCBI is four semesters (120 ECTS points). The M.Sc. course must be completed by the end of the ninth semester at the latest.

2. Module Overview/Course plan¹

Module Number	Compulsory / Required Elective	Title of Module	Recommended Semester	CP
4138	C	Principles of Molecular Cell Biology	1	12
4051	C	Molecular Immunology	1	6
4139	C	Advanced Molecular Cell Biology	2+3	9
4104	C	Research Module (Part 1)	3	12
-	RE	Required elective modules Molecular Cell Biology and Immunology	1-3	21
-	RE	Required elective modules Biology ²	1-3	18
6010	C	Interdisciplinary Master's Module	1-3	12
6003	C	Master thesis Molecular Cell Biology and Immunology	4	30
			Total:	120

¹Unless otherwise stated in the module descriptions, the modules of the M.Sc. course MCBI are always graded.

²The required elective modules in biology can be chosen from the module handbooks of the "Evolution and Ecology", "Microbiology", "Molecular Cell Biology and Immunology", "Neurobiology" and "Cell and Molecular Plant Biology" courses, and from the "Ethics, Human Genetics, Parasitology" handbook

Required Elective Modules in Molecular Cell Biology and Immunology

Module Number	Title of Module	Recommended Semester	CP
4042	Innate and Adaptive Immunity	3	12
4105	Project Module	3	12
4157	Cell Biology of Development	2/3	6
4181	Principles of Immunology	1	6
4182	Advanced Immunology	2	6
4183	Basic Methods of Molecular Cell Biology	1	6

4184	Advanced Methods of Molecular Cell Biology	2	12
4185	Cell Biology of Health and Disease	2/3	6
4186	Special Topics in Cell Biology and Immunology	2-3	9
4187	Model Organisms in Cell Biology	1/2	6

Required Elective Modules in Biology

The required elective modules in biology can be chosen from the module handbooks of the “Evolution and Ecology”, “Microbiology”, “Molecular Cell Biology and Immunology”, “Neurobiology” and “Cell and Molecular Plant Biology” courses, and from the “Ethics, Human Genetics, Parasitology” handbook.

ECTS points earned in the required elective section and in the interdisciplinary master’s module are subject to the following regulations:

- a) Credit points can only be awarded for courses/modules from the course catalogue of the University of Tübingen or from officially approved study programmes abroad. Credit points cannot be awarded for external courses, internships in laboratories, research groups or companies.
- b) Credit points cannot be awarded for modules that were already listed in the bachelor’s degree certificate.
- c) Up to 30 supplementary credit points can be recorded as a voluntary achievement on the official transcript of records but cannot be used for the calculation of the final grade. Within the framework of the optional biology modules or of the interdisciplinary master’s module, **supplementary subjects** can be taken. Provided that the minimum required number of credit points has been earned (stated below in parenthesis), the supplementary subject will be noted in the master’s degree certificate: *Ethics in the Life Sciences (12 CP)*, *Human Genetics (18 CP)*, *Parasitology (18 CP)*.

Module Course Plan

Semester	CP	Master of Science Molecular Cell Biology and Immunology			
1.	30	Principles of Molecular Cell Biology (12 CP)	Required elective modules Molecular Cell Biology and Immunology (21 CP)	Required elective modules Biology (18 CP)	Interdisciplinary Master's Module (12 CP)
		Molecular Immunology (6 CP)			
2.	30	Advanced Molecular Cell Biology, part 1 (6 CP)			
3.	30	Advanced Molecular Cell Biology, part 2 (3 CP)			
		Research Module (12 CP)			
4.	30	Master thesis Molecular Cell Biology and Immunology (30 CP)			

3. Studies

Modules

Contents, teaching methods, prerequisites and examination procedure can be found in the module description section of this handbook. One ECTS credit point normally stands for 30 working hours (including preparation, follow-up work and exam preparation). A year of full-time study corresponds to 60 ECTS credits.

Module Organiser

For each module, the module organiser is the contact person for all content-related and organisational questions concerning the module and the examination. The name of the module organiser is to be found in each respective module description. The instructors are responsible for their respective courses within the module.

Module Examinations

Examination form and procedure for each module are laid down by the module organiser and made known to the students at the start of the module. A module examination is not considered as passed until **all** coursework required for the module (e.g. protocols, exams etc.) has been completed successfully. Module examinations may be repeated twice. Here only count attempts of actually undertaken examinations. A module examination and, if necessary, repetitions of examinations take place during the course of each module cycle. When the module examination has been passed, the relevant credits together with the grade achieved are registered to the student in the examination database of the Biology Department. Students can access their personal files including their performance records, on the website of the Biology Examination Office.

