

# Guidelines for the Composition of Term Papers and Theses

**Chair of Economic Policy  
Prof. Dr. Andreas Freytag**

**Friedrich Schiller University Jena**

**Contact address:**

Carl-Zeiss-Straße 3  
07743 Jena  
Germany

Tel. +49 3641 9-43250  
Fax: +49 3641 9-43252

[www.wiwi.uni-jena.de/vw2](http://www.wiwi.uni-jena.de/vw2)

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## **1. Introduction**

In recent times more and more students have requested us for a fundamental instruction on the basic aspects of writing scientifically acceptable papers. We hope to meet this need by publishing these guidelines. We have tried to keep this paper as short and simple as possible, as you will find a large selection of literature in our library, dealing with the topic in a much more detailed and elaborate manner. Therefore, if you have any more questions, please refer to the literature of which we have composed a selection at the end of these guidelines.

The structure for the elaboration of the topic (chapter 3) may only be taken as a proposal- there is no universal method of approaching scientific topics, as every student has to find an own style of working on this. The main objective is that the scientific process of developing a paper's conclusion is clear.

## **2. Didactical Motives for the Task of Creating a Term Paper**

The creation of a term paper can be understood as an exercise on the scientific capabilities required for authoring a thesis. The main skills necessary for this are:

- To independently research on adequate literature from primary and secondary sources
- Hence to identify and understand the relevant issues, arguments and concepts
- To structure and discuss them in one's own words at an appropriate breadth
- And last but not least to critically question the outcome of one's argumentation under an economical perspective.

Special attention should be paid to a careful selection of the literature. It has to meet qualitative and quantitative standards, as it is the basis for the following composition of the term paper itself. For the whole process one should recon approximately 3-6 weeks.

### 3. Possible Structure for the Elaboration of a Topic

#### Phase 1: Studying of the Recommended Basic Literature

In order to get a good overview over the topic we strongly recommend to work through the basic literature. At this stage one should understand, which kind of problems are dealt with in the articles, what points are made in the lines of argumentation, and which key words or technical terms are especially relevant for the topic. In addition to this, the cited references can be used as a starting point for one's own literary research.

#### Phase 2: The Independent Literature Research

- Literature Research  
(See chapter 4)
- "Skimming" of the Found Literature  
(See chapter 4.2)
- Narrowing the topic down (helpful methods: brainstorming und mind mapping):  
First of all one should try to brainstorm all terms and concepts that, by chance, could be relevant and write them down. In the next step one can try to systemize and categorize these through mind mapping. This should help to reveal connections between the different topics and lines of argument. Also one may already try to distinguish between the central issues of the problem and those which are less relevant.
- Systemizing the Arguments and Concepts:  
Next, the different points of argument need to be checked for their relevance regarding the central questions of one's paper, while also considering their relatedness to one another. Usually more material will be found than necessary. Irrelevant points should be sorted out in order to make the key aspects more clear.

Generally professional articles can be classified in to three different categories:

- 1) **Theoretical Papers** usually deal with specific problems under certain assumptions using models from macroeconomics, microeconomics or game theory.
- 2) **Empirical Papers** try to falsify certain statements made by theoretical models. For this purpose they use econometrical test methods fed with actual economic

data. This way, approximate statements can be made about correlations within the models, possibly resulting in its validation.

3) **Descriptive Papers:** These contain case studies as well as pure statistic-descriptive articles, which apply economical reasoning to individual observable situations. In doing so, the theoretic/empirical results are approved, fully disproved, or limitedly disproved with a statement for this exceptional observation.

Furthermore these papers include articles containing solely recommendations for politics.

Phase 3: Establishing a Tentative Structure Outlining the Topic („sketching“):

Simplified, the structure of the term paper could be elaborated as follows (this will not be possible in all cases): Purpose/issue of the paper → theoretic arguments → empirical/descriptive aspects → discussion of the topic under the aspects of economic policy.

