

Information sheet on the written work of the Master thesis and subsequent Master thesis examination in Drug Sciences

With the Master thesis, a longer and content-related scientific work and written report on the work is carried out. The latter is an important part of the Master thesis, can be written in German or English and serves as a basis for assessment. It is useful to clarify the following notes on structuring with the responsible lecturer/assessor beforehand:

The work should generally be concise and precise. The text consists of entire sentences and must not be written in telegraph style. The work should be delivered in format A4 and a line spacing of 1.5 should be selected. There are no regulations for the lettering, but a font size of at least 10 points should be adhered to.

The report should be drawn up as follows:

- *Title page*

The following information must appear on the title page:

Title of the work, name of the Master student, the supervisor, the Department

The further design of the title page is free.

If the work is confidential, a corresponding note must be indicated on the title page: "These results are confidential due to pending patents" or "The results of this Master thesis must be treated as confidential."

- *Table of contents*

- *Summary*

The work is summarized on one page according to the following outline: introduction to the topic, main results and discussion points.

The summary does not include references to the literature or cross-references to the main part.

- *Introduction*

The introduction gives a brief overview of the topic and the findings of the project/area. Important terms, which reappear in the further course, shall be clarified. Based on the introduction, a reader should be able to orient himself about the research on the subject. In the end of the introduction, the objectives of the work are formulated.

The introduction has to be written in such a way that the concrete objectives are logical and comprehensible. However, the introduction is not intended to anticipate your own work and results.

- *Materials and methods*

In this part, all materials, equipment and methods used in the Master thesis are listed. On the basis of the methodological part, the experiments carried out must be traceable and repeatable to third parties. In the case of generally known methods (e.g. centrifugation, electrophoresis, etc.), it is sufficient if the settings are described and, if necessary, a quotation is given.

It is expedient to first describe the materials and then the methods. The methods should appear in a chronological sequence.

- *Results*

The results are described and presented in a prepared form in figures and tables. The strategies, which are not successful, should also be documented.

Illustrations and tables are numbered and provided with an informative legend (in the case of figures the legend appears below, in tables above the illustration). Each table and figure has at least one cross-reference in the text.

- *Discussion*

In this part the results are assessed and compared with results from the scientific literature. The discussion of your results should be critical and objective. The discussion section is intended to conclude with an outlook on possible further work.

- *References*

Here you will find all the books, periodicals and URL addresses that you used to carry out the work. The work is cited in the text section at the appropriate place.

The requirements of the respective department apply, where the Master work is carried out. A continuous numbering ([1], [2] or 1,2 etc.) or citation of the names (e.g. Abderhalten et al., 2001; Meier and Miller, 1988) should be used. In the first case, the references are listed in the list of literature according to the increasing number, in the second case in ascending order in alphabetical order.

The references are listed in the literature list according to the specifications of the respective department. A distinction is made between books, magazines and book chapters.

A note on the correct nature of scientific citation: citation of a scientific work means that reference is made to the results and hypotheses of published works. This means that the facts of the cited work are reproduced in a meaningful way and that sentences or sections from the cited work are not literally copied (so-called "copy-paste"). It is also not allowed to use information from published works without adequate references, or even entire passages from third-party works without a reference to sources. The latter is considered a plagiarism and is sanctioned according to the study regulations.

- *Annex*

Raw material and experimental material are compiled in the annex.

The work must also contain a statement concerning the independent creation and the correct citation of all used literature. The form can be found on the website <https://philnat.unibas.ch/de/studium/>. This declaration can be integrated into the work or be handed over separately.

Publications

The Master thesis is a departmental examination work and not quotable. Any related consequential publications must be discussed with the relevant supervisor or Head of the research group.

Tasks of the supervisor

The workplace, equipment and necessary materials should be provided by the supervisor. For a good start, a short introduction of the students into the research project and the necessary working methods is essential. The main task is the professional support of the students during their work and their integration into the team.

