# ANIMAL BIOLOGY

# Master's degree program

Master of Science: MSc in Animal Biology

Within the Basel life science program, the Department of Environmental Sciences and its associates offer a comprehensive Master course for graduates with a background in biology. The course builds upon the local strength in Zoology and Evolutionary Biology in general and in evolutionary genetics and genomics, population biology, developmental biology and evolutionary ecology in particular.

## Focal area of teaching and research

Some key aspects of the Master in Animal Biology are:

- We offer a broad spectrum of course modules from which preferred topics can be chosen.
- We offer attractive workshops and field courses in Switzerland and abroad.
- We employ modern laboratory methods, including genomic techniques.
- In our field work, we integrate population biology across scales.
- Our teaching focuses on interactive courses that lead to independent thinking and the development of conceptual strength in topics ranging from molecular evolution, evolutionary developmental biology to population biology and metapopulation ecology.
- Master students will do a guided, yet independent research project within any of the groups associated with the master program. Current research topics include the evolution of host-parasite interactions, epidemiology, speciation, adaptive radiation, sexual selection, evolution of hermaphrodism and mating systems, evolutionary developmental biology, evolutionary genomics and the evolution of the immune system.
- The master thesis will be written in English. Most theses will lead to publication in international peer-reviewed journals.

#### **Course structure Master studies**

The Master of Science degree is a postgraduate degree that requires a successfully completed Bachelor's program. The program awards 90 ECTS credits in total. The Master's degree program Animal Biology is a so called «mono-course» consisting of only one core subject. Supervised practical work over the course of one year constitutes the core of the studies.





Curriculum Master's Degree in Animal Biology	KP
Master's thesis	50
Master's examination	10
Courses (of which 18 ECTS must be taken within the Animal Biology course offerings)	30
Total	90

One ECTS credit point roughly equals 30 hours of study.

## Course language

The language of instruction is English. The Master's thesis is generally to be written in English.

#### **Exams**

Student performance is assessed through course accompanying certificates, proof of course participation according to study contracts, a Master's thesis and through a Master's examination.

## Language stays / Internships

No language stays or internships are required.

# **Combination of subjects**

The degree programs at the Faculty of Science are generally mono-courses with the possible addition of an in-depth subject and an elective subject.

## Start of program

The program is to be started preferably in fall but can also be started in the spring semester.

## **Duration of study**

The Master's program lasts three to four semesters. There are no restrictions on the duration of study.

## **Further degrees**

**Teaching diploma for secondary schools**: The teaching diploma enables teaching within the general school system at the Secondary Level II and is based on the academic degree at Master's level of a university in one or two subjects. In addition, two semesters of vocational training at the school for teacher education at FHNW have to be completed. The diploma does not require a Master's degree in a second subject; however, it is advisable due to better career options later after graduation. Details can be found in UNI INFO «Lehrdiplom für Maturitätsschulen».

Also see: www.fhnw.ch/de/studium/paedagogik/sekundarstufe-2

**Doctorate**: A Master of Science in Biology qualifies for a doctorate in biochemistry, biophysics, botany, computational biology, genetics, microbiology, molecular biology, neurobiology, structural biology, cell biology or zoology. Trans-faculty doctorates are possible in the fields of epidemiology, history of the sciences, medical-biological research and pharmacology. The doctoral studies last three to four years. After the acceptance of the dissertation an oral examination covering the postgraduate studies in the doctoral subject has to be passed.

# Career opportunities

After successfully completing their Master's degree the graduates can study further for a doctoral qualification or follow a profession in all fields of life sciences. Biology is a subject that covers many disciplines and the career opportunities include research and related activities in the fields of medicine, biotechnology and pharmaceutical industries. The practical advantages of the subject are found not only in basic research but also, increasingly, in business, society and politics. Numerous jobs are on offer to biology graduates, within the university and also in private industry, government service, schools and

organizations, be it as researchers, communicators, teachers or advisors. For these reasons, biology can rightly be considered as this century's key science.

#### Admission

The following degree allows for direct admission to the Master's degree program Animal Biology: Bachelor of Science (BSc) in Biology from the University of Basel. Other Swiss or foreign degrees from an education institution recognized by the University of Basel require approval by the examination commission of the Faculty of Science. Binding information under: www.unibas.ch

## **Application**

Application under <u>www.unibas.ch/application</u>; the application fee amounts to CHF 100.-. Application deadline for the fall semester is April 30, for the spring semester 30 November.

#### **Enrollment**

The letter of admission also informs students on the procedure of enrollment. In general, students with a Swiss educational background do not have to be present in person for enrollment.

## Tuition fees and scholarships

Tuition fees per semester (also for examination semesters): CHF 850.-

Individual costs of living etc. are not included. Costs for excursions and visits of other labs will have to be covered by the students.

**Scholarships and student loans:** Applications should be sent to the responsible office of the canton in which the parents are eligible to pay their taxes.

## **Mobility**

Semesters abroad are possible and supported by scholarship programs. The mobility programs facilitate the stay at other Swiss universities or foreign universities. Further Information: Student Exchange, Petersplatz 1, 4001 Basel, T +41 61 207 30 28, mobility@unibas.ch

## **Further information**

**Guidelines and regulations** of the Master's Degree in Animal Biology see <a href="https://www.bio.unibas.ch/en/regulations">www.bio.unibas.ch/en/regulations</a>

#### Information about the University of Basel

- The course directory can be found under: <a href="www.unibas.ch/en/Studies/Course-Directory">www.unibas.ch/en/Studies/Course-Directory</a>
- Basler Studienführer: <u>www.studienberatung.unibas.ch</u>
- Website: www.unibas.ch

#### Student advice

Questions regarding the study of Animal Biology can be discussed with the Study Counselor for the Master Program Animal Biology.

#### **Contacts**

## Study Counselor for the Master Program Animal Biology

Prof. Dieter Ebert Departement Umweltwissenschaften, Zoology Vesalgasse 1, 4051 Basel T +41 61 207 03 60 www.evolution.unibas.ch

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#### **Studies Secretariat Biology**

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# Office of the Dean of Studies of the Faculty of Science

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## Student Administration Office of the University of Basel

Petersplatz 1, 4001 Basel T +41 61 207 30 23 www.unibas.ch

enquiries: www.unibas.ch/studseksupportEN

## **Student Advice Center Basel**

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## **Imprint**

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