Format of the Doctoral Thesis
(see RerNat-O §10 RerNat-O³)

The doctoral thesis can be written in two different forms: monographic or chapter-based.

**Monography** (§10.2): A monographic doctoral thesis will remain the standard format of a dissertation.

**Chapter-based thesis** (§10.3): Manuscripts which are published, accepted, under revision, submitted or being prepared for publication can be a part of the doctoral thesis as long as

   a) the reviewers of the thesis agree,
   b) the supervisor confirms that the manuscripts make up the significant part of the scientific work of the doctoral candidate, and
   c) the doctoral candidate’s own contributions are stated clearly and in detail for each manuscript.

   – It is not required to apply for a chapter-based thesis.
   – Chapter-based theses include what used to be called “cumulative theses”, i.e. a chapter-based format with only published or accepted manuscripts. These are of course still possible but count as regular chapter-based theses.
   – Keep in mind to correctly reference published/accepted/submitted manuscripts.
   – Get written approval of all co-authors for use (and later, publication) of the manuscripts in your thesis.
   – In case co-authors wish to use the same manuscripts in their PhD theses you all need to state your own contributions in great detail in your theses (no overlap!).
   – Possible copyright issues need to be considered well in advance (i.e. you may need to contact the journals or publishers). See also the info page of the SUB.

**All dissertations have to include**

1) a thorough and comprehensive introduction, which leads to the general topic of the thesis and addresses all its aspects and overall relevance,
2) a careful summary of all topics dealt with, and
3) an extensive discussion section, which addresses all key findings of the doctoral research and their relevance to the field, putting the key results of the thesis into a broader context.

- Please keep in mind that also in a chapter-based thesis, especially the introduction, summary and discussion will make up a big part of the grade of the thesis. -
Formatting:
There are no specifications reg. the formatting of font, spacing, margins, etc., or reg. the length of a dissertation in GGNB. However, the cover page and backpage (page 2) have to adhere strictly to the templates!

Example: Cover page
The format of the cover (title) page is specified by the degree regulations (RerNat-O Annex 2). It does not include any adornments (e.g., logos, seals, etc.).
You may use the university logo only if you adhere to the rules, and you must place the logo (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.

Example: Back page (page 2)
The format of the backpage (page 2) is specified by the degree regulations (RerNat-O Annex 3).
§ 10 Dissertation

(1) The focus of the dissertation must be in the field of mathematics or natural science. It must meet high scientific standards, contribute to the advancement of science and be an independent achievement of the doctoral candidate. It 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. The 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) Furthermore, a scientific manuscript or several scientific manuscripts for which the doctoral candidate is co-author may form part of a dissertation. In 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. Furthermore, one of the supervisors must confirm that these manuscripts constitute the essential part of the academic work. This 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) The dissertation shall be written in German or English. It shall be provided with a title page in accordance with the sample in Annex 2.

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

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