Assessment Criteria for the Master thesis

Both the assessment of the practical work as well as the written report are considered for grading of the Master thesis. The following points are assessed:

Practical work

- Understanding of the issues, independence in planning and implementation
- Commitment
- Quality of the project work / laboratory work
 - Planning, organization
 - Cleanliness
 - Accuracy
- Laboratory Journal
 - Layout
 - Traceability
- Independence in interpretation and evaluation of the results
- Independence when writing the report

Written report

- General structure
- Introduction
- Material and methods
- Presentation of results
- Discussion
 - Interpretation of results
 - Scientific arguments
- Literature Review
- Language
 - Clarity
 - Comprehensibility
- Attachment
 - Reasonable and complete

Master thesis examination

Before completing the practical Master thesis, a formal registration for the Master thesis examination is required (cp. <https://philnat.unibas.ch/de/studium/>). This is usually completed by the student or the secretary of the assessor.

The Master thesis examination is usually carried out within four weeks after submitting the Master thesis in the form of a 45-minute oral colloquium on the topic of the Master thesis and related areas (about 15 minutes presentation of the Master thesis, 30 minutes of questions/discussion). Examiners are the responsible lecturer and usually the supervisor in the Master thesis (or another appropriately qualified person). It is graded in marks of half steps. When the Master thesis examination is passed, 4 credits are earned. In case of failing the examination, it can be repeated once.

Registration for the Master thesis examination takes place in consultation with the responsible lecturer and must be done by the date of submission of the written Master thesis at the latest. The exact date of the Master thesis examination will be announced by the responsible lecturer.

Assessment criteria Master thesis examination

Presentation

- General structure of the lecture (introduction, main part, end)
- Quality of the slides (readability, use of text, graphics and color, structure)
- Presentation (language flow, eye contact, gesture, authenticity)
- Linguistic correctness
- Relevance of the content (the most important results of the Master thesis were presented and discussed)

Interview / Discussion

- Answering (knowledge) questions
- Establish and justify hypotheses
- "Depth" of the scientific conversation

For more information please refer to:

<https://pharma.unibas.ch/de/teaching/msc-drug-sciences/>

For further questions, please contact the Study Coordination at the Department of Pharmaceutical Sciences, Pharmazentrum, Krigenbau, Office 0059, Klingelbergstrasse 50, 4056 Basel, Tel. 061-207 15 53, e-mail [studienkoordination-pharma\(at\)unibas.ch](mailto:studienkoordination-pharma(at)unibas.ch)

Annex: Extract from the "Statute for the Master Degree Programme in Drug Sciences at the Faculty of Natural Sciences of the University of Basel" (Dated 05 December 2015)

Master thesis

§ 10. The master thesis is supervised by a lecturer with an "habilitation" (professor or junior professor) or an equivalent academic qualification in the Drug Sciences master programme of the Department of Pharmaceutical Sciences. Responsibility may be transferred to an external qualified person with the approval of the Education Committee.

² The supervisor defines the topic, scope, and start and end dates of the master thesis in collaboration with the student, and documents these in a master study contract, which is signed by the supervisor, by the head of the Education Committee and by the student, before the beginning of the master thesis.

³ Supervision of the thesis may, with the approval of the Education Committee, be delegated to another researcher who has at least a Master degree qualification. Also in this case, responsibility for the thesis remains with the nominated thesis supervisor.

⁴ Duration of the master thesis is normally 10 months. Deviations of greater than 1 month are considered by the Education Committee on request by the thesis supervisor.

⁵ The master thesis will be reviewed and graded by the thesis supervisor.

⁶ A failed master thesis can be repeated once with a different topic. A second fail leads to exclusion from the Drug Sciences Master Study Programme at the University of Basel.

Master thesis examination

§ 11. The master examination consists of an oral colloquium presentation on the topic of the thesis and related areas.

² The student must apply for the master examination in writing to the administrative office. Cancellation is possible up to 2 weeks before the planned examination, by writing to the examination secretariat of the Dean's office.

³ The examination will take place within 4 weeks of submitting the master thesis. It lasts 45 minutes and is graded. Exceptions are possible on request by the thesis supervisor to the Examination Committee.

⁴ The examiners are the thesis supervisor, and as a rule the researchers who were directly involved in the thesis work. The Education Committee may exceptionally at the request of the thesis supervisor permit another appropriately qualified person to deputize for the supervisor.

⁵ If the master examination is failed, it can be repeated once. A second fail leads to exclusion from the Drug Sciences Master Study Programme at the University of Basel.