Phase 4: Consultation of the Structure with the Supervisor (!):

To go through the structure, we recommend consulting the supervisor personally. The sole consultation by e-mail makes precise explanations and discussions difficult.

Phase 5: Processing of the Individual Points and Detailed Literature Research

Phase 6: Correction of Formal and Spelling Mistakes, Checking the Indices for Completeness (!)

## **4. Effective Literature Research**

The literature research implies the independent search for and the revision of scientific articles. The aim is to identify relevant economic arguments in contemporary and/or fundamental scientific primary sources.

The technical language of economics is English, thus it is indispensable to read articles from English scientific journals when writing about an international topic.

### **4.1. Databases**

*Sources for literature*

#### 1. Libraries:

- Online-Catalogue of ThULB: Search for books in the university library
- “Gemeinsamer Verbundkatalog” (interlibrary catalogue), [GBV](#)
- [WorldCat](#) → worldwide research in library catalogues

- E-Journals of ThULB → Search for specific journals (the contents of the electronic journals are usually only available by using the university network or instead by using the [VPN-Client](#)) ([link](#))
  - Econis-Select → Search for economic publications in Germany
  - Econbiz → Research for economically relevant publications ([link](#))
2. Literature Databases:  
(Access by using the ThULB or E-Journal [Portal](#))
- Science Direct ([link](#)) and JSTOR ([link](#))  
(Google Scholar is a meta-search machine and browses these databases)
  - EBSCO ([link](#))
  - etc.
3. Free Literature and Statistical Databases:
- [EconPapers](#): worldwide database on economic working papers (WP) and journal articles. The WPs are classified according to the [JEL-Code](#). The JEL-Code is a classification system of the *Journal of Economic Literature*, which can be very helpful when researching on a specific topic)
  - Google's Scientific Search Machine: Google Scholar
  - (Statistical) Databases of National/International Institutions:
    - International Monetary Fund ([IMF](#)); The [Worldbank](#), Bank of International Settlements ([BIS](#)), UNCTAD ([comtrade](#)), OECD ([OECD.stat](#); [OECD-iLibrary](#)), regional development banks, central banks, European Union ([EuroStat](#)), etc.
    - Statistical departments of the respective countries

## 4.2. Search Method

Just as important as the research in the relevant databases („where“) is the use of the correct search syntax and method („how“).

### *Research and Keywords*

Initially it is recommended to limit the research to titles/abstracts. If an article deals extensively with a specific topic, the keyword will be mentioned here. In case the results are not satisfying, you may run a full-text search. The research should be limited to scientific journals participating in the peer-review process (these articles are approved by independent experts) or working papers (e.g. from the World Bank, IMF, NBER, CESifo, etc.). In addition, it is rather advisable to focus one's research on economic journals. If technical

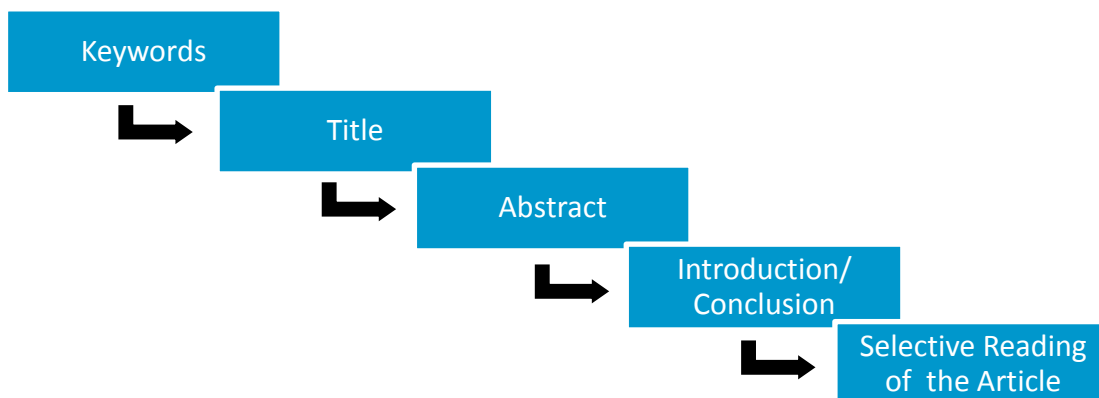
terms/author names are known, the use of these as keywords will lead to the relevant publications faster.