Lecture Period and Registration

Information on courses and lecture periods are to be found in the online course catalogue at the Campus portal of the University of Tübingen. Courses are either organised in “blocks” of 4 or more weeks or in “tracks” throughout the semester. Online registration for the respective courses takes place via Campus during the registration periods (July/Aug. for the winter semester, Feb./March for the summer semester).

Master's Degree Thesis

The master's thesis should show the investigation and presentation of a high-order scientific research question. The master's thesis can be written in German or English.

Work on the master's thesis can only start when at least 60 credit points of the master's degree have been earned. For a successfully completed master's thesis 30 credit points (= 6 months workload) are awarded. The master's thesis is graded by two evaluators. An official list of possible evaluators can be found at the Biology Examination Office. An instruction on the master's thesis and further information on procedure can be found on the website of the Department of Biology ([link](#)).

Master's Degree Examination, Calculation of Overall Grade, Certificate

The master's degree examination is taken during the course of studies and consists of the module examinations totalling 90 credit points and the master's thesis. The master's degree must be completed by the end of the ninth semester at the latest. Otherwise the right to take the examination expires.

The overall grade of the master's degree examination is derived from the average of the module grades and the master's thesis grade (doubled), weighted by the ECTS credit points. Up to 30 points can be earned over and above the 120 master's degree credit points but cannot be included in the calculation of the final grade.

About eight weeks after the master's thesis has been submitted, the master's degree certificate, with transcription of records, can be collected from the Biology Examination Office.

4. Contacts

Application

<http://www.uni-tuebingen.de/de/2048>

Dean of Studies Master: Prof. Dr. Ulrike Zentgraf

For office hours and contact details see <http://www.biologie.uni-tuebingen.de/>

Person responsible for MCBI programme: Prof. Dr. Boris Macek

<https://uni-tuebingen.de/en/70816>

Coordinator of M.Sc. program: Dr. Sven Huelsmann

<https://uni-tuebingen.de/en/63366>

M.Sc. Degree Program in Molecular Cell Biology and Immunology

<https://uni-tuebingen.de/en/64304>

Biology studies in general, news

<http://www.uni-tuebingen.de/en/437>

General enquiries and advice

<https://uni-tuebingen.de/en/16190>

Overview of performance, accumulated credit points, transcript of records, certificates

<http://www.uni-tuebingen.de/en/16191>

Registration / course changes / leave of absence

<https://uni-tuebingen.de/en/596>

Information on biology studies, exam tips and support

Students' Representative Council. Contact hours, further information und contact details:

<http://www.fsbio.uni-tuebingen.de/?cat=5>

Information for graduates, jobs, career, internship market place

Career Service

Contact hours, further information and contact details:

<https://uni-tuebingen.de/de/2767>

We wish you an interesting, informative and successful master's course.

The teams of the Department of Biology and the Interfaculty Institute for Cell Biology

Attachment: description of modules

MCBI 4042	Innate & Adaptive Immunity	Optional
ECTS Points	12	
Workload	Contact time: 120 h Individual study: 240 h	
Duration	1 Semester	
Rotation Cycle	Every semester	
Teaching Methods	Practical course, seminar	
Module Contents	<p>Overview of the normal and pathogenic mechanisms that regulate the functions of the cellular immune system.</p> <p>Insight into the complex immunological processes in humans and animals.</p> <p>Overview of dysfunctions and how they are manifested by immunodeficiency or tumour formation.</p>	
Learning Outcomes	<p>Students</p> <ul style="list-style-type: none"> acquire competence in immunological techniques understand immunological phenomena are able to identify and describe immune effectors acquire competence in scientific record keeping in the field of immunology are capable of selecting appropriate subject-specific techniques 	
Student Attendance and Coursework	Participation, seminar talk, results protocol, completion of short lecture to present the student's own results in English	
Module Examination	Practical course protocol or oral presentation	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Weber, Alexander, Prof. Dr.	

