

Form and content requirements of the doctoral dissertation

1 The structure and genre elements of the dissertation

PhD students starting their training program in or after the academic year 2016/2017 are required to submit a PhD dissertation to the faculty office responsible for the administration within three years after the complex examination.

At the Doctoral School of Earth Sciences, PhD dissertations follow the structure shown below:

Contents

1 Introduction

2 Literature review

3 Research objectives

4 Research methods

5 Results

6 Conclusions

7 Directions for future research

Acknowledgments

Bibliography

Appendix (if applicable)

2.1 Introduction

The introductory part refers (in some pages) to the general and current relevance of the topic and the target area, moreover the most important elements, the antecedents and the effects of its scientific background. If necessary, we can refer here to the possible shortcomings of the dissertation.

2.2 Literature review

This part answers the question whether the candidate's research objectives follow

from the logic of the scientific development in the given field so far. The review is good if, while reading, the reviewer formulates exactly the same research questions that the candidate listed in the “objectives” part of the dissertation (see below). However, a sequential, concise description of the content of the read articles should be avoided. Instead, it is important to give a critical analysis of the literature in a logical/chronological order.

2.3 Research objectives

It is a short part of the dissertation, usually edited in bullet points. The general objectives, the more precise and specific sub-objectives, or research questions should be in line with the answers given in the "Results" and "Conclusions".

2.4 Research methods

When describing the methods, one should not save the characters. It is advisable to describe the cognitive process (theory making, research plan, measurements, sampling), the observation methods (data collection, experiments, questionnaires, field research, interviews, impact assessments), as well as data processing, analysis and illustration (indexes, scales, models, formulas and other statistical methods, use of computer software) in full, in recipe-like detail. The precise description should be supplemented by experience gained with the methods used (reliability, advantages, disadvantages, limitations, accuracy and reproducibility).

2.5 Results

One of the most important parts of the manuscript, consisting of several chapters, sections and subsections, which presents new observations, contexts and new scientific results, primarily through the evaluative analysis of data.

2.6 Conclusions

It is advisable to start this part with a summary of the results in bullet points. This makes it easier for reviewers of the dissertation to recognize the new scientific findings. It is advantageous to highlight only three or four points that are truly new and truly scientific. This part includes suggestions, outlining the new hypotheses arising from the results and presenting possible practical applications of the results.

2.7 Directions for future research

A few paragraphs (max. 1–2 pages) convince the reviewers that the candidate's interest did not end with the submission of the dissertation.

2.8. Acknowledgments

In addition to listing names, it is useful to include the type of assistance that contributed to the work.

2.9 Bibliography

It is important that the list of references should be complete and accurate. All relevant sources must be cited, however, we should avoid demonstrating our literacy by copying pages from a literature database into our dissertation. A minimum of twenty percent of the bibliography items should be high-quality (indexed in Scopus or WoS) sources.

2.9.1 Referencing style

References should be given not only at the end of the dissertation but also in the text. Referencing in the footnote must be avoided. The items in the bibliography have to be listed in alphabetical order, taking into account the initials of the family names of the cited authors. The accepted form of references is the international standard of the APA (American Psychological Association).

Exampless for in text citations

One author in parentheses (a) or, where the author is the subject of the sentence (b):

- a)... (Whitney, 2011).
- b) Whitney (2011) states...

Two authors in parentheses (a), respectively, where the authors are the subjects of the sentence (b):

- a)... (Whitney & Rolfes, 2011).
- b) Whitney and Rolfes (2011) argue that...

Three or more authors :

... (Watson et al., 2008).

Several authors get similar results:

... (Dawson, 2007; Overton, 2005).

Two different works by the same author in the same year:

... (Dawson, 2007a, 2007b).

The work of the same author published in different years:

... (Dawson, 2007, 2012).

First mention of documents in the case of acronyms (a) and subsequent mentions (b):

a)... (Central Statistical Office [CSO], 2007).

b)... (CSO, 2007).