### *Syntax of the most Databases*

Search terms that are separated by blanks are treated as a logical *and*-connection, i.e. the search for [GDP growth in Germany] browses the database for articles, in which the words „growth“ or „Germany“ are mentioned *anywhere*. This may easily result in finding articles concerning the “cell GROWTH” of specific bacteria cultures. Hence, it would be better to enter [„GDP growth in Germany“], as the database then is searching for exactly this combination of words and provides better results in the case of compound technical terms.

### *Identifying the Relevant Literature*

It is recommended to check the researched literature regarding relevance to the following scheme.



### **4.3. FAQ – Literature Research**

- a. When writing a term paper, is it sufficient to work with the basic literature?

*No, it is not. The idea is to help students to get started and to give them an overview on a new topic.*

- b. How many references have to be applied?

*Neither do we count references, nor is there a general norm, which applies to all topics. However, a thumb rule could be “for each text page one scientific article”.*

*The point is that the different opinions regarding the topic have to be represented in an appropriate way, covering the related scientific discourse, but also respecting relevance towards the topic.*

- c. Do I have to use English literature?

*The main language for Economy is English. If one is working on a topic regarding international matters, it will not be possible to do this sufficiently without taking English literature into consideration. Even if one is working on a purely German topic, many of the scientific articles will be written in English.*

- d. May I cite Wikipedia?

*No, certainly not. Wikipedia is not a scientifically acceptable source. Also Blogs, other kind of Wikis and Online-Encyclopedias may not be used for scientific quotations.*

- e. What about term papers, theses and lecture scripts?

*They may not be used.*

- f. May I use a teaching book?

*Principally yes. Teaching books are usually based on a large selection of primary literature and try to cover a topic in a simplified manner. Thus, it is not sufficient to **only** refer to teaching books.*

## **5. Writing a Term Paper**

*Which are the Properties of a **Good** Term Paper?*

One important trait of a good term paper is the usage of sources that exceed the recommended basic literature. *Using* them means that they are commonly quoted throughout the paper. The quoted material must be clearly distinguished from one's own ideas. Articles from press media and encyclopedias should be used scarcely. Good literature research enables a well-balanced argumentation, allowing one to show alternative points of view and critical opinions for the different theories. One's theoretical arguments should be compared with several empirical works and checked for plausible flaws (still, the extent at which this is possible depends very much upon the topic. If an issue requires closer clarification, please contact your supervisor). The segmentation of the paper should have a logical structure, and the titles and subtitles should be meaningful and clear. The separate lines of argumentation should not be too short, but rather elaborate, free of repugnance and common repetition. One must always keep in mind that every aspect should be relevant for the topic. At the end of the thesis (often referred to as a summary) the different arguments should be discussed and weighed against each other, resulting in a conclusion. Herein one is required to lay stress on the economic aspects of the problem, while other aspects may only have a subordinate influence on the conclusion (for example aspects related to Business, Politics, Sociology or Ethics).



Usually it is very difficult to discuss all aspects of a topic. Therefore we recommend to contact one's supervisor in order to narrow down the subject and focus on certain aspects that appear especially relevant.

### *The Structure / Table of Contents*

The structure of a paper draws an outline of its contents. Thus, it can be used as a guideline for the composition of the paper. If one tries to summarize the content of every chapter down to one sentence, the structure as a whole has to make a plausible impression. The outline of the structure should clearly deal with the description of the central issues, the main argumentative points and the conclusion. With this method one can also check the necessity of every single chapter.