MCBI 4051	Molecular Immunology	Mandatory
ECTS Points	6	
Workload	Contact time: 60 h Individual study: 120 h	
Duration	1 Semester	
Rotation Cycle	Every semester	
Teaching Methods	Practical course, seminar	
Module Contents	Scientific contents and methods in the area of molecular immunology	
Learning Outcomes	<p>Students</p> <p>acquire competence in the basic techniques in molecular immunology</p> <p>learn to carry out their molecular immunology research independently in the lab</p> <p>learn scientific record keeping</p> <p>are able to work successfully as part of a team</p> <p>are capable of presenting their procedure and results clearly in English</p>	
Student Attendance and Coursework	Participation in practical course and seminar, protocol, oral presentation in seminar	
Module Examination	Protocol or oral presentation	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Weber, Alexander, Prof. Dr.	

MCBI 4105	Project Module	Optional
ECTS Points	12	
Workload	Contact time: 120 h Individual study: 240 h	
Duration	8 weeks block	
Rotation Cycle	Every semester	
Teaching Methods	Practical course	
Module Contents	Study of experimental procedures in preparation for the master's thesis Conception, formulation and specification of scientific research questions in molecular cell biology and immunology in preparation for writing the master's thesis	
Learning Outcomes	Students lay the groundwork for an independent, problem-oriented experimental thesis. are capable of critically evaluating experimental procedures in cell biology / immunology and selecting those appropriate to their research question. are able to develop concepts for experimental procedures in cell biology /immunology.	
Student Attendance and Coursework	Participation in practical course, protocol	
Module Examination	Oral examination or colloquium	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Hülsmann, Sven, Dr.	

MCBI 4104	Research Module	Mandatory
ECTS Points	12	
Workload	Contact time: 120 h Individual study: 240 h	
Duration	8 weeks block	
Rotation Cycle	Every semester	
Teaching Methods	Practical course, semester assignment	
Module Contents	Scientific contents and methods in the area of molecular cell biology and immunology Implementation of research-oriented laboratory work in the subject-specific area Presentation of student's own results in the form of a short lecture in conference format in English	
Learning Outcomes	Students acquire first skills in independent project management and experimental design improve their basic and special techniques in molecular cell biology or immunology acquire competence in scientific record keeping can to view their own results in an interdisciplinary context and discuss them critically are capable of presenting and discussing their results in English	
Student Attendance and Coursework	Participation, results protocol, oral presentation of the student's own results in English	
Module Examination	Protocol of practical course or colloquium	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Hülsmann, Sven, Dr.	

MCBI 4138	Principles of Molecular Cell Biology	Mandatory
ECTS Points	12	
Workload	Contact time: 120 h Individual study: 240 h	
Duration	1 Semester	
Rotation Cycle	Winter semester	
Teaching Methods	Lecture, seminar, practical course	
Module Contents	<p>The lecture covers the basic principles of molecular cell biology.</p> <p>The seminar provides more insight into the lecture topics through student presentation of classic and current publications.</p> <p>The practical course provides guidance on the application of current basic molecular methods in cell biology, promotes a comprehensive theoretical understanding of these methods and provides training in scientific record keeping.</p>	
Learning Outcomes	<p>Students are conversant with the basic principles of molecular cell biology</p> <p>acquire competence in the presentation of scientific publications</p> <p>acquire basic competence in the implementation and documentation of independent experiments</p>	
Student Attendance and Coursework	Attendance at lecture, seminar and practical course, oral presentation in seminar, experimental protocol	
Module Examination	Written examination	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Proikas-Cezanne, Tassula, Prof. Dr. (apl.)	

MCBI 4139	Advanced Molecular Cell Biology	Mandatory
ECTS Points	9	
Workload	Contact time: 90 h Individual study: 180 h	
Duration	2 semesters	
Rotation Cycle	Every semester	
Teaching Methods	Lecture, seminar, practical course	
Module Contents	<p>The lecture provides an overview of current advanced topics in molecular cell biology.</p> <p>The seminar provides more insight into selected current research-oriented topics</p> <p>The practical course provides more insight into selected aspects of molecular cell biology and introduces students to instrumental methods in cell biology</p>	
Learning Outcomes	<p>Students</p> <p>understand the theoretical principles of current molecular cell biology</p> <p>know and recognize unresolved issues in cell biology</p> <p>acquire competence in the implementation and documentation of instrumental analysis</p> <p>are able to record, analyse and interpret the results of their measurements</p> <p>learn to assess their work critically and develop their power of sound scientific judgement</p>	
Student Attendance and Coursework	Attendance at lecture and practical course	
Module Examination	Written examination	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Macek, Boris, Prof. Dr.	

