



Methodological Guidelines for the Supervision, Elaboration and Defence of University Qualification Theses

1 INTRODUCTION

The elaboration of a Bachelor's or Master's thesis and its defence is an integral part of the state final examinations at the PŘF of the University of Hradec Králové. From the point of view of the faculty, it is a very important independent work of the student, who proves the following at the end of the relevant study programme by elaborating and defending this work:

- The ability to produce an independent written thesis on a special topic in their field of study;
- The fact that he/she is familiar with the literature and is able to apply it independently.

These methodological guidelines also apply to the elaboration of rigorous (Advanced Master's) theses and dissertations submitted to the PŘF UHK and, on the other hand, also to final theses in lifelong learning programmes or education in internationally recognised courses. In the following, we will use the word "thesis" for all types of the above-mentioned university qualification theses, unless the type of thesis is explicitly stated.

2 THESES SUPERVISION

Professors or associate professors can be supervisors of doctoral students (i.e., supervise dissertations), Master's thesis supervisors and Bachelor's thesis supervisors. Assistant professors or external experts with a Ph.D. or CSc. degree may supervise Master's theses and Bachelor's theses. Lecturers or external experts or Ph.D. students who have completed a Master's degree may supervise Bachelor's theses. The requirements for theses reviewers are the same as those for thesis supervisors of the same type of thesis.

Exceptionally, other experts with a scientific degree who are not associate professors or professors can also be supervisors of doctoral students (i.e. supervise dissertations); however, they must be approved by the Research Board of the

Faculty of Science of the UHK. See Government Regulation No. 274/2016 Sb., on standards for accreditation in higher education.

Exceptionally, in justified cases, academicians or external experts without the scientific degree of Ph.D. or CSc., who are graduates of Master's studies, can be supervisors or reviewers of theses, but they must be approved by the Dean of the PŘF UHK. An exception may be granted either for the supervisor or for the thesis reviewer; it may not be granted for both the supervisor and the reviewer at the same time. Doctoral students who are not academicians at the same time cannot be thesis supervisors.

The requirements for thesis supervisors in lifelong learning programmes or in internationally recognised courses are the same as those for Bachelor's thesis supervisors.

If the employment contract between the thesis supervisor and the University of Hradec Králové ends, the head of the department will decide whether the thesis supervisor will continue to supervise the thesis as an external expert or will be replaced by an academician who is an employee of the University of Hradec Králové, while the other provisions of this Dean's Decision remain in force. A similar procedure will be applied in the event of termination of the employment contract between the thesis reviewer and the University of Hradec Králové.

3 NUMBER OF SIMULTANEOUSLY SUPERVISED THESES

An individual academician may supervise a maximum of eight theses at any one time in a given academic year.

The total number of theses supervised by a given academician includes

- Dissertations that are being prepared methodically, for which the materials are being collected, or that are being elaborated by a doctoral student of whom the academic staff member is the supervisor in the given academic year, except in the case where the doctoral student has already submitted a completed dissertation and is awaiting its defence;
- Theses of students of the follow-up Master's degree programme who are enrolled in the subjects Master's Thesis 1 and Master's Thesis 2 in the given academic year, or in the subjects Master's Thesis 3 and Master's Thesis 4 if they are compulsory subjects of the respective study programme curriculum;
- Bachelor's theses of Bachelor's students who are enrolled in Bachelor's Thesis 1 and Bachelor's Thesis 2 in the given academic year.

Only one half of the total number of the following theses supervised by a given academician is counted:

- Theses of students of the follow-up Master's degree programme who are enrolled in one of the subjects Master's Thesis 1 and Master's Thesis 2 in the given academic year;
- Bachelor's theses of Bachelor's students who are enrolled in one of the subjects Bachelor's Thesis 1 and Bachelor's Thesis 2 in the given academic year;
- Final theses of students in their final year of lifelong learning programmes or in internationally recognised courses.

4 THESES TOPICS, THEIR PUBLICATION AND SELECTION

Each professor, associate professor and assistant professor with a scientific degree is obliged to announce at least three thesis topics via the information system by **15 November** of the academic year at the latest. If, however, the academician is likely to exceed the maximum number of concurrent theses by supervising these three theses, he or she shall inform the head of department of the situation and the head of department shall then individually determine the number and type of theses to be conducted in the given academic year.

Academicians may exceptionally, in agreement with students, announce additional thesis topics via the STAG IS **after 15 November** of a given academic year.

