

Master's Program in Biology, Concentration Evolutionary Anthropology

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Institute of Evolutionary Anthropology: Research into the Origins of Human Morphology and Behaviour

Work at the Institute of Evolutionary Anthropology (IEA) is aimed at understanding the origins and evolution of human morphology and behaviour. For both research areas we have a dual task. First, we need to identify the unique features of humans and reconstruct their evolutionary history. Second, we then need to develop explanations for these novel features based on general biological theories, built up from studies of living and fossil primates and other animals.

Master's Program

The consecutive Master's program in Biology, concentration Evolutionary Anthropology, contains lectures and courses on human evolution, evolutionary genetics, morphology and behaviour of primates, modelling, and history of the anthropological sciences. These modules can be complemented by a variety of modules from other Master concentrations such as Genetics and Development, Animal Behaviour, Systematics and Evolution, Palaeontology, or Evolutionary Linguistics.

The Master's program at the Department of Anthropology consists of:

- Course work
(20 ECTS points, see below)
- Master's thesis in Evolutionary Anthropology (including seminars and colloquia)
(60 ECTS points, module **BIO508**, conducted over a 12-month period)
- General exam
(10 ECTS points, module **BIO 520** 'Integrated Knowledge in Biology')
- Two oral presentations

Additional information can be found on:

<https://studentservices.uzh.ch/uzh/anonym/vvz/index.html#/details/CG/51037185>

The module BIO338 Introduction to Scientific Writing (0 ECTS, one day in September or February) is mandatory for all Biology Master's students. The module should be taken before writing the Master's Thesis.

Supervisory Arrangements

MSc students at the IEA are supervised by two academic staff (professors, '*Wissenschaftliche Mitarbeitende*', post-docs). The principal supervisor must be entitled to supervise MSc thesis according to the regulations of the Faculty of Science and by IEA. Additional external supervisors can be added. The principal supervisor acts as the main contact and is responsible for the student's

fulfilment of all academic requirements set by the IEA, the Division of Biology and the Faculty of Science. Both supervisors will be listed on the learning agreement. Apart from providing academic support, the second supervisor will provide independent assessment and marks for modules BIO508 and BIO520.

Learning Agreement and Course Work

MSc students and the principal supervisor agree on an individual course program before commencement of the Master's program. The Master's Program in Biology with concentration in Evolutionary Anthropology requires a minimum of 20 credit points of course work. The course work comprises block courses and special lectures in Evolutionary Anthropology (15 ECTS credits) and elective modules (5 ECTS).

The core 15 ECTS in Evolutionary Anthropology can comprise the following block courses and lectures (HS23 and FS24):

BIO 201 Primate Evolutionary Biology, 3 ECTS, VL	HS, Mo 14-16, WP 3
BIO 202 Comparative Communication and Cognition, 6 ECTS, BK	FS 3. Viertel, WP 2
BIO 203 Primate Behaviour and Ecology, 6 ECTS, BK	HS 3. Viertel, WP 2
BIO 204 Applied Human Evolution, 6 ECTS, BK	HS 1. Viertel, WP 2
BIO 207 Comparative Systematics and Evolution of Primates, 2 ECTS, VL	HS, Mo 8-10, WP 3
BIO 208 Current Debates in Evolutionary Biology and Human Evolution, 6 ECTS, BK	HS 2. Viertel, WP 2
BIO 210 Human Behavioural Ecology and Cultural Evolution, 6 ECTS, BK	HS 1. Viertel, WP 2
BIO 211 Primate Behaviour and Cognition - Empirical Research, 6 ECTS, BK	FS 4. Viertel, WP 2
BIO 212 Language Evolution: Insights from Animal Communication, 3 ECTS, VL	FS Mo 8-10, WP 3
BIO 214 Von Affenmenschen und Menschenaffen, 2 ECTS, VL	HS Mo 10-12, WP 3
BIO 216 Primate Origins of Human Sociality, Cognition, & Mind, 3 ECTS, VL	FS Mo 10-12, WP 3
BIO 218 Ethische Aspekte der biol. Forschung am Menschen, 3 ECTS, VL	FS Mo 12-14, WP 3
BIO 219 Evolution of the Human Brain, Cognition, & Language, 3 ECTS, VL	HS Mo 12-14, WP 3
BIO 340 Biology, Evolution and Ecology of Marine Mammals, 3 ECTS, VL	HS Di 10-12, WP 3
BIO 341 Field Course in Evolutionary Biology of Marine Mammals, Shark Bay, Western Australia, 4 ECTS, EXK, 2 Wochen im Juli/August	alle 2 Jahre, WP 3
245-503 Geschlecht und Biologie, 3 ECTS, VL	HS, Do 10-12

In addition, in agreement with supervisors and MSc Coordinator, the following courses from other concentrations can also be selected and will count as core ECTS:

