

FAQ Master Studies in Microbiology at University of Zurich (UZH)

Jakob Pernthaler, ver. Aug 2022

Precondition:

Bachelor degree accepted by UZH (clear with [Studienkoordination Biologie](#) if in doubt)

Read the information provided on these webpages:

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

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

Structure:

During a Master Study in Biology at UZH a minimum of 90 ECTS credit points need to be acquired. This amounts to about three semesters. Master studies generally consist of 3 parts:

1. Courses (20 credit points from “compulsory” and “voluntary” courses):

In our programme we do not distinguish between the two categories “compulsory” and “voluntary”, but I will leave it open to Master student candidates to individually compose their course programme. I shall check the appropriateness of the chosen courses in the listing presented in the Learning Agreement (see below).

One additional compulsory course for all Master students that is not listed in the Master Agreement is the Microbiological Seminar (BIO711) on Friday afternoon in the Institute of Plant Biology (small lecture hall). While the weekly participation is negotiable for external students, every Master student has to give one final presentation of his work in the framework of the seminar.

2. Master Thesis:

One or several projects with a total duration of 1 year. Master student candidates will need to find one or several supervisors for these projects, e.g. from the research groups listed on the web page <http://www.biologie.uzh.ch/Studium/Masterstudium/MasterStudies/Microbiology.html>. Usually this is done by directly asking people, e.g. during block courses. Supervisors from other UZH / USZ laboratories are also acceptable. In special circumstances, researchers from outside can also be supervisors, but this needs to be cleared with me first. Specifically, Studienkoordination Biologie only approves of external Master supervisors if they significantly contribute to the UZH Bachelor teaching programme (e.g., many professors at ETHZ qualify as supervisors, because ETHZ microbiology courses are open to UZH students).

In most cases only a single 12-month project is performed in one laboratory, because it is not all that easy to find several researchers that are prepared to supervise shorter projects. The Master Thesis needs to be submitted one year after the starting date in printed form both to the Master supervisor and to the Studienkoordination Biologie (but not to me). Master Thesis can be completed in either, English or German.

3. Compulsory module BIO 520 „Themenübergreifende Fachkompetenz Mikrobiologie“:

Altogether BIO 520 is awarded 10 credit points which is equivalent to 300 hours of student work load (amounting to 6-8 weeks of preparation). It consists of 2 parts that are to be completed in English:

a) Written part: Typically Master students take the written part of BIO520 after completion of their Master Thesis (there is the option of doing it at the beginning of the Master study, which I strongly discourage). The written exam lasts for 3 hours. It consists in equal parts of questions on the Thesis project provided by the Master supervisor, and questions from *Brock Biology of Microorganisms* (see below for current listing of included chapters in 16th Edition). The secretary at the Institute of Plant Biology Mattias von der Crone (mattias.vondercrone@botinst.uzh.ch) will contact the Master Thesis supervisors to submit the questions for the written part. The possible dates for doing the written exam are dependent on the meeting dates of a UZH committee that acknowledges the Master degrees and cannot be exactly predicted at the starting date of the Master Thesis. Usually they are in January, April, June, August, October, and December. Please contact the secretary at the Institute of Plant Biology for details.

b) Oral part: The oral part consists of a 30 minute discussion of two papers related to the topic of the Master Thesis that are selected by the Master Thesis supervisor. The Master student should tell the supervisor to send me these two papers beforehand by email (pernthaler@limnol.uzh.ch). The oral part takes place at the Limnological Station Kilchberg (<http://www.botinst.uzh.ch/research/limnology/pernthaler/station.html>), and dates must be set within one week before or after the written part. These dates have to be arranged individually with me and the supervisor, usually with help from the secretary at the Department of Plant and Microbial Biology.

Learning agreement:

Before a Master Project can officially start, a Learning Agreement has to be signed by the Thesis supervisor, the head of the “Studienkoordination Biologie” and myself. For this, it is wise to first send me a project draft and a list of proposed courses per email, so that I can verify that the chosen courses are appropriate for a Master in Microbiology. Once I have confirmed this, the online form available at

http://www.corpora.ch/typo3/index.php?id=learningagreement&L=1#learningagreement_205

must be filled out and submitted. The resulting pdf file should be printed out, signed by both, the student and the supervisor, and sent to me by surface mail. I will also sign it, return it to you and you then have to personally bring it to the Studienkoordination Biologie. It is important that the secretary at the Institute of Plant Biology is also informed, i.e., the finalized Learning Agreement pdf should be sent to him per email.

Grades:

The overall grades for the Master will be compiled from the different parts by the secretary at the Institute of Plant Biology, who should be contacted in this respect.

If you are still unclear, please [contact me](#) per mail or telephone (please do not call to ask questions that are answered either here or on the above listed webpages...)

Jakob Pernthaler

Appendix: BIO520 „Themenübergreifende Fachkompetenz Mikrobiologie“

Based on: Brock Biology of Microorganisms, 16th (Global) Edition

These units/chapters are relevant for the written part:

Unit 1: complete

Unit 2: complete

Unit 3: Chapters 10, 11,13

Unit 4: Chapters 14, 15

Unit 5: complete

Unit 6: Chapters 24, 25

Unit 7: Chapters 31 -34