The student can propose his/her own topic. This topic proposal is entered into the STAG information system and the student asks the head of department to approve the topic and assign a supervisor no later than **15 December** of the academic year. The head of department will approve or reject the proposal no later than **31 January** of the academic year. If the head of department approves the topic proposal, he/she assigns a thesis supervisor to the student by the same deadline. If he/she does not approve the topic proposal, he/she informs the student of the reasons for the negative decision.

A student of the penultimate year who plans to enrol in Bachelor's Thesis 1 and Bachelor's Thesis 2, or Master's Thesis 1 and Master's Thesis 2 in the following academic year is obliged to choose a topic from the offer in the STAG IS, or to propose his/her own topic, or to personally agree with one of the academicians on announcement of the topic via the STAG IS no later than by **30 June**, except for students who have not completed successfully all compulsory courses registered in the academic year by 30 June. For these students, the latest possible date for the topic to be announced via the the STAG IS is postponed to **30 September of the following academic year**.

The Ph.D. study candidate proposes the topic of his/her dissertation already during the Ph.D. study admission interview. The proposed topic may be later refined or modified.

5 CONTENT OF THESIS

Individual theses may differ in the form of processing, which is largely dependent on the nature and objectives of the thesis (project design or implementation, theoretical work, empirical research,...). For this reason, the following recommended structure of the thesis should be considered very general and should be adapted to the nature of the specific thesis. The items in the suggested structure below which are marked with an asterisk must be included (in the order indicated) in each thesis.

Recommended structure:

- *1. Title page
- *2. Thesis assignment
- *3. Statement
 - 4. Acknowledgements
- *5. Annotation in Czech language
- *6. Annotation in English
- *7. Table of contents
- *8. Introduction stating the motivation, aims of the thesis and the chosen methodology
- *9. Theoretical part of the thesis (literature search)
- *10. Practical or empirical part of the work
 - 11. Discussion (discussion of the results of the work)
- *12. Conclusion indicating the main results, the author's own contribution and recommendations
- *13. References
 - 14. Annexes

All pages of the thesis, starting with the title page, are given a sequential number (i.e., the title page is number 1, the thesis assignment is number 2, the statement is number 3, etc.), but the first seven items in the list do not have a page number on that page. Page numbers are not given until the eighth entry (i.e. starting with the "Introduction" entry).

ad 1)

A specimen cover sheet is attached.

ad 2)

The student prints the assignment from the eVKSP information system and includes it after the title page of the thesis. In the electronic form of the thesis, it is scanned and inserted in the form of an image so that it is included after the title page as in the bound paper form.

ad 3)

A model declaration is attached.

ad 4)

It is a courtesy, but not an obligation, to thank the supervisor, consultant, or organization in which you had the opportunity to elaborate the thesis for the help they have given you. It is possible to thank loved ones for their support, for making research possible, etc. In any case, the acknowledgement should be no longer than a few lines.

ad 5)

A necessary part of the thesis is an annotation (for a model sample, see the annex) which summarizes the aim and significance of the thesis and the results achieved in it. The annotation of the thesis in the Czech language may not be longer than 200 words. The annotation itself is preceded by a self-citation (i.e. a bibliographic citation according to the standard ČSN ISO 690 Bibliographic Citations). The annotation is followed by keywords, the recommended number being 4 to 7 keywords or multi-word technical terms.

ad 6)

The annotation of the thesis in English may be no longer than 250 words. Only the translations "Bachelor Thesis" for a Bachelor's thesis and "Diploma Thesis" for a Master's thesis are used to refer to the qualifying thesis in English language. The annotation itself is preceded by a self-citation (i.e. a bibliographic citation according to ČSN ISO 690 Bibliographic Citations). The annotation is followed by keywords, the recommended number being 4 to 7 keywords or multi-word technical terms.

ad 7)

Table of Contents - refers to the page numbers; the table of contents lists only the items listed after it, i.e. starting with the "Introduction" item. The headings "Introduction", "Conclusion", "References" and "Annexes" are not numbered. Chapters of the theoretical, practical or empirical part of the thesis are numbered. The chapter number shall not be followed by a dot. The numbering of subchapters may be done in multi-level numbering, with a maximum of 3 levels. The numbers of subchapters are separated by a dot; the subchapter number shall not be followed by a dot.

ad 8)

In the introduction, the author of the thesis explains his/her motivation for choosing the topic of the thesis, or explains the social importance of the topic. He/she then outlines the problem situation and specifies the questions to be addressed in the Bachelor's or Master's thesis. At the end of the introduction, he/she formulates the objectives of the theoretical part of the thesis and the objectives of the practical or empirical part of the thesis and, in relation to them, the chosen methodology, which must be adequate to the problem to be solved.

