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AND ECONOMICS

FRIEDRICH-ALEXANDER-UNIVERSITY ERLANGEN-
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Industrial Organization and Energy Markets

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Guidelines for writing scientific papers

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Academic papers - information leaflet

1. Preliminaries

This information sheet provides you with an introduction of the most important criteria you need to consider when writing an academic paper. For more detailed assistance we refer you to the comprehensive literature (see below for an example), especially with regards to writing good English manuscripts:

Wallwork, Adrian (2011), English for writing research papers. Springer Science & Business Media.

Note: These guidelines are standard for all academic student papers written at our chair. However, for a particular course or thesis, different rules might be announced. If that is the case, the information provided for the specific course/paper will overrule the standards stated here (e.g., a seminar might require you to write a term paper with less/more pages).

Writing an academic paper requires self-initiative, which implies that you should contact your advisor on your own when there are major or anticipated problems of any kind. Furthermore, self-initiative implies that you are expected to perform the necessary literature research autonomously.

You have the freedom to choose the phraseology and style of sentences. However, you should always formulate your sentences as concisely as possible. Especially you should be avoiding any inconsistent arguments and use the correct terminology. Orthographical rules and rules of punctuation have to be considered and should be used consistently in the entire document.

2. Content

For writing an academic paper it is inevitable to thoroughly consider the literature about the particular topic. The literature assigned to you by your supervisor should only be a starting point. The assigned papers can help you to come up with first ideas of core themes of your academic paper and also guide you in your further investigation. The aim of the academic paper is **not** only to summarize the one or two articles provided. You are expected to go beyond the provided articles. The literature you reference in your paper should be generally accessible, preferably from respected and reputable journals. Your paper should be based on (recent) scientific articles. Note that most (economic) research is published in journals, rather than books

or monographies. For a first literature research you could use the online catalogue of the library, their online journals or online databases (like google scholar).¹

You have to keep a critical distance to the cited literature. Every single thought stemming from the literature has to be scrutinized for its. All ideas developed by yourself have to be explained argumentatively. Thoughts that are not your own have to be identified clearly and appropriate references have to be cited. Value judgements of any sort (e.g. “better”, “good”) should be avoided in academic papers.

Developing a good outline is a necessary step for writing an academic paper. A well-organized structure provides a guiding thread to the reader. It enables the reader to infer the thoughts of the author and provides an overview of the issue. Creating an outline is the first thing you should do before you start writing your research paper. Having an outline before you start to write imposes structure to the paper.

Your outline has to be appropriate for the type of paper you are writing. For example, 10 main points are most likely to be too much for a seminar paper, but very reasonable for a master thesis. Coordinate your outline with your advisor and do it **early** in the writing process. Most importantly, do it when you still have sufficient time to incorporate your supervisor’s comments.

3. Formal requirements

If nothing else is specified in the course you are taking, the maximum length for your paper is:

- 15 pages for a seminar paper (Bachelor),
- 20 pages for a seminar paper (Master),
- 30-35 pages for a bachelor thesis and
- 55-65 pages for a master or diploma thesis.

The length includes continuous text **without** the title page, the list of figures/tables, appendices and references. Your paper has to be written on A4 sized paper with 1.5-line spacing between lines and a 12 point font size. Justification of paragraphs is preferable. The font Times New Roman is recommended. There is no page number for the title page. All other pages are numbered. All index pages are numbered with roman numerals. Start over with Arabic numerals

¹ The FAU library frequently offers tutorials on how to conduct a proper literature search, the use of the online catalogues, how to use citation software, etc. We highly recommend these course. See <http://ub.fau.de/schulungen/index-en.shtml> for more information.

from the first text page to the end. Page numbering can be made at the right top or the right-bottom corner.

