Guidelines for Writing a Final Thesis

These guidelines were prepared to help students interested in writing a final thesis (Bachelor/ Master) at the Chair of Professor Dr. Ockenfels. These guidelines should be seen as an extension to the literature on how to write a dissertation. Details about the content of the thesis should be discussed with the respective supervisor.

1. Requirements

The legal requirements for writing a theses are determined in your respective examination regulations ("Prüfungsordnung").

For students under the examination regulations of 2015 ("PO2015"), the <u>examination office has</u> <u>created a website which entails all relevant legal information regarding your thesis</u> in your course of study. Please take a look at these rules before contacting us about a thesis!

2. Choosing a topic

At the Chair of Prof. Dr. A. Ockenfels (Department of Economics) you can write a final thesis on any of the following topics:

- Game Theory
- Experimental Economics
- Market Design and Auctions
- Microeconomics and Industrial Organizations
- Behavioral Economics
- Bounded Rationality.

If you are interested in one of these topics, please write an email to <u>ockenfels-abschlussarbeiten</u> <u>@uni-koeln.de</u>. Our chair provides a list with topic suggestions for bachelor students which is frequently updated. You can find this list on our homepage. From master students we expect an own topic suggestion which should be outlined in an exposé. The exposé should describe the specific research question, key academic literature, and a brief outline of the content.

3. Time frame

The time permitted for writing a master thesis is 6 months. There are no exceptions to this rule.

The time permitted for writing a **bachelor thesis** is 12 weeks. There are no exceptions to this rule.

4. Submission of the thesis

There are the following two ways of submitting a thesis:

- 1. Electronic submission via SCIEBO
- 2. The thesis can still be submitted as a printed (hardback copy) version to the examination office via the mailbox at the WiSo Student Service Point. Alternatively, the thesis can be handed in directly at the WiSo Student Service Point during its opening hours or be mailed to the examination office. In this case the date of the post stamp is the date of submission. An electronic version of the thesis has to be handed in on CD/DVD. The electronic version should be in pdf-format as well as in a text format (e.g. doc, docx)

5. General comments

The first principle during the compilation of a final thesis is: Every statement has to be comprehensible. This is fundamental for every scientific paper. The writer has to specify if a text passage contains own research findings, own views or the views of other authors. The formulation of the view of other authors can be made literal (through quotation) or through using the conjunctive.

If the thesis refers to sources that are not generally available, the writer has to make these sources available, in case they are needed during the evaluation of the thesis.

6. Valuation principles

Every final thesis covers a different topic and thus has its individual structure and approach. This makes comparison of different theses impossible. Hence, no standard evaluation criteria exist.

Nonetheless, the following aspects of the thesis are usually taken into account in the process of evaluation:

1. Topic of the thesis:

The objective difficulty of the topic
Amount of work required
The importance and the formulation of the topic
Level of independent contribution

2. Content of the thesis

Systematic problem-solving methods
Weighting of each topic
The result of the auditors' personal contribution
Approached and concepts applied

3. Formal arrangements

Structure and subdivision
Scientific language
Accuracy of figures and tables
Quotations and spelling

7. Content and layout

The quality of a scientific thesis depends not only on the content but also on the structure, language and form.

Language

The thesis can be written either in English or German.

Page limit

A master thesis should not exceed 60 pages and a bachelor thesis should not exceed 40 pages.

Formatting rules

We recommend the following formatting rules. However, please be aware that any rules of your examination office have priority.

Paper format: DIN A4

Page margins: left: 3.5 cm

right: 2.5 cm top: 2.5 cm bottom: 2.5 cm

Line spacing: 1.5 spaced

Font: e.g. Times New Roman or Arial

Font size: 12 for standard-text blocks

Paragraphs: Either left aligned or justified. If you choose justified, please activate the

syllabication function.

The thesis can be printed one- or two-sided. Captions should be highlighted in different font sizes corresponding to their importance.