Therefore, it is advisable to explain why he/she has chosen a particular approach (why not some other). At the same time, it is advisable to be aware of the possibilities and limitations of the chosen approach to the problem.

The introduction may remain only in the form of a few theses for the period of the thesis elaboration; the student usually returns to writing the final introduction after the basic chapters have been written. Beginning from the introduction, the page number is given in Arabic numerals in the middle of the bottom margin of the page.

ad 9)

The theoretical part of the thesis gives a brief overview of the knowledge achieved in the field of the thesis. It is often useful to characterize the historical development of the problem or topic. It may also take the form of a literature search, i.e. a review of the available literature on the topic. In this case, the author states why he or she has proceeded from these sources and how he or she has used them. The theoretical part may be divided into several chapters or it may form the first chapter of the thesis.

ad 10)

The author usually describes his own solution in several chapters. Information of a non-textual nature (figures, graphs, diagrams) and tables are usually included in the text. Only large tables (e.g., with the results of extensive measurements or research), large sets of graphs or pictorial appendices may be included after the whole thesis in the form of annexes. Each piece of non-textual information (figures, graphs, diagrams) must be numbered continuously and accompanied with an appropriate short text.

ad 11)

In the discussion, the author evaluates the results obtained in the thesis and compares them with the results found in the literature.

ad 12)

The paper concludes with a brief summary of the results and their contribution and practical implications. The author gives an overview of his own results obtained in the course of solving the problem, critically evaluates the results he has arrived at (consistency of the results with the literature or assumptions, circumstances that influenced the thesis presented, etc.). It is appropriate to indicate possible follow-up or alternative ways of investigating the issue and open problems for further study.

ad 13)

In the list of references used, all works cited are listed either in alphabetical order of the authors' surnames or in the order in which the citations appear in the text. Each item in the list must have a serial number, the author's/authors' surname and abbreviation of his/her name, the title of the work, its part if it is a multi-volume

work, the publisher, the place and year of publication. If the citation is from a journal, the list item shall contain the serial number, the author's/authors' surname and abbreviation of his/her name, the title of the article, the name of the journal, the volume and number, the year of publication, the page. For publications that have been assigned an ISBN or ISSN, this identification number must not be missing. Citations and their inclusion in the text follow the procedure of ČSN ISO 690 Bibliographic Citations. If the author draws on other works or essays not explicitly cited in the text, he/she is obliged to add them to the list of cited literature and to mention references to them in the introduction of the text that draws freely on such sources (e.g., "The chapter was prepared using ...").

Important note: It is a criminal offence to quote someone else's idea without citing the author and the title of the publication (Act No. 121/2000 Sb., on Copyright, as amended). In the case of a Bachelor's or Master's thesis, such a finding is grounds for evaluating the defence of the thesis with the grade "failed", and, in serious cases, for initiating disciplinary proceedings against the student. A reasonable number of citations and references to literature show that the student has made the necessary effort in the overall preparation and finalisation of the thesis.

Links to in-text citations

The paper must use one of the two methods listed below, i.e. the numerical citation method or the year of publication method. The methods cannot be combined. It is not permissible to use the footnote method. That is, footnotes may not be used to refer to and cite citations; footnotes may be used for other purposes.

Method of numerical citations

Individual documents are numbered according to the order in which they appear in the citation list. If a document is cited more than once, it is repeated under the same number. In the list of citations, i.e. the list of literature used, all works cited are listed either in alphabetical order of the authors' surnames or in the order in which the citations appear in the text. In the text, the number is given in square brackets. The author's last name may but doesn't have to appear in the text of the thesis.

For example: as Josef Novák [33] states, it is possible to look at this issue ...

 It is possible to look at this issue ... [33].

 To quote Jan Mařík [17], "*Among mathematics aspirants, a special ...*"

Method of indicating the year of publication

In the text, the identification of the document is given by the surname of the author(s) and the year of publication of the document in round brackets. If a document is cited more than once, the identification remains the same. In the citation list, i.e. the list of literature used, all works cited in this way are always listed in alphabetical order of the authors' surnames and works written by the same author are listed chronologically by their year of publication.

For example: It is possible to look at this issue (Novák, 2006)

As Novák (2006) states, it is possible to look at this issue ...