MCBI 4157	Cell Biology of Development	Optional
ECTS Points	6	
Workload	Contact time: 60 h Individual study: 120 h	
Duration	4 weeks block	
Rotation Cycle	Every semester	
Teaching Methods	Lecture, seminar, practical course	
Module Contents	The module is concerned with the cell biology of the processes of development and differentiation in selected animal organisms. The main focus is on the molecular mechanisms that regulate cell behaviour during development and differentiation, and on the methods that serve to throw light on them.	
Learning Outcomes	<p>Students</p> <ul style="list-style-type: none"> are conversant with models that enable the study of processes of development and differentiation in animal organisms at cellular and molecular levels are familiar with the cell biological and genetic methods that are used to examine cell behaviour during development and differentiation understand the connections between development, differentiation and aging have at their command the practical knowledge with which to answer developmental biological questions at molecular level 	
Student Attendance and Coursework	Attendance at lecture, practical course and seminar with oral presentation	
Module Examination	Semester assignment or poster presentation	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Moussian, Bernard, PD Dr.	

MCBI 4181	Principles of Immunology	Optional
ECTS Points	6	
Workload	Contact time: 60 h Individual study: 120 h	
Duration	1 Semester	
Rotation Cycle	Every semester	
Teaching Methods	Lecture, seminar	
Module Contents	The module provides students with an understanding of the fundamental principles of cell and molecular immunology.	
Learning Outcomes	Students understand the fundamental principles of immunology are familiar with the fundamental concepts of humoral and cellular immunity and of both the innate and the adaptive immune response.	
Student Attendance and Coursework	Attendance at lecture and seminar, oral presentation	
Module Examination	Written examination or oral presentation	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Weber, Alexander, Prof. Dr.	

MCBI 4182	Advanced Immunology	Optional
ECTS Points	6	
Workload	Contact time: 60 h Individual study: 120 h	
Duration	1 Semester	
Rotation Cycle	Every semester	
Teaching Methods	Lecture, seminar	
Module Contents	The lecture provides an overview of current advanced topics in immunology. The seminar provides a comprehensive theoretical understanding of the methods.	
Learning Outcomes	Students understand the theoretical principles underlying immunological questions. know and recognize unresolved issues in immunology learn to assess immunological work critically and develop their power of sound scientific judgement	
Student Attendance and Coursework	Attendance at lecture, seminar and practical course	
Module Examination	Written examination	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Weber, Alexander, Prof. Dr.	

MCBI 4183	Basic Methods of Molecular Cell Biology	Optional
ECTS Points	6	
Workload	Contact time: 60 h Individual study: 120 h	
Duration	4 weeks block	
Rotation Cycle	Every semester	
Teaching Methods	Lecture, seminar, practical course	
Module Contents	The focus of the module is on basic methods commonly used in cell biology	
Learning Outcomes	Students gain an overview of the methods commonly used in cell biology are familiar with the functional principles, areas of application and limitations of commonly used methods in cell biology improve their understanding through independent study of literature on cell biological methods are able to apply selected methods in a technically correct manner learn to work as part of a team	
Student Attendance and Coursework	Attendance at lecture, practical course and seminar with oral presentation	
Module Examination	Oral examination or semester assignment	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Ewald, Jennifer, Prof. Dr.	

MCBI 4184	Advanced Methods of Molecular Cell Biology	Optional
ECTS Points	6	
Workload	Contact time: 60 h Individual study: 120 h	
Duration	4 weeks block	
Rotation Cycle	Every semester	
Teaching Methods	Lecture, seminar, practical course	
Module Contents	Introduction to and application of advanced and complex methods and instruments to obtain qualitative and, particularly, quantitative data with which to solve current issues in cell biology.	
Learning Outcomes	<p>Students</p> <ul style="list-style-type: none"> gain in-depth knowledge of special methods in molecular cell biology develop discernment in judging the quality of their measurement results are able to operate complicated measuring instruments independently have the ability to carry out complex quantitative analyses learn to work independently in the lab and design experiments are capable of organizing a team and instructing bachelor's degree students in the use of instruments are able to choose appropriate methods to address specific issues 	
Student Attendance and Coursework	Participation in exercise / practical course. Writing of scientific text or experimental protocol	
Module Examination	Semester assignment or experimental protocol	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Ewald, Jennifer, Prof. Dr.	