BIO 262 Evolutionary Morphology of Vertebrates, 6 ECTS, BK	FS 2. Viertel, WP 2
BIO 331 Frontiers in Animal Behaviour, 2 ECTS, VL	HS Mo 10-12, WP 3
BIO 353 Animal Behaviour Field Studies, 6 ECTS, BK	FS 4. Viertel, WP 2
BIO 395 Concepts in Evolutionary Biology, 1 ECTS, VL&UE	2 Tage, März, WP 3,
BIO 437 Human Adaptation, 3 ECTS, VL	HS Di 10-12, WP 3
BIO 438 Methods in Human Bioarcheology, 3 ECTS, VL&UE	HS Di 8-10, WP 3
BIO 440 Evolutionary Medicine: Morphological Changes and Pathologies, 6 ECTS, BK	HS 3. Viertel, WP 2

BIO 442 Evolutionary Medicine: Health and Disease in Modern Humans,
6 ECTS, BK

FS 4. Viertel, WP 2

BIO 556 Scientific Writing for Organismal Biologists, 3 ECTS, SE

HS Fr 10-12, WP 3,

BME 307 Microbiomes in Health and Disease, 6 ECTS, BK

HS 1. Viertel, WP 2

You must complete an individual Learning Agreement (LA). At the very latest before starting the MSc thesis project, the LA must be completed online and cleared by all involved.

(<http://studentadmin.mnf.uzh.ch>).

Duration of Master's Program

The duration for the MSc program in the Institute of Evolutionary Anthropology is 18-24 months (including course work, 'ramp-up time' and module BIO508). The duration of the MSc thesis project is one year (full time). A written request for extension in case of unexpected, exceptional circumstances beyond personal control needs to be lodged with and approved by the MSc Coordinator not later than 2 months prior to the submission date stated in the learning agreement, and if granted also has to be approved by the Academic Support Office.

If an optional minor of 30 ECTS is chosen, the total duration of the MSc program is prolonged by approximately 1-2 semesters. Minor modules must be done outside the thesis project year. A minor can be added or dropped during the MSc program.

Introductory and Final Oral Presentation

MSc students are required to give both an introductory and a final presentation of their work at our Anthropological Project Report Colloquium (**BIO549**). Both seminars will be graded by the supervisors. The sign-up sheet can be found in Microsoft Teams (BIO 549: Sign-up Sheet Anthropological Project Reports). Enquiries can be directed to the study advisor of the IEA, Tony Weingrill (tonyw@aim.uzh.ch).

Project Proposal and Master's Thesis

Prior to commencing the practical component, a project proposal including a literature review, must be written. Primary supervisor and student agree on the scope of the proposal.

Generally, an MSc thesis at the IEA can be written in a classical format (50-60 pages) or as a manuscript for publication in an international scientific journal. The format and scope will be agreed upon with the primary supervisor.

After completion of the MSc thesis, students are expected to hand in four hard copies at the IEA administration office (one for each examiner and two for the IEA). An additional copy must be handed in personally at the Academic Support Office (*Studienkoordination*). An electronic copy is to be submitted to the study advisor of the IEA and the Academic Support Office (*Studienkoordination*). The final mark of the MSc will be determined by the principal and the co-supervisor, who both act as examiners of the MSc thesis.

Field Work

If you plan to conduct fieldwork, please contact the Administrative Office (zebib@aim.uzh.ch) at least 2 months in advance. UZH MSc students who travel abroad on behalf of UZH are automatically covered by the university's travel insurance. Please see more information below:

<https://www.staff.uzh.ch/en/safety-health/travelinsurance.html>

Please complete the Travel to Areas of Increased Risk application form as you travel into a remote area. Please find the link below:

<https://www.staff.uzh.ch/en/safety-health/travelinsurance/authorization.html>

To ensure insurance coverage for countries with high medical costs, specific travel preparations are required. You must inform International SOS via the Assistance App or telephone for optimal support in illness or medical emergencies. They can then issue a payment guarantee, for example. Please download the app.

Admission Procedures

UZH students and students from other Swiss universities:

UZH biology students interested in carrying out their MSc work at the IEA are expected to apply directly to any senior IEA academic staff member (including postdocs). Biology students from other Swiss universities must apply to UZH first.

International students:

Detailed information for the admission of international students for a Master's program in Biology at UZH can be found at <https://www.uzh.ch/cmsssl/en/studies/application/master.html>. For questions, the admissions office of UZH must be contacted.

IMPORTANT NOTICE: Many international students are required to complete additional course work (conditions) in a preparatory phase before they are admitted to undertake their MSc program at the UZH. Thus, international students can commence the Master's program at the IEA only if all admission requirements from UZH plus any additional stipulations by the IEA have been fulfilled. Arrangements (flights, accommodation etc.) should only be made after any potential additional course work at UZH has been identified and the enrolment in the Master's program has been confirmed by the UZH admission office. Please contact the Academic Support Office (Studienkoordination) Biology immediately after the receipt of the admission letter to obtain important information about planning your studies (studienkoordination@biol.uzh.ch).

Registration Process

Registration for the Master's program in Biology

Students who have successfully completed their Bachelor's degree course in Biology can continue their studies by choosing the consecutive Master's program in Biology (application for a direct entry via the semester enrolment).