Laws:

... (Act CCIV of 2011 on National Higher Education, 2011).

Examples for the reference list**Book:**

Aubert, A., & Szabó, G. (eds.). (2005). *Position and perspectives in Baranya tourism, updating the tourism development program of Baranya county*. Pécs: Baranya County Self-Government, University of Pécs, Department of Tourism, 120 p.

In text citation:... (Aubert & Szabó, 2005).

One chapter of a book:

Dávid, L., Bujdosó, Z., & Patkós, Cs. (2003). The effects and significance of tourism in regional development. In I. Süli-Zakar (ed.), *Fundamentals of Spatial and Settlement Development*. (pp. 433–453). Pécs: Dialog-Campus Publishing Company.

In text citation: ... (Dávid et al., 2003).

Book where author and editor differ:

Andorka, R. (2006). *Introduction to Sociology* (Z. Spéder, ed.). Budapest: Siris Kiadó.

In text citation:... (Andorka, 2006).

Journal article:

Halassy, E. (2007). The relationship between the Hungarian population and water, waterfront and spa and wellness tourism. *Tourism Bulletin*, 11(4), 2–12.

In text citation: ... (Halassy, 2007).

Online article (with DOI):

Gabbett, T., Jenkins, D., & Abernethy, B. (2010). Physical collisions and injury during pro-professional rugby league skills training. *Journal of Science and Medicine in Sport*, 13(6), 578–583.

<https://doi.org/10.1016/j.jsams.2010.03.007>

In text citation: ... (Gabbett et al., 2010).

Article up to 20 authors:

Mikosch, P., Hadrawa, T., Laubreiter, K., Brandl, J., Pilz, J., Stettner, H., & Grimm, G. (2010). Effectiveness of respiratory-sinus-arrhythmia biofeedback in state-anxiety in patients with undergoing coronary angiography. *Journal of Advanced Nursing*, 66(5), 1101–1110.

In text citation ... (Mikosch et al., 2010).

Article by more than 20 authors (19 +... + last):

Kalnay, E., Kanamitsu, M., Kistler, R., Collins, W., Deaven, D., Gandin, L., Iredell, M., Saha, S., White, G., Woolen, J., Zhu, Y., Chelliah, M., Ebisuzaki, W., Higgins, W., Janowiak, J., Mo, K.C., Ropelewski, C., Wang, J., Leetmaa, A., ... Joseph, D. (1996). The NCEP/NCAR 40-year reanalysis project. *Bulletin of the American Meteorological Society*, 77(3), 437–471. <http://doi.org/fg6rf9>

In text citation: ...(Kalnay et al., 1996).

Doctoral dissertation (printed):

Kóródi, M. (2006). *Correlations of rural tourism development in the Hungarian micro-regions* (Doctoral dissertation). Szent István University, Gödöllő.

In text citation ... (Kóródi, 2006).

Doctoral dissertation (online):

Kóródi, M. (2006). *Correlations of rural tourism development in the Hungarian micro-regions* (Doctoral dissertation, Szent István University, Gödöllő).

Retrieved from: https://szie.hu/file/tti/archivum/Korodi_Marta_ertekezes.pdf

In text citation ... (Kóródi, 2006).

Development document (online):

Government of Hungary. (2014). *Hungary - Rural Development Program, 2014–2020*. Retrieved from: http://ivsz.hu/wp-content/uploads/2015/07/Programme_Commission-Decision_2014HU06RDNPO01_1_1_hu.pdf.

In text... (Government of Hungary, 2007).

Law, decision, decree, other legislation (online):

Health and Safety in Employment Act 1992. (2013, December 16). Retrieved from <http://www.legislation.govt.nz>

In text citation: ...(Health and Safety in Employment Act 1992, 2013).

Government of Hungary. (2019). *About the extension of free textbook provision in full-time public education year 10–16*. (Government Decision 1092/2019 (III. 8.)). Retrieved from: <https://magyarkozlony.hu/dokumentumok/17262b6d4bd560f73ac4a46c594d4e092c00d951/megtekintes>.