A term paper usually consists of 5 to 6 chapters. The first chapter should contain an introduction, while the last chapter forms the summary/conclusion. The amount of pages used for every single chapter should be proportional to its importance in dealing with the paper's topic. It is recommended to form subchapters within the central chapters (for example 2.1., 2.2., 2.3., etc.). It is strongly recommended to send a copy of the structure/table of contents to one's supervisor as early as possible. This way, the right focus can be set right at the beginning and possible problems can be dealt with while it is still easy to make changes.

### *Suggestions for Writing Papers and Theses*

Source citation should be carried out parallel while writing the paper. It creates a great effort to include and/or search for the references afterwards. In addition it is recommended to complement new literature to the list of references as soon as a new citation is added. In order to facilitate the management of references, it is helpful to make use of a citation program. The familiarization with such a program might be a good practice before writing one's final thesis (e. g. Citavi, [free of charge for FSU students](#)).

While writing the paper, it is necessary to research additional information if there are unclear or incomplete arguments. Frequently one uses (too) much time in specific sections. To avoid "wasting" time one should once again determine the objective and the contents of the paper, whereafter it will be possible to work on. If necessary, it is always possible to rework this section later on. This applies particularly to the introduction, which should be adapted at the very end.

## **6. Formal Requirements**

Make use of the automatic functions of the text processing programs:

- Full justification
- Generation of list of contents/figures/tables
- Insertion of page numbers
- Automatic spell checking
- Footnotes and illustration/table numbers

### **6.1. Structure of Term Papers/Theses**

A term paper, bachelor's, master's, or diploma thesis should not exceed 15, 30, 60 pages (+/- 10%), in which illustrations, appendices and indices are not figured. The paper consists of the following sections; points in brackets are optional:

- 1) Front page (min. information: department, topic, supervisor, name, matriculation no.)
- 2) Table of Contents
- 3) *(List of Figures)*
- 4) *(List of Tables)*
- 5) *(List of Abbreviations)*
- 6) *(List of Symbols)*
- 7) Text
- 8) *(Annex)*
- 9) List of References
- 10) Position Paper (only for term papers, s. section 7.1)
- 11) Declaration of Academic Honesty (only for Bachelor's/Master's/Diploma theses, s. section 6.4)

### **6.2. Layout**

*The General Text*

- Font size 12, footnotes' font size 10
- Full justification + syllabication
- 1.5 line spacing
- Font type Times New Roman (Arial requires more space)

### *Number of Pages*

- Sequential numbering of the whole paper; the front page must not contain a page number.
- Table of Contents and – if existing – List of Figures, List of Tables, List of Abbreviations and List of Symbols are numbered continuously with Roman numerals.
- The general text, the Annex and the List of References are numbered with Arabic numerals.

### *Margins*

- Left margin 4 cm, right margin 2 cm, top and bottom margin 2,5 cm each

## **6.3. Citation style**

### *Referencing in Text*

Direct quotations should be used sparingly. They need to be enclosed by quotation marks (“...”). In case there is another direct quote in the cited text, one should use single quotation marks (‘...’). However, rather than quoting directly, one should rephrase borrowed ideas, citing indirectly instead.

We recommend parenthetical referencing (Harvard citation style), which means partial citations are enclosed in round brackets and embedded in the text (as opposed to footnote style). If there are more than two authors to a source, one should only name the lead author and omit the remaining, appending “et al.” (“and others”) instead. All authors have to be listed in the bibliographic entry (in the list of sources) nonetheless. Multiple publications by the same author in the same year should be disambiguated by minuscule (e.g., “Smith 2000a”, “Smith 2000b”).

In case the cited passage spans consecutive pages, write e.g. “pp. 17f.”, or “pp. 17-25” in case of more than two pages, respectively. If a citation refers to the entire source, one can spare the page reference. However, the page reference is obligatory for direct quotations.