Additional information for students with a Bachelor's degree from another university than the UZH (Swiss and international students)

- Online application form: <https://www.uzh.ch/cmsssl/en/studies/application/apply.html>
- Proficiency in English is expected

- Note the extremely early application deadline if a visa for Switzerland is required. The online application for the MSc program in Biology costs CHF 100.- and should be completed as early as possible, as it may take months to be processed. Check the following web site for more information: <https://www.uzh.ch/cmsssl/en/studies/application/apply.html>
- After formal admission, and after payment fees, students receive a student ID and Uni-Access number with password. These numbers are required to register for courses, so they should be obtained at least two months before starting your studies (*i.e.*, mid July to start in September).
- Courses need to be registered in advance online. If registration dates are missed, studies may take up to a year longer.
- For any questions after admittance into the UZH Master's program in Biology, the study advisor of the department, Tony Weingrill (tonyw@aim.uzh.ch) should be contacted.

Guidelines for Anthropology Students and Supervisors

- Contact your (intended) supervisor and send him/her an application letter containing your CV, and copy of your Bachelor degree (please note supervisors are not obliged to accept you as their student). However, to choose a supervisor and be accepted by him/her, you should have at least successfully completed one lecture or course with him/her. Thus, we advise students from abroad to start with a variety of courses and lectures in their first term, but already to attend colloquia and the journal club within the IEA. Please note that this might prolong the total duration of your Master's studies, depending on your previous knowledge and project of choice.
- When you have agreed with a supervisor on the research topic of the Master's thesis, contact the Study Advisor (tonyw@aim.uzh.ch). The Administrative Office will issue an office key and will program access to the Department on your UZH-card. Ideally, the start of the Master's project should coincide with the beginning of the spring or fall semester.
- The start and end dates of the Master's project have to be specified in the Learning Agreement and the Internal Registration Form. The Learning Agreement must be completed and cleared by all involved before the start of a Master's project. Usually, the duration of the Master's thesis is one year. However, if work on the thesis is interrupted by one or more block courses, a corresponding extension of the duration is possible and should be noted in the learning agreement in advance. Please be aware that projects involving fieldwork, especially abroad, may take more preparation time before the actual start of the research due to visa and other paperwork. Under these special circumstances, the Master's coordinator can approve a delayed submission of the learning agreement no longer than 6 months after the start of the research project.
- At the end of the project, MSc students are obliged to make all raw data available to their supervisors.

Regulations concerning BIO 520 *Integrated Knowledge in Biology*

- This final exam takes place within 2 months after handing in the thesis. It comprises a 3-hour written exam and a 30 - 60minute oral exam on the same day. The written exam includes six questions (each question can comprise of several sub-questions) from all supervisors. The supervisors and if required the MSc coordinator will conduct the oral exam.
- Examination material for all MSc students at IEA will be the latest edition of Boyd & Silk 'How Humans Evolved' plus a second science book (or a collection of research papers that will be arranged with the principal supervisor).

- The introductory and final talks are integrated into the mark of the final master exam. Students should preferably give their final talks before submitting their thesis; however, they must give the talk three weeks after submitting their thesis at the latest. Talks need to be presented during the semester.

Ongoing Projects and Research Groups

Below is a list of group leaders and researchers that can serve as supervisors of Master's projects.

Group Prof. Dr. Michael Krützen (michael.kruetzen@aim.uzh.ch):

Evolutionary genetics and genomics, and behavioural ecology

Group Prof. Dr. Andrea Migliano

Prof. Andrea Migliano (andrea.migliano@uzh.ch)

Human evolutionary ecology

Dr. Lucio Vinicius (lucio.vinicius@aim.uzh.ch):

Evolution of human brain cognition and language

Dr. Robin Morrison (robin.morrison@uzh.ch)

Gorilla social behaviour

Group Prof. Dr. Judith Burkart (judith.burkart@aim.uzh.ch):

Primate cognition and behaviour

Group Prof. Dr. Kathelijne Koops (kathelijne.koops@uzh.ch)

African ape behaviour and ecology

Group Prof. Dr. Simon Townsend (simon.townsend@uzh.ch)

Comparative communication and cognition

Dr. Colin Shaw (colin.shaw@uzh.ch)

Human physiology and ecology

Dr. Erik Willems (e.willems@aim.uzh.ch):

Social evolution and spatial ecology of (primarily) vervet monkeys

Dr. Tony Weingrill (tonyw@aim.uzh.ch):

Primate reproductive strategies and socioendocrinology

Useful Links

Ongoing projects and research groups at the Institute of Evolutionary Anthropology:

<http://www.aim.uzh.ch>

<http://www.biologie.uzh.ch/Studium/Masterstudium/MasterStudies/Anthropology.html>

Biology curriculum:

<https://www.biologie.uzh.ch/de/Studium/Masterstudium/MasterStudies/Anthropology.html>

<https://www.biologie.uzh.ch/de/Fuer-Biologiestudierende/Wegleitung-Merkblaetter.html>

(only available in German)

List of courses and lectures at UZH:

<https://courses.uzh.ch>

For current overview of all courses and lectures, select:

Faculty of Science, Master of Science Faculty of Science, Study Program Biology, Anthropology.