

## **Instructions for writing a master's thesis at the Department of Environmental Economics**

### **Master's thesis learning objective:**

With the Master's thesis you are supposed to show that you are able to "independently work on a defined scientific problem (...) within a given period of time" (§12 of the examination regulations for the Master's programs).

In the context of the topics assigned at the Department of Environmental Economics, this means that you should be able to

- understand scientific publications, including the methods used in them, and reproduce the main contents in a clear written form (= understanding of scientific methods),
- present a clearly defined problem on the basis of several sources and to place these in a larger context (= understanding of a scientific problem), and
- make your own contribution to this problem (= independent contribution).

Depending on the chosen topic, the latter can be done in a variety of ways. For example, through an independent and novel presentation, a critical evaluation of existing work, the identification of new research questions, and the student's own contributions to answering these questions (conceptually or through analysis of empirical data).

In master's theses, a sound understanding of methods is expected and the aspect of "independent contribution" is given central importance.

### **Scope of work:**

Maximum 40 pages of text, excluding indexes, tables and figures. Please note the following section 'Formal requirements'. The length of a thesis is not an indicator of quality. A very good thesis can be shorter. A good quality thesis conveys its content in a focused manner.

### **Formal requirements:**

Please refer to the separate document 'Formal guidelines for theses and seminar papers at the Department of Environmental Economics'. The formal requirements for the thesis are considered during the grading.

Please note that any confirmation of a place is only binding for the semester in which the confirmation is made. The acceptance may be forfeited if you fail to contact the respective supervisor within the given timeframe (i.e. the current semester). In exceptional cases, it is possible to postpone the registration of your thesis to a subsequent semester. In any case, this requires early consultation with the supervisor.

### **Electronic version:**

In addition to submitting hard copies of your work as required by the examination office, please send an electronic version in PDF format to [stefanie.engel@uos.de](mailto:stefanie.engel@uos.de) and the respective supervisor of your work. Other formats or storage media cannot be accepted.

### **Addressees of your work:**

The goal of any scientific text is to provide (potential) readers with new knowledge. This means that your target audience usually understands less about the topic than you do (otherwise they would not want to read the text). It makes sense to imagine the addressees of your paper not as your supervisor, but as your fellow students who, like yourself, are just about to graduate. As with any group of readers, you should then ask yourself the following questions before writing the paper:

- What knowledge can I assume my addressees have?
- What is the most important content I want to convey, and how much of this content can I convey in a comprehensible way, within the given scope (pages, time)? What content do I have to leave out due to these limitations?

### **Structured handling of the literature:**

If basic literature has been provided, focus on it first and try to understand and reproduce it. Then consider what other literature you want to consult. Proceed in an orderly fashion: First try to get a rough overview of the relevant literature (What are the essential sources for your question and what is their content?). Only then decide which of these sources you want to study more closely and which of these more closely considered sources are actually relevant to your work. Thus, consciously select the literature used according to purely content-related criteria. The length of the bibliography alone is not a sign of quality!

When reviewing the literature, also consider the scientific reliability of the cited sources: Have the sources been checked by third parties, have you checked the contents yourself, are there indicators for the reliability of the authors? Reliability should be critically examined not only for internet sources, but also for printed work. When in doubt, the prime principle is always "Believe only what you have convinced yourself of." Wikipedia is not a scientifically reliable source.

### **Introduction and conclusion:**

Every scientific paper should begin with an introduction in which you convey what the paper is about, why this is (or can be) of interest, and how the paper is structured. Likewise, you should provide a summary or conclusion at the end. These parts of the paper are often underestimated. However, they give you the opportunity to raise interest among readers and to make your conclusion short and concise.