MCBI 4185	Cell Biology of Health and Disease	Optional
ECTS Points	6	
Workload	Contact time: 60 h Individual study: 120 h	
Duration	2 semesters	
Rotation Cycle	Every semester	
Teaching Methods	Lecture, seminar	
Module Contents	The module is concerned with changes in cell behaviour with pathological results in human and animal model. Examination of the molecular etiology of selected diseases.	
Learning Outcomes	<p>Students</p> <ul style="list-style-type: none"> make use of basic research oriented knowledge to address clinically relevant questions develop relevant subject-specific research questions communicate subject specific knowledge and research results challenge and evaluate the research ideas of other scientists and develop their power of sound scientific judgement 	
Student Attendance and Coursework	Attendance at lecture, seminar. Oral presentation in seminar.	
Module Examination	Written examination or oral presentation	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Proikas-Cezanne, Tassula, Prof. Dr. (apl.)	

MCBI 4186	Special Topics in Cell Biology and Immunology	Optional
ECTS Points	9	
Workload	Contact time: 90 h Individual study: 180 h	
Duration	2 semesters	
Rotation Cycle	Every semester	
Teaching Methods	Lecture, Seminar, Exercise	
Module Contents	The module covers selected topics in molecular cell biology that are the subject of current interdisciplinary research.	
Learning Outcomes	<p>Students</p> <ul style="list-style-type: none"> are conversant with special topics in cell biology build bridges to the neighbouring disciplines, such as biochemistry, nanoscience and microbiology are capable of identifying the specific problems of the respective special fields with the help of independent literature research and of understanding the major explanatory models are able to structure their acquired knowledge and present it in English 	
Student Attendance and Coursework	Attendance at lecture, seminar with oral presentation, practical exercise	
Module Examination	Not graded	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Proikas-Cezanne, Tassula, Prof. Dr. (apl.)	

MCBI 4187	Model Organisms in Cell Biology	Optional
ECTS Points	6	
Workload	Contact time: 60 h Individual study: 120 h	
Duration	4 weeks block	
Rotation Cycle	Every semester	
Teaching Methods	Practical course	
Module Contents	Overview of organisms that serve as models for cell biological studies.	
Learning Outcomes	<p>Students</p> <p>are conversant with the areas of application and the advantages and disadvantages of selected model organisms.</p> <p>develop the basic practical skills needed to use model organisms in cell biological research.</p> <p>are familiar with the resources that enable and facilitate the use of model organisms.</p>	
Student Attendance and Coursework	Participation in practical course, protocol	
Module Examination	Semester assignment or experimental protocol	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Advanced knowledge of biology	
Module Organiser	Ewald, Jennifer, Prof. Dr.	

MCBI 6003	Master's Thesis Molecular Cell Biology and Immunology	Mandatory
ECTS Points	30	
Workload	Contact time: 300 h Individual study: 600 h	
Duration	1 Semester	
Rotation Cycle	Every semester	
Teaching Methods	Scientific thesis	
Module Contents	The master's thesis completes the master's course. It consists of carrying out a research project, the evaluation and processing of the results and the written report of the results. The results should contribute to the body of scientific knowledge.	
Learning Outcomes	<p>Students</p> <ul style="list-style-type: none"> have the ability to familiarize themselves with a problem in current research within the given deadline. They are capable of applying appropriate methods with increasing independence and of presenting results in a scientifically appropriate form are able to work independently on a challenging scientific topic and thereby apply their acquired knowledge of biological methods have improved their problem-solving skills and are able to transfer methodological knowledge are able to work as part of a team in an international scientific context 	
Student Attendance and Coursework	Writing of a scientific thesis	
Module Examination	Graded thesis	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	Successful completion of master's modules of the degree course	
Module Organiser	Thesis supervisor	

BIOL 6010	Interdisciplinary Master's Module	Mandatory
ECTS Points	12	
Workload	Contact time: 120 h Individual study: 240 h	
Duration	1-2 semesters	
Rotation Cycle	Every semester	
Teaching Methods	Lecture, seminar, practical course, exercise, field trip	
Module Contents	It is intended that students should broaden the scope of their studies to include other disciplines and round off their chosen field of activity. Consideration should be given to the fact that biology has manifold correlations with other disciplines and is influenced by them in many ways. Students choose from the courses worth 12 ECTS points offered by the general course catalogue of the University of Tübingen.	
Learning Outcomes	Students acquire interdisciplinary, career-oriented skills with a broad qualification profile, which allows them to develop their professional interests independently and to take advantage of offers from a wide range of application fields.	
Student Attendance and Coursework	Laid down by department responsible for module	
Module Examination	Laid down by department responsible for module	
Pertinence	M.Sc. degree courses in biology and, if applicable, related degree courses in the natural sciences or medicine	
Prerequisites	None	
Module Organiser	Dean of Studies	