"Among the aspirants of mathematics, a special group ..." (Mařík 1953)

Mařík (1953) writes: "*Among mathematics aspirants, a special group ...*"

ad 14)

For each annex, the number of the annex (e.g., Annex 4) must be indicated in the upper right-hand corner. The Bachelor's/Master's thesis may also be accompanied by a data medium (CD, DVD, ...) which must be placed in a suitable envelope attached to the back of the thesis.

6 THESIS EDITING

Submission of theses, their form and number

The student submits the Bachelor's or Master's thesis in one bound hard copy and one electronic copy of identical content to the hard copy. After the defence of the thesis hard copy is returned to the student; the electronic copy remains with the school. The hard copies are handed in by the student to the secretary of the department where the thesis was submitted for validation. The student submits the electronic copy of the thesis via the eVŠKP web interface (<https://ris.uhk.cz/eVSKP> - electronic submission of university qualification theses) which is available on the Internet and via the faculty information system. The digital copy must be uploaded to the system before submitting the hard copies. The thesis must be completely submitted and validated by the department secretary at least 28 days before the thesis defence date.

The candidate/student submits the thesis or dissertation in three printed copies, of which at least one copy must be hard bound, other copies can be hard bound or ring bound.

The principles and rules for the submission and handling of theses are described in detail in Rector's Decree No. 13/2022 "Rules for Handling with Bachelor, Diploma, Rigorous, Dissertation and Habilitation Theses at the UHK".

Binding of Bachelor's/Master's thesis

Paper copy has to be bound in hardcover. On the top of the hardcover, text in accordance with the specimen in the Annex shall be printed.

In addition to the two copies mentioned above, it is advisable for the student to have a third copy of the thesis for his/her own use so that he/she can navigate through the comments of the reviewer's opinion during the defence. For this copy, a ring binder is quite sufficient.

Text editing

Text is printed on white A4 sheets on one side of the paper only. The original and one copy must be typed on 80 g.m⁻² paper. The thesis is written using a suitable text editor. For the text itself, a footer font (preferably Cambria font) is required, font size 12 pt (or 11 pt), for headings either the same font of a larger size (18 pt for the first level heading, 14 pt for the second level heading) in bold type may be used, or a sans font (preferably Verdana font) may be used. The left margin of the text starts 3.5 cm from the left edge of the page. The top and bottom margins of the page are 2.5 cm, with the page number in the centre of the bottom margin.

It is appropriate to edit paragraphs into a block and split words. It is not necessary to indent the first line, but then it is necessary to have a 10 pt (or 12 pt) space after the paragraph. If you indent the first lines of paragraphs (then 0.5 pt indentation is recommended), you do not indent the space after the paragraph and the first paragraph within the chapter is not indented. The line spacing within a paragraph can range from "Single" to "1.5 lines", with the recommended value being "Multiples" ... 1.15. The author must ensure that the text of the paper is of an appropriate standard in terms of style and spelling. Failure to fulfil this obligation (in particular the occurrence of spelling errors in the text) is a reason for the defence of the thesis to be graded "failed".

The thesis can be processed in a suitable word processor (e.g., MS Word or OpenOffice.org Writer) or in the typographic program LaTeX. It should be submitted electronically in PDF/A format (or in PDF).

Text of the work in a foreign language

In the case of a study programme taught in the Czech language, the Master's or Bachelor's thesis may be submitted in a foreign language with the consent of the supervisor. In such case, the Master's or Bachelor's thesis must include an extended abstract in Czech. This is not necessary for theses in Slovak language.

7 RECOMMENDED SCOPE OF WORK

| <i>Type of work</i> | <i>Recommended range: number of characters including spaces</i> | <i>Corresponding number of standard pages of text</i> |
|---|---|---|
| Final thesis in lifelong learning programmes or in an internationally recognised course | 40,000 | 20 |
| Bachelor's thesis | 60,000 | 33 |
| Master's thesis | 90,000 | 50 |
| Advanced Master's thesis | 135,000 | 75 |
| Dissertation | 200,000 | 111 |

The number of characters, including spaces, is a more objective expression of the scope of the thesis than the number of pages because it does not depend on the number of figures, graphs and diagrams inserted or the size of the font used. The recommended length of the thesis, given in the table, should be kept as a minimum. The maximum length should not exceed, for any of the papers, the value given in the table one line below, or, for the dissertation, 300 000 characters including spaces.