### **Further aids:**

Osnabrück University offers a wide range of writing courses, supportive information, and individual one-to-one consultations for students ([see here](#), link in German). There are a variety of books and websites that promise helpful instructions and tips for writing scientific papers. Following guidebook can be recommended and the university library has an e-book license for it: Macgilchrist, Felicitas. 2014. *Academic Writing*. UTB Schlüsselkompetenzen, Nr. 4087. Paderborn: Schöningh. <https://elibrary.utb.de/doi/book/10.36198/9783838540870>.

### **Supervision of work:**

The theses are supervised by Prof. Dr. Stefanie Engel or a member of the department. The examiner is Prof. Dr. Engel. You are entitled to a preliminary meeting with the supervisor (more detailed definition of the topic considering your prior knowledge), a discussion of the (preferably detailed) outline (the more detailed your outline, the more helpful the feedback can be), as well as - if needed - another meeting for questions/feedback during the writing stage.

### **Evaluation criteria:**

The following general criteria are considered during the evaluation of master's theses. The weighting of the mentioned criteria varies in individual cases (e.g., depending on the complexity of the research question).

#### *1. Formalities*

- Is the work clearly structured (into chapters and subchapters, relevant indexes available)?

- Is the reference list complete and are citations used according to the guidelines (see document 'Formal guidelines for theses and seminar papers at the Department of Environmental Economics')?
- Is the formatting consistent and does it comply with the requirements (see document 'Formal guidelines for theses and seminar papers at the Department of Environmental Economics')?
- Does the paper include a brief summary in the form of an abstract that represents the content of the thesis in a concise and easy to read manner? Does it invite the audience to read the full paper?

## 2. Linguistic Representation

- Is the text generally understandable and formulated in a scientific writing style?
- Does the text have orthographic errors?
- Are technical terms used correctly?

## 3. Question and Structure

- Is a or are several coherent research question(s) formulated and is the structure of the work based on this/these question(s)?
- Does the introduction sufficiently motivate the research question and/or emphasize its relevance (e.g., scientific or societal)?
- Is the work structured in a meaningful way and is this structure clearly stated?

## 4. Scientific Competence

- Is the literature extensive and well-organized? Was a degree of originality developed in bringing together several strands of literature and critical skills demonstrated in assessing and reviewing previous research? Is the literature correctly reproduced and summarized in the student's own words?
- Is there an integration of the literature or are the findings just summarized individually?
- Has the candidate demonstrated an understanding of basic economic concepts and, in particular, the concepts of the research field of the thesis?
- Is the line of argumentation within the individual chapters comprehensible and clear?
- Is the problem systematically analyzed in a thorough and in-depth manner? Is the problem convincingly placed into context?

## 5. Discussion/ Reflection

- Is the conclusion clearly and explicitly linked to the research question and derived from scientific analysis of research results? Does the conclusion provide novel insights into the relation to the research question? Is the summarized research critically discussed?
- Is the problem systematically analyzed in a thorough and in-depth manner? Is the problem convincingly placed into context?
- Are the weaknesses of the thesis mentioned and/or discussed?
- Are research gaps identified or suggestions made for future research?

## 6. Supervision and Independence

- Did the student show initiative as well as project and management skills? Did the student fulfill (or went beyond) agreements made?
- Was the question proposed independently by the candidate or how strong was the candidate's input for defining the topic?
- How much supervision did the supervisor provide?

- Was the student well prepared for supervisor meetings?
- Has the candidate adequately addressed constructive criticism from the supervisor?

Depending on the focus and methodology of the thesis, the following criteria can also be considered for evaluating the thesis.

*1. Research methodology*

- Did the student collect extensive and high-quality data related to the research question?
- Is the data presented in a fully objective way and is bias towards any interpretation avoided?
- Did the student conduct a sophisticated and correct analysis of data with the use of an adequate technique?
- Is the methodology understandable and correctly explained?
- Did the student exhibit a methodological understanding? Did the description of the research method match with the research question and is reproducible?

*2. Implications and recommendations*

- Are the implications and recommendations comprehensive, to-the-point and well-linked to the findings and conclusion?
- Did the student make well-founded recommendations towards improved policies or practices?