The margins for the entire paper are:

Left hand margin (for corrections):	5 cm
Right hand margin:	1.5 cm
Top:	2 cm
Bottom:	2 cm

Use continuous numbering for footnotes. Make sure you have the footnote on the page of the reference. Place your footnote numeral behind a punctuation mark without a space in between. If the footnote includes an annotation for a certain term, place the footnote behind the term without a space in between. The font for footnotes is the **same** as in the text body, but with font size of 10 points and one-line spacing.

Separate titles/heading from the text by using “bold” letters and a bigger font size. Make sure you have the identical titles/headings in your outline and in the text. (Learn how to automatically create a table of contents in the word processor you use!). If sub-headings are used on a particular level, there have to be at least two sub-headings on this level (e.g., if you have a subchapter 2.1 you also need a subchapter 2.2).

We provide examples for the title page at the end of this document. Put all your abbreviations which are not in the Oxford, Cambridge or Webster dictionary in a list of abbreviations. Figures and tables have to be numbered independently. Use “Fig.” under every image and “Tab.” above every table, followed by the corresponding number and a shorthand label. If the figure or table is from a source, reference that source (footnote is possible). You have to refer to the figure or table in your text.

Your paper or thesis has to have the following structure:

- Title page
- Table of contents
- List of abbreviations (if needed)
- List of figures (if needed)
- List of tables (if needed)
- Main body
- References

- Appendix (if needed)
- Affidavit

4. Citation method and list of references

Giving appropriate reference to the cited sources is very important. Similar to most professional journals, the American citation style has to be used for these references. This means that you point to the reference **directly** in the text, e.g. “Both particular economists (Vandalen, 1997; Oster and Hamermesh, 1998) and complete faculties (Conroy et al., 1995; Dusanky and Vernon, 1998; Bommer and Ursprung, 1998,) were evaluated on this basis.” Interviews have to be cited in a footnote. If you summarize a paper, make clear which paper you are referring to, but do **not** cite the paper after each sentence/paragraph. The reader must know which paper you are talking about, but you should not cite the paper again and again within a section if it is clear that you are summarizing the cited paper.

Citing literally should generally be avoided. It is only recommended for very concise formulations. In case you decide to quote literally you have to mark literal statements with quotation marks. It is recommended to use indirect citing. Please abstain from stringing multiple citations together.

It is important that **all** cited sources (and only those) are listed in your bibliography at the end of the paper. Every source is only listed once, independently of how often you refer to it. There are many useful reference management programs and several of them are free of charge. We highly recommend to become familiar with one of these programs as they greatly ease the use of several sources.² Sort your sources in **alphabetical order** and start with the author’s surname. This structure makes it easier to find your sources. If there is a source written by multiple authors, start with the first author’s surname, followed by the given name. From the second author on, start with the given name, followed by the surname (also see examples below).

4.1 Articles in scientific journals

Sources with the same (first) author are listed in chronological order. In case there are multiple sources written by the same authors that appeared in the same year add a small letter after the year:³

² See link in footnote 1 for more details.

³ Your citation style can differ from this proposal. Make sure your citation is consistent and matches a current standard.

Surname and given name of the author (authors) (year of publication in brackets) "Title of Article", *Journal/Magazine name*, volume (number of magazine), page numbers of article.

Costa-Gomes, Miguel, Vincent P. Crawford, and Bruno Broseta (2001), "Cognition and Behavior in Normal-Form Games: An Experimental Study", *Econometrica*, 69 (5), pp. 1193–1235.

Fehr, Ernst, and Simon Gächter (2000a), "Fairness and Retaliation: The Economics of Reciprocity", *Journal of Economic Perspectives*, 14, pp. 159-181.

Fehr, Ernst, and Simon Gächter (2000b), "Cooperation and Punishment in Public Goods Experiments", *American Economic Review*, 90, pp. 980-994.

Austen-Smith, David and Jeffrey S. Banks (1996) "Information Aggregation, Rationality, and the Condorcet Jury Theorem", *American Political Science Review*, 90 (1), pp. 34-45.