8 THESIS DEFENCE AND EVALUATION

The state final examination includes the defence of the Bachelor's or Master's thesis. The defence is attended by the members of the examination committee and (unless serious obstacles prevent it) the reviewer of the Bachelor's or Master's thesis, the supervisor of the thesis, or an expert consultant (if any has been assigned). The scenario of the defence is as follows:

- a) At first, the student usually presents a brief report on his/her thesis. In it, he/she states why he/she chose the given topic, how he/she proceeded in its processing, what results he/she came to, what problems he/she encountered in his/her work, what new things he/she found. It is advisable that the report is supported by a carefully prepared computer presentation.
- b) The supervisor of the thesis (or in his/her absence the chairman of the examination committee or a member of the committee authorized by him/her) reads his/her opinion or asks the student questions.

- c) The reviewer (in his/her absence, the chair of the examination committee or a member of the committee authorized by him/her) reads the report and, if necessary, asks the student questions.
- d) The student responds to comments and/or questions from the supervisor and reviewer.
- e) This is followed by further discussion with the student, usually prompted by questions from members of the examination committee.

The purpose of this debate is to see how well the student has mastered the professional problems of his/her work and how well he/she can answer the comments or questions presented. In the defence, not only the thesis itself, its content, comprehensiveness, fulfilment of the requirements of the assignment, methodological level, formality, appearance and clarity, presentation of results are evaluated, but also the student's performance, the level of the prepared computer presentation, the ability of argumentation, promptness and correctness of answers to the questions asked. All these factors will be included in the final classification.

9 TRANSITIONAL AND FINAL PROVISIONS

If an academician is supervising more than eight theses at the same time on the date of entry into force of these guidelines, the number of theses supervised at the same time may not be increased in the future, but only maintained or reduced until the number of eight theses supervised at the same time is reached.

These methodological guidelines come into force on the date of their signing and take effect on 1 January 2021. At the same time as they come into force, Dean's Decision No. 4/2020 Methodological Guidelines for the Supervision, Elaboration and Defence of University Qualification Theses is repealed.



EUROPEAN UNION
European Structural and Investment Funds
Operational Programme Research,
Development and Education



MINISTRY OF EDUCATION,
YOUTH AND SPORTS

Attachments:

Specimen 1. Cover of the Bachelor's/Master's thesis

Specimen 2. Title page of the Bachelor's/Master's thesis

Specimen 3. Statement

Specimen 4. Annotation

Hradec Králové on 13 April 2023

Ass. Prof. RNDr. Jan Kříž, Ph.D.

Dean of the PŘF UHK UHK

Specimen 1. Cover of the Bachelor's/Master's thesis

University of Hradec Králové
Faculty of Science

BACHELOR/DIPLOMA THESIS

2012

Name and surname

Specimen 2. Title page of the Bachelor's/Master's thesis

University of Hradec Králové

Faculty of Science

Name of the Department

Title of the Bachelor's/Master's thesis

Bachelor/Diploma Thesis

| | |
|--------------------------------------|--|
| Author: | Name, surname |
| Study programme: | Number and name of the study programme |
| Field of study: | Name of the field of study |
| Thesis supervisor: | Title, name, surname |
| Expert consultant: (if specified) | Title, name, surname Workplace |

Hradec Králové

March 2012

Specimen 3. Statement

Statement:

I declare that I have prepared my Bachelor/Diploma thesis independently and that I have listed all the sources I have used in the list of literature.

Signature in blue

In Hradec Králové on

Name and surname

Specimen 4. Annotation

Thesis annotation:

The text contains basic data that characterize the content and results of the thesis. It is presented in Czech and English. The length of the text should not exceed 200 words in Czech and 250 words in English. The annotation is preceded by a self-citation and followed by a list of key words.

Anotace

NOVÁK, J. *Biomonitoring výskytu řas a sinic ve vodní nádrži Rozkoš*. Hradec Králové, 2015. Diplomová práce na Přírodovědecké fakultě Univerzity Hradec Králové. Vedoucí diplomové práce Petra Mazalová. 78 s.

Text anotace, text anotace, text anotace, text anotace, text anotace, text anotace, text anotace, text anotace, text anotace, text anotace, text anotace, text anotace...

Klíčová slova

biomonitoring, řasa, sinice, vodní nádrž

Annotation

NOVÁK, J. *Biomonitoring of Algae and Cyanobacteria Occurrence in a Water Reservoir Rozkoš*. Hradec Králové, 2015. Diploma Thesis at the Faculty of Science University of Hradec Králové. Thesis Supervisor Petra Mazalová. 78 pp.

Text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation, text of annotation...

Keywords

Biomonitoring, algae, cyanobacteria, water reservoir

(Note: For the designation of the qualifying thesis in English, only the translations "Bachelor Thesis" for the Bachelor's thesis and "Diploma Thesis" for the Master's thesis are used.)