### Examples:

- These problems have been explicitly pointed out (Issing et al. 1991, p. 23).
- Inflation causes welfare reduction (Friedman 1968a, p. 52; Friedman 1968b, pp. 48-51).
- McCandless and Weber (1995) show that at the end of the day inflation is a monetary problem.

If an indirect quote comprises multiple, non-consecutive pages of a single source, one has to indicate the exact order of pages, which the particular passage was based on, in the corresponding place. This is done in order to avoid unnecessary wasting of time for the reviewer. *One single* reference at the beginning or end of a longer, indirectly quoted passage is not sufficient, though.

### *Footnotes*

Footnotes may be used if citing more than two sources or for making additional remarks. A footnote is normally flagged by a superscripted number (without period or brackets) immediately following that portion of the text the note is referring to. Footnotes are placed at the bottom of each page, optically separated from the text by a horizontal bar. Initial letters of footnotes may be capitalized, while the note itself should end with a full stop.<sup>1</sup>

### *Primary and Secondary Sources*

If a primary source is not retrievable, one may *exceptionally* cite it via a secondary source. Both the primary and secondary source then have to be listed in the bibliography.

#### Example:

- Since there is no definitive truth, economic policy would do well not to presume too far or even arrogate knowledge (v. Hayek 1975, as quoted by Donges and Freytag 2004, p.45).

### *Bibliography*

Every used source has to be listed at the end of the paper, sorted alphabetically by the author's name, in the bibliography. If the author is unclear, unknown or not given, one should list it by the publishing institution.

#### Examples (see also chapter 9, "Literature"):

- Friedman, Milton (1968), The Role of Monetary Policy, in: *American Economic Review*, 58(1), p. 1-17.  
(One must list volume and issue for journal articles.)
- Friedman, Milton and Anna Schwartz (1963), *A Monetary History of the United States, 1867-1960*. Princeton: Princeton University Press.  
(One must list location, publisher, and edition – in case there are more than one – for monographies)

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<sup>1</sup> Further causes for inflation are indicated by Issing et al. (1991, p. 23), Friedmann (1968a, p. 52), as well as McCandless and Weber (1995, p. 10). Avoiding digression, they will not be outlined here, though.

- Fagan, Gabriel and Jérôme Henry (1999), Long Run Money Demand in the EU: Evidence for Area-Wide Aggregates, in: Lütkepohl, Helmut and Jürgen Wolters (eds.): *Money Demand in Europe*. Heidelberg: Physica-Verlag, p. 217-240.
- Freytag, Andreas and Gernot Pehnelt (2009), Debt Relief and Governance Quality in Developing Countries, *World Development*, 37(1), p. 62-80.
- von Hammerstein, Konstantin (2003), Der Wachstumsprediger, *Der Spiegel*, 6, p. 74-76.
- The Economist (2011), The UN and Libya. An unlikely unifier, 389(8723), p. 61.

**URLs** should not be included in the bibliography if the source was also published in print (e.g., journal articles, or certain working paper series). Websites may be listed as follows:

- Bundesministerium für Bildung und Forschung (2000), Bundesministerin Bulmahn legt Konzept für Dienstrechtsreform an den Hochschulen vor, Press release 21.09.2000, <http://www.bmbf.de/presse01/223.html> [retrieved on 01.12.2000].

#### **6.4. Miscellaneous**

##### *Tables and Figures*

Tables and figures must be numerated and captioned (caption either positioned above or below the figure); if necessary, cite the table's or figure's source Harvard style. The tables' and figures' caption needs to be catalogued in the list of tables or list of figures, respectively, with their respective page number. Tables and figures – including the variables and symbols used – have to be amplified within the text and included in one's line of reasoning. If possible, one should (re-)create tables and figures instead of just scanning them.

If one includes an appendix, there has to be a clear coherence with the main text. The sources of all the borrowed material need to be indicated. In any case, the respective material needs to be referred to from within the text (e.g., “see table 12 in appendix”).