In text citation... (Government of Hungary, 2019).

2.10 Appendix

Documents, diplomas, letters, legal texts, supplementary statistical and other tables, lists, questionnaires or pictures are included here, which do not fundamentally modify, but supplement and illustrate what is described in the dissertation. It is not necessary to understand the key points in the dissertation, but it allows the reader to have a deeper understanding of the text and the methods used.

2 The length and form of the dissertation

The doctoral regulations of the University of Pécs, paragraph 33 (2–3) on “The doctoral dissertations” refers to the main, general content and form guidelines. At the same time, paragraph 6 states that the detailed requirements and length are determined by each doctoral school. See also Operational Regulation of the Doctoral School of Earth Sciences (Faculty of Sciences, University of Pécs) Part III, (8) (j) on the “Responsibilities of the DSES Council” and Part VII (5) on the “Requirements of obtaining PhD degree”.

Regarding the length, there is no lower or upper limit, but we should try not to exceed 180–200 pages. Generally, a dissertation consisting of continuously numbered pages printed in one and a half line spacing on one side of an A/4 size sheet is accepted. The hard cover contains the name of the higher education institution, faculty and doctoral school, the name of the candidate, the place and time of publication, while the title page contains the title of the dissertation, the name of the candidate, the supervisor, the institution and the faculty, and finally the place and time of publication.

3 Summary Booklet of the dissertation

Paragraph 33 (5) of the Doctoral Regulations of University of Pécs states that the dissertation must be accompanied by the Summary Booklet of the dissertation. The booklet summarizes the results of the independent scientific work. The results must be presented in a uniform, self-explanatory system, the new findings being itemized, based on the applicant's professional publications. The Operating Regulations of the Doctoral School of Earth Sciences (Faculty of Sciences, University of Pécs) “On the requirements for obtaining PhD degree” Part VII (5) stipulates that the Summary Booklet must also be prepared in English. The dissertation and booklet should be submitted electronically and in their final form in three bound copies.

The booklet is in A5 size (148 mm wide, 210 mm high), printed on both sides with a font size of 9 to 10, single-spaced, stapled, maximum 10 pages long. At the top of the cover page “Summary Booklet of the PhD dissertation”, then below the name of the doctoral school, the title of the dissertation, the name of the candidate, the name of the institution, the faculty and finally the place and year of publication can be read. The structure of the booklet is the following:

- 1 Introduction
 - 2 Research objectives
 - 3 Research methods
 - 4 Conclusions
- List of own publications on the topic

Emphasis should be placed on new, own results in the booklet, summarized in a maximum of 5–6 thesis points, in a concise, synthesis-like manner. Instead of the bibliographic data of the sources, the list of own publications on the research topic should be included. The Scimago rating (Q) of the journal containing the publication must also be given here (<https://www.scimagojr.com/>).

4 Key requirements for submitting journal articles

After completing the complex examination, the PhD students can enter the second phase of the training (research and dissertation), where their primary task for four semesters is research and related publication. It is essential that the candidate is required to publish in high quality, internationally indexed, peer-reviewed journals (see the Scimago list tailored to the specific research fields and the Operating Regulations of the Doctoral School of Earth Sciences (University of Pécs, Faculty of Sciences, Part VII, Paragraphs 3–4 on “Requirements for earning the PhD degree”).

The submission guidelines of most scientific journals require the following structure from the author of the manuscript:

- Title
 - Authors full name (affiliations, full postal address, telephone, e-mail, corresponding author, funding)
 - Abstract (150–250 words)
 - Keywords (3–5, in alphabetical order)
-
- Introduction
 - Methods
 - Results

- Conclusions
- References

Articles can only be submitted to a journal if the content of the manuscript and the journal selection have been approved by the supervisor. In the case of students with state scholarship, only the Institute of Geography and Earth Sciences (University of Pécs) should be indicated in the “Authors’ affiliations” box. Fee-paying students can indicate their employer/institution/organization as well.