When referencing a source with one or two authors in the text state the surnames of all authors and the year of publication in paraphrases e.g. (Fehr and Gächter, 2000a). When citing a source with more than two authors name only the first author followed by "et al." e.g. (Costa-Gomes et al., 2001).

4.2 Books and writings (monographs)

Surname and given name of the author/s (year of publication in brackets): Source title, publisher, place of publication, edition (if needed).

Pindyck, Robert S. and Daniel. L. Rubinfeld (2001) *Microeconomics*, Prentice Hall, London, Fifth Edition.

Voigt, Stefan (2002) *Institutionenökonomik*, Wilhelm Fink, München.

4.3 Contributions in collections

Surname and given name of the author/s (year of publication in brackets) "Contribution title", in: Surname and given name of the publisher/s with additional (Ed. /Eds.): Title of the collections, publisher, place of publication, edition (if needed), page numbers of contribution.

Ostrom, Elinor (1996) "Incentives, Rules of the Game, and Development", in: M. Bruno (Eds.): *Annual World Bank Conference on Development Economics*, The World Bank, Washington, D.C., pp. 207-34.

4.4 Unpublished literature

Unpublished literature contains for example working and discussion papers and also manuscripts. Be careful in using such papers. In general preference should be given to published work.

Surname and given name of the author/s (year of publication in brackets) “Title”, if necessary working or discussion paper series (if there is no information available point it out with the note “mimeo”), place if necessary.

Fischbacher, Urs (1999) “z-Tree – Zurich Toolbox for Readymade Economic Experiments – Experimenter’s Manual”, *Working Paper No. 21*, Institute of Empirical Research in Economics, University of Zurich.

Ladha, Krishna, Gary Miller and Joe Oppenheimer (2003) “Information Aggregation by Majority Rule: Theory and Experiments”, *mimeo*

4.5 Online sources

Surname and given name of the author/s (if available year of publication in brackets): Title, URL, “accessed” with complete date of the last call of the website(s).

UNESA – United Nations Department of Economic and Social Affairs (2002) “Global Challenge, Global Opportunity, Trends in Sustainable Development”, http://www.un.org/esa/sustdev/publications/critical_trends_report_2002.pdf, accessed on 01.03.2007.

Note: If you access a published paper online, e.g. through the catalogue of the library, the paper does not become an online source. Please abstain from referencing the cited article by stating where and when you accessed the journal. If it is a published article citing the article as shown in section **Fehler! Verweisquelle konnte nicht gefunden werden.** is appropriate.

Appendix 1

Title page of a seminar paper:

Paper title
Subtitle (in case)

Term paper in “*Seminar title*“

at

Prof. Dr. Gregor Zöttl
Industrial Organization and Energy Markets
Friedrich-Alexander-University Erlangen-Nuernberg

Nuernberg, xx.xx.xxxx

Erik Exampleman

Examplestr. 1

00000 Exemptown

Phone: 09876/123456789

Email: erik.exampleman@fau.de

Student ID: 987654321

Appendix 2

Title page of a thesis:

Thesis title
Subtitle (in case)

A thesis submitted in partial fulfillment
of the requirements for the degree of
“Degree“

at
Prof. Dr. Gregor Zöttl
Industrial Organization and Energy Markets
Friedrich-Alexander-University Erlangen-Nuernberg

Nuernberg, xx.xx.xxxx

Erik Exampleman

Examplestr. 1

00000 Exampletown

Phone: 09876/123456789

Email: erik.exampleman@fau.de

Student ID. 987654321

Appendix 3

Affidavit / statement of authorship

I confirm that I wrote this thesis independently and on my own without using any other sources and aids as I stated. Where I used other sources I clearly marked them as not my own. This thesis has not been received by any examination board, neither in this nor in a similar form.

All quotes and citations are marked as such.

Nuernberg, xx.xx.xxxx

Signature