##### *Abbreviations*

All used symbols and abbreviations have to be outlined in a list of abbreviations, which must precede the actual text.

Commonly used abbreviations like „etc., i.e., e.g.“ do not need to be included in the list of abbreviations. All acronyms have to be spelled in full on their first occurrence in the text: “World Trade Organization (WTO)”.

### *Statutory Declaration*

Bachelor, Master and Diploma theses must quote the following affidavit verbatim on the last page:

*„I declare that I have developed and written the enclosed Master Thesis completely by myself, and have not used sources or means without declaration in the text. Any thoughts from others or literal quotations are clearly marked. The Master Thesis was not used in the same or in a similar version to achieve an academic grading or is being published elsewhere.*

*Place, Date*

*Signature“*

## **7. Submission of the Paper**

The size of one's term paper, bachelor's, master's, or diploma thesis should not exceed 15, 30, or 60 pages (+/- 10%), respectively. The compliance with the aforementioned manual of style (i.e., graphic and table captions, etc.) should be reviewed before submitting the paper. This should also be done regarding the bibliography's integrity, in the sense of not having sources listed that are not referred to within the paper/thesis itself. Finally make sure to check your paper for any types of grammatical, orthographic, and typographic errors, or (ideally) find a third person to do this task for you. In case the paper is written in German the "new spelling rules" apply (as per the German orthography reform of 1996).

### **7.1. Term Papers**

Please submit **two printed** but **unstapled** copies of your paper to the chair (of economic policy) and send an electronic version (file format PDF obligated) to the secretary's office.

Seminar papers must also include a position paper, which – besides the author's name and his/her paper's topic – should comprise of at least five propositions. To spark a lively seminar debate, those propositions can be controversial, conceivably in the form of antitheses. The proposition paper should not exceed a single page, if necessary with single line spacing.

### **7.2. Bachelor's, Master's and Diploma Theses**

Please submit **three bound** copies to the examination office.

## 8. The seminar

### *Debate*

We expect all participants to thoroughly peruse the collection of seminar papers, and to get actively involved in the debate. One's contribution to the discussions will account for 25% of the final seminar grade. Further, in order to refine the students' culture of discussion, we encourage input that may be deemed inconvenient or controversial, in fact without any negative impact on one's final grade.

### *Presenting your own Paper*

The presentation should encompass the key points of one's seminar paper and is meant to stimulate the ensuing debate. However, you **must not exceed** the time allowance, which usually spans 20 minutes for a single speaker, or 10 minutes for either speaker in case of twofold topic assignment. In case of the latter, you may (please) collaborate with your co-speaker to avoid redundancy of any kind (in particular theoretical approaches, historical developments, etc.).

### *Discussing an Additional Paper*

Another element of the seminar is the critical examination of an additional topic by accompanying a paper of a fellow seminar participant. This oral presentation should **briefly** summarize the key points of that paper. In particular, the discussant should feel compelled to address and outline substantial inconsistencies. He/she should emphasize a single aspect, if necessary amending errors and adding points that were omitted in the original paper.

## 9. Literature on „Writing Scientific Papers”

- McCloskey, Deirdre (2000), *Economical Writing*. Prospect Heights (IL): Waveland Press.

McCloskey's book covers only 112 pages and is geared towards students of economics in particular. McCloskey offers less concrete advice than does Bailey (2011), but presents some general framework of how to write a scientific paper. His tutorial is written in a generally understandable and often humorous way.

- Bailey, Stephen (2011) *Academic writing for international students*. 3<sup>rd</sup> Edition. Taylor and Francis, London.

This book is intended for non-native speakers and offers helpful advice for every stage of scientific writing. Most notably its thesaurus of scientific terminology, and other

conjunctions and verbs can be very useful. The book also includes numerous practical exercises and illustrates concrete ways of application.

- The Economist Styleguide ([www.economist.com](http://www.economist.com))