

Instructions for PhD thesis reviewers

The evaluation process: The review process evaluates the thesis and analyzes strengths and weaknesses. However, unlike in the peer review of scientific articles, the thesis will not be revised according to the reviewer's suggestions. Only in case that the thesis is not accepted by the reviewers (graded 5, failed), the doctoral candidate has to address the criticism by performing additional experiments and/or revising the manuscript and then resubmit the thesis. If the reviews are positive, the reviewer's comments and criticisms will be provided to the candidate and all members of the examination board and will be subject of the thesis defense. There the candidate has to address any criticism and the examiners have to judge whether the response is appropriate. The grades given by the reviewers will be shown in the certificate together with the grade given for the defense. If the thesis and the defense are graded with 1 (excellent), the doctoral student will, according to the curriculum, be awarded the PhD degree "with distinction". The Medical University of Innsbruck aims to give this honor only to the best 5 – 10 % of graduates. The highest grade (1) should therefore be given only if the thesis is indeed excellent.

The grades are:

1	excellent
2	good
3	average
4	pass
5	failed

Organization of the thesis: PhD thesis can be organized in two different ways: A **cumulative paper thesis** contains two or more scientific articles relating to a single topic, to each of which the doctoral student has made a significant contribution. The articles will be preceded by an abstract, a general introduction, additional details of the methods, and followed by a general discussion. The articles should be provided as links to electronic versions rather than the original articles. The second acceptable form is the **monographic thesis**, in which the student presents her/his research in the classical book format. In either case, it is expected that the thesis resulted in at least one scientific article in a peer-reviewed journal, where the doctoral student is the first author. At the time of submission of the thesis, this article should at least be accepted (in press). If this is not the case, an accompanying statement from the thesis committee will explain the circumstances that justify an exception from this requirement. In this case, the reviewers are asked to comment on whether they consider this exception appropriate, and whether it is likely that a publication will arise from the thesis within due time.

Review criteria: The written review typically is one to two pages in length and should address the following issues:

1. Did the thesis research generate significant new knowledge in a scientific area?
2. Is the methodology scientifically sound and described in a way that allows reproducing the experiments? Were relevant international ethical standards and rules of good scientific practice adhered to?
3. Does the thesis demonstrate a solid understanding of the state-of-the-art in

the research area and the knowledge of the most important and current literature?

4. Are the results presented clearly, with the appropriate controls and statistical analysis?

5. Are the results discussed in relation to the research of others, and does the thesis demonstrate a good understanding of the implications of the work in a broader scientific context.

Because research is usually conducted in teams, it is mandatory that the candidate clearly specifies her/his own contribution to each aspect of the thesis (conception of ideas, experiments [e.g. which figures in an article], writing of an article), and that she/he acknowledges any contribution by others appropriately.

6. Is the candidate's contribution to the research and publication(s) clearly stated and sufficiently large to grant her/him primary authorship?

Confidentiality: The thesis is the intellectual property of the PhD candidate and her/his research team and has to be treated confidentially. Any part of it that had not been published already, must not be discussed with third persons or used in own experiments or publications without the explicit consent of the authors.

Language: Because many of our PhD students are not native German speakers, we ask you to write your review in English.