

Handout: Format of the Doctoral Thesis

(cf. RerNat-O §10*)

According to §10 of the doctoral degree regulations (RerNat-O), the dissertation may be submitted in two formats. The regulations do not specify a specific format. The detailed framework conditions are outlined in this handout.

Monographic Dissertation:

The monographic form remains the standard format of a dissertation and includes a detailed structure of the topics addressed within a scientific context, along with an in-depth discussion of the results obtained.

Manuscript-based Dissertation:

One or more scientific manuscripts, whether already published, accepted, under revision, or prepared, may form part of the dissertation if the doctoral candidate is a co-author and his/her own contribution is clearly stated in detail for each manuscript. The independence of the work must always be evident.

- It is not necessary to apply for a manuscript-based dissertation.
(exception in Chemistry, Geography and Geoscience, cf. appendix 8 & 9 RerNat-O, respectively)
- Ensure that published/accepted/submitted manuscripts are cited correctly.
- The insertion of passages and results from already published manuscripts may be integrated into the dissertation as continuous text and must be clearly cited in accordance to the rules for good scientific practice.
- Obtain (written) permission from all co-authors for the use (and later publication) of the manuscripts in your dissertation.
- If co-authors intend to use the same manuscripts in their dissertations, all individual contributions must be described in great detail (no overlap).
- Potential copyright issues must be clarified in advance (i.e., you may need to contact the journals or publishers). Clarifying the rights situation for already published manuscripts is solely the responsibility of the doctoral candidate and must be completed prior to publication. See also the [info page of the SUB](#).

All dissertations must include:

- 1) a thorough and comprehensive **introduction** that leads to the general topic of the dissertation and addresses all aspects and overall relevance,
- 2) a careful **summary** of all topics covered, and
- 3) an extensive **discussion** section that addresses all key findings of the doctoral research, their relevance to the field, and places the main findings in a broader context.

Please note that even in a **manuscript-based dissertation**, the **introduction**, **summary**, and **discussion** account for a substantial part of the overall evaluation. It is therefore essential to contextualize the manuscripts and demonstrate their inter-connections and coherence. The scientific, methodological and conceptual depth of the dissertation must also be evident in the framework text, not only in the included manuscripts.

Ultimately, the reviewers assess whether the dissertation meets the quality requirements for a doctoral degree. Therefore, the candidate's original contribution to each manuscript should be clearly highlighted and transparently documented (e.g., whether the candidate has taken the project forward in terms of its conceptual development (research question, design) or merely contributed).

Formatting:

There are **no** specifications with regard to the formatting of font, spacing, margins, etc., or in relation to the length of a dissertation.

However, the cover page and page 2 of the dissertation (templates: [English](#) / [German](#)) have to adhere strictly to the templates specified by the degree regulations (RerNat-O Annex 2)!

- The format of the cover (title) page must not include any adornments (e.g., logos, seals, etc.). You may use the university logo only if you adhere to the [rules](#), and it must be placed (incl. protective space) left-aligned on the page.
- The use of the seal of the university is **not** allowed unless you have a written approval by the Presidential Board.
- Using a blank page on the cover is not accepted.
- The backpage (page 2) lists the TAC members, the reviewers of the dissertation, the examination board members, and the date of the oral examination (disputation).

Do **not** include:

- Place of birth on the cover page
- Affidavit (already incl. in the Promovierendenerklärung/Doctoral student's declaration)
- CV

Ensure transparency in the use of AI in your dissertation (cf. [Countdown to doctoral degree](#) and the [University recommendations](#)).

* RerNat-O

§ 10 Dissertation (*TRANSLATION- ONLY THE GERMAN VERSION IS LEGALLY BINDING*)

(1)¹The dissertation must focus on a mathematical or scientific field. ²It must meet high scientific standards, contribute to the advancement of science and be an independent achievement of the doctoral candidate. ³It must be a scientifically noteworthy piece of work and show that the doctoral candidate has the ability to solve scientific questions in the subject area independently and methodically and to present the findings in a standard form for the subject. ⁴The doctoral candidate may incorporate previously published results into the dissertation; the source must be cited in the usual scientific manner.

(2) The dissertation can be in monographic form with a detailed classification of the topic in the scientific context and a sufficient discussion.

(3)¹Furthermore, a scientific manuscript or several scientific manuscripts for which the doctoral candidate is co-author may form part of a dissertation. ²In this case, a summary of the topics worked on must also be submitted, together with a detailed discussion section and a clear description of the doctoral candidate's own contribution to the manuscripts. ³This may be deviated from in the subject-specific regulations of a program.

(4) The dissertation may not have been or be used in any other doctoral procedure or comparable procedure at a university in Germany or abroad, unless otherwise stipulated in these regulations.

(5)¹The dissertation shall be written in German or English. ²It shall be provided with a title page in accordance with the sample in Annex 2.

(6)¹A dissertation should be carried out predominantly in conjunction with an academic institution belonging to the relevant program. ²Exceptions require the prior approval of the responsible Examination Committee.

(7) Further details may be regulated in the subject-specific provisions of a program.