Arrangement of the pages:

- 1. Title page
- 2. Table of Content
- 3. List of Figures and List of Tables (if necessary)
- 4. List of Abbreviations (if necessary)
- 5. Main text
- 6. Reference list (in alphabetical order of authors)
- 7. List of any auxiliary means (if necessary)
- 8. Appendix (if necessary)

Title page

The title page should correspond to the title page recommended by the Examination office. Please note that there are different recommendations for **Master and Bachelor theses**.

Table of Contents

A Table of Contents gives an overview of the structure of the thesis.

One can choose between a numerical order and an alphanumerical order. Each number should be followed by a period. Subchapters only make sense if there is more than one subchapter. For example, if there is a subchapter called 1.1, there should also be a subchapter called 1.2.

Captions should be followed by some text to avoid too many captions in a row. Instead, students should briefly describe the outline of the following chapter.

In the introduction, the topic should be motivated, the specific research question stated and the structure of the thesis outlined. The concluding section of the thesis (Summary) should summarize the key findings and ideally point out gaps in the literature.

Please note the following: Although the table of contents is simply an aid for the reader, it also shows the writer's understanding of the problem and his/her ability to cope with a task in a structured and accurate manner. The table of contents allows the reader to follow the author's thought process and to understand the weight each topic is given. The table of contents has to be structured logically, from general to specific.

As a rule of thumb: Text passages of about a page are too short for one chapter, and text passages of more than five pages too long for one chapter.

Lists of Figures and List of Tables

Figures and tables must be labelled according to the content of the image or chart (time, locale, dimension, etc.). Geographical images, charts, curves, marks, etc. have to be labelled. The charts and images should be numbered in ascending order throughout the text. Additional figures and tables can be added in the appendix. However, all figures and tables in the main text should be described (and referred to) in the main text. When referring to a figure or table, the caption (number) of the figure or table should be mentioned in the text. The source of figures and tables should be stated in its caption. When you create a own figure or table which is based on a different source, this source should be mentioned. A list of figures and tables can be included before the main text of the thesis.

List of Abbreviations

A list of abbreviation can be provided but does not need to include common abbreviations ("e.g.").

Main Text

The writer should avoid an inappropriate diction, imprecise terms and undifferentiated judgments like "should", "must" or "fulfil". Own judgments should be clearly distinguishable from facts or evidence. In general, avoid any first-person perspective in your style of speech.

Referencing style

Literature should be referenced for example using the Harvard citation style. It is not recommended to use footnotes. Rather, specify the author, year of publication and the page number in parentheses directly in the text. For example, (Müller 2004, p. 34).

Direct quotes should be put in quotation marks followed by the reference. For example, "...quote..." (Waringer and Schulz 2003, p. 10).

If you are referring to multiple publication of the same author(s) in the same year, use alphabetical letters to differentiate between these publications. For example, (Müller 2002a, p. 37) and (Müller 2002b, p. 68).

Multiple authors should be separated by a comma: (Meyer, Schulz and Mosblech 2003, p. 10).

Multiple references should be separated by a semicolon: (Waringer and Schulz 2003, p. 23; Theisen 2003, p. 137).

If authors are mentioned directly in the text, the year of publication should be put in parenthesis: "The results of Waringer and Schulz (2003) show that..."

Direct quotes in a foreign language should be avoided in the main text. Instead, the writer of the thesis should present an appropriate translation of the relevant part of the quotation. Please note that quotations in English pose an exception to this rule. Translations conducted by the author of the thesis should be labelled as such at the end of the relevant section. Passages from publications, which were translated in German, can be cited literally using quotation marks.

In case of quoting symbols from different sources (e.g. in formulas), these should either be explicitly defined or exchanged with those previously used in one's thesis.

For quotations from sources published only online, please note the following: One should state the name of the author, the year of publication and the date of the download. The URL should be listed in the bibliography. Also, a printed version of the online source should be presented on request.

References list

The reference list specifies all sources, gives credit for the use of concepts from other authors and might introduce the reader to new literature. The bibliographic information has to be complete and accurate to ensure accessibility of the source for verification.

