Guidelines to modules BCH501 (Masterarbeit) and BCH502 (Biochemie im Überblick)

- The Master thesis project (BCH501; Masterarbeit) can be started only upon completion of all modules mandatory in the Master program in Biochemistry (see Guidelines to the studies in biochemistry (Wegleitung zum Biochemie-Studium) and VVZ, the course catalog).

- To inquire about a Master’s project position send your application letter to the BCI group leader (or external group leader, see below) of your choice well ahead of the time you plan to start the project. The application comprises a short motivation letter, your CV, your up to date transcript of records, and the report issued as part of BCH408 Research Project. In the motivation letter, state the reason(s) for choosing the group for your Master’s project and describe research topics within the research activities of the group which would be of special interest for you. As far as Master’s positions are not available all the time, think about a second choice as well.

- The starting date is determined in coordination with the group leader and the direct supervisor, and is communicated to the module coordinator (currently Ilian Jelezarov, E-mail: iljel@bioc.uzh.ch, Tel. 044 635 5547, Office 44-K-07).

- The experimental work and the compilation of the thesis should be finished within 9 months (approx. 6 months laboratory work + approx. 3 months writing up; see VVZ). In justified cases, a one-time extension of up to four weeks is possible. The extension should be requested before the end of the regular deadline (E-mail to the module coordinator, along with a short explanatory statement of the group leader).

- External Master projects can be carried out only in academic institutions (institutes of Swiss universities, institutes of foreign universities, and departments of non-profit research organizations). An application for the execution of an external Master thesis must be submitted no later than 6 weeks before the anticipated starting date to the module coordinator. The application includes:
  
  - Motivation letter (reasons for the choice of research institution; reasons why the anticipated experimental work cannot be accomplished in any research group at BCI).
  - Brief description of the scientific background, the planned experiments and the expected outcome.
  - Description of the experimental techniques that will be used.
  - Provisional time schedule
  - Written confirmation of the group leader.

- The application is assessed at BCI. Approved external Master theses are supervised by qualified members of BCI. The modus of supervision is a matter of negotiation between the student and the BCI supervisor.
The thesis is graded by the group leader in consultation with the direct supervisor. In the case of grade 6.0 or grade 4.0 a second opinion of a qualified person is required. External theses are graded by the internal supervisor at BCI upon consultation with the external supervisor/group leader, who provides a justified suggestion.

The accepted Master thesis leads to acquisition of 45 CP.

The final grade is communicated to the module coordinator by the group leader (E-mail).

The thesis (graded final version; hardback copy) must be deposited at the Secretariat (Mrs. R. Ruckstuhl; 44-J-09).

As part of the module a master seminar will be given by the student at BCI (20-25 minutes oral presentation of the topic and the results of the Master project + discussion). The seminar will be organized by the group hosting the Master project.\(^1\) The time slot is not a priori fixed.\(^2\) The seminar will be advertised at BCI. At least 10 days before the seminar the student should provide the following information (E-mail to the module coordinator, currently I. Jelezarov): title, a short abstract (1/2 page), date, time and venue.

The registration for the Master's exam (BCH502) is done by E-mail to the module coordinator. The following information is required: the student registration number, the exact title and the abstract of the Master's thesis.

The exam is conducted by two qualified persons who are appointed by the module coordinator.

The module coordinator organizes the examiners and notifies the candidate. The candidate arranges the exam date and the exam venue directly with the examiners. A copy of the thesis must be submitted to each examiner no later than 4 weeks before the exam date. Possible period of the exam date: 8 to max. 12 weeks after registration. The candidate notifies the module coordinator about the exam date (E-mail).

The participation in the exam can be cancelled up to 10 days before the exam (E-mail to the module coordinator and the two examiners, including a new date which has been agreed upon with the examiners). The new date must be set after expiration of week 12 counted from the first registration.

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\(^1\) External Master students are responsible for the organization of the seminar at the corresponding institution. If necessary, the Master student fosters the communication between the external supervisor and the internal supervisor at BCI.

\(^2\) One possibility is the integration of the seminar with the regular group meetings. However, the group makes the decision on this matter.
The successful Master's examination (grade > 4.0) leads to acquisition of 10 CPs. This generally corresponds to a workload of 300 hours. A preparation of 8 to 12 weeks is estimated to be necessary for the successful passing of the final exam.

After the exam, the examiners notify the module coordinator about the score. The protocols are deposited at the Institute secretariat.

On successful completion of modules BCH501 and BCH502, as well as all other mandatory modules within the Master program in biochemistry (total of 90 CP) the candidate fills out the form Application for graduation (Antrag auf Studienabschluss) and forwards it to the module coordinator, together with a copy of the title page of the Master thesis. All subsequent steps leading to official graduation are executed at the Dean’s office.

The registration (matriculation) is compulsory for the semester in which the exam takes place. For exams taking place in the lecture-free periods the following rules apply.

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**Information on BCH502 (Biochemie im Überblick)**

The exam is oral, in the form of free discussion, and the duration is approximately 1 hour. Exam language is German or English; the candidate has the choice to specify the language. Prerequisite for a successful passing of the Master's examination is the recapitulation and deepening of the knowledge acquired in the following modules, which represent the core of the studies of biochemistry:

*BCH201: Biochemistry I
BCH202: Biochemistry II
BCH301: Molecular Cell Biology
BCH304: Protein Biophysics
BCH306: Biochemical and Biophysical Methods
BCH420: Advanced Protein Engineering
BCH630: Protein Crystallography and Protein Structure Validation*

Furthermore, expected is understanding of the theory, application area and informational content of experimental methods which have been instructed during the studies of biochemistry.
Scripts and lecture notes distributed by the lecturers form the basis in the preparation for the exam. However, the usage of appropriate textbooks is recommended.