It is not recommended to list many references just for making a good impression. Bear in mind that each piece of literature raises the standard against which your thesis is measured. The bibliography should only contain literature that has been referred to in the text.

The literature should be sorted by authors in an alphabetical order. If an article is part of a book, which includes a collection of articles, one should first give the author of the article and its title, and then provide details about the book's authors, title, and publication details.

Items in the reference list should include the following information:

Last and first name of the author(s) (in case of an anonymous author use "N.N"),

the year of publication,

the title of the article (if the article is a chapter in a book with a collection of articles, provide the name(s) of the author(s) of the book with an "ed(s)." in parenthesis after their names),

the name of the journal,

the volume (and issue, where applicable),

the publisher: and location of publication (only applies to books),

the range of pages in the journal or the respective chapter in the book,

for references from the internet: name, date, URL, and the time of the download or the time of the page visit.

Note that references in the reference list are sentences and should end with a full stop.

Examples:

Bolton, Gary E. and Axel Ockenfels (2000). ERC: A Theory of Equity, Reciprocity and Competition, in: American Economic Review, 90(1), p. 166-93.

Tadelis, Steven (2013). Game theory: An introduction. Princeton University Press: Princeton.

De Vries, Casper, Alireza Namazi, Axel Ockenfels and Andreas Schadschneider (2007). The Economic and Statistical Laws of Bid Timing and Bid Amounts in Online-Auctions, Working Paper, University of Cologne.

Doe, John (2010): www.johndoe.co.uk/publications/test.pdf, 19.03.2010.

Declaration according to §13(9) of PO 2007/ §21(13) of PO 2015/ §21(13) of PO 2021 for bachelor students or §16(9) of PO 2008 / §21(15) of PO 2015/ §21(17) of PO 2021 for master students.

In addition to your thesis, students have to submit a declaration of originality. Please use the form provided on the website of the Exam Office. This form should be signed, together with the date of the thesis submission, and should be submitted separately (not included in the thesis) to the Exam Office.

Declaration for Essays ("Hausarbeiten")

Essays ("Hausarbeiten") should be submitted by the deadline announced by the examiner. Essays should include the following declaration of originality, which has to be submitted <u>in German</u>, together with the date of the essay submission and your signature.

"Hiermit versichere ich, dass ich die vorliegende Arbeit selbstständig und ohne die Benutzung anderer als der angegebenen Hilfsmittel angefertigt habe. Alle Stellen, die wörtlich oder sinngemäß aus veröffentlichten und nicht veröffentlichten Schriften entnommen wurden, sind als solche kenntlich gemacht. Ich versichere, dass die eingereichte elektronische Fassung der eingereichten Druckfassung vollständig entspricht."

"I hereby declare that I have single-handedly written this thesis and used only allowed resources. All passages containing published or unpublished work by other authors are marked as such. I certify that the electronically submitted version is a true copy of the submitted version in print."

The last sentence is omitted, if the essay is only submitted electronically.

8. Notes on literature search

To search for literature, there are a variety of options: the University and City Library of Cologne, Web of Science (online from the University network, or off campus with VPN), Google Scholar, etc.

To access articles from journals: http://rzblx1.uni-regensburg.de/ezeit/search.phtml?bibid=USBK-8colors=7&lang=de. This is only possible on campus, logged in into the University of Cologne network, or off campus logged in via VPN (http://rrzk.uni-koeln.de/vpn.html?&L=0).

9. Further readings

The following books provide useful tips about writing a final thesis:

Cole, A. and Karl W. Bigelow (2006): A Manual of Thesis-Writing: For Graduates and Undergraduates, 1st edition, Cosmo Study Guide.

Clark, Irene L. (2006): Writing the Successful Thesis and Dissertation: Entering the Conversation, 1st edition, Pretince Hall International.

Zerubavel, Eviatar (1999): The Clockwork Muse: A Practical Guide to Writing Theses, Dissertations, and Books, Harvard University Press.