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# Formal Guidelines for the Elaboration of Term Papers, Bachelor and Master Theses <sup>1</sup>

Version: WS 2018/2019

<sup>&</sup>lt;sup>1</sup> These guidelines are based on the guidelines for the formal presentation of bachelor and master theses within the minor SMI and have been adapted to the requirements of the Department of Management, Business Administration and Economics, Chair of InnovationManagement.

# Prof. Dr. Alexander Fliaster



# Structure

Structure
1 Principles of Academic Writing
1.1 Research Gap3
1.2 Structural Requirements for Academic Writing
1.3 Working Title5
1.4 Citation Guidelines5
2 Procedure of Scientific Writing
3 Literature Review
4 Format Requirements8
4.1 Language8
4.2 Extent8
4.3 Cover8
4.4 Paper8
4.5 Headings, Font style, Structure
4.6 Interspaces9
4.7 Page Numbers9
4.8 Submitting the paper/thesis
4.9 CD labeling
5 Content Requirements
5.1 Title Page
5.2 Abstract
5.3 Table of Contents
5.4 List of Abbreviations
5.5 List of Symbols
5.6 List of Figures
5.7 List of Tables
5.8 Text
6 Particularities of team papers
7 References

#### Prof. Dr. Alexander Fliaster



# 1 Principles of Academic Writing

## 1.1 Research Gap

Academic writing refers to combining and coordinating elements based on existing science. The aim of scientific work is to gain particular knowledge. If gaps can be identified by the combination of previous scientific work, knowledge is gained by filling these gaps. Accordingly, gaps are topics and sets of facts which have not or insufficiently been investigated until the recent date. They describe the underlying white space in investigation. Hence, these gaps have to be identified, attended, and closed as thoroughly as possible – either partially or completely.

A profound literature review is decisive, since it represents the state of the art. The thorough literature review helps to identify existing research gaps regarding all relevant literature to the topic in question. At the chair for business administration, especially innovation management, relevant literature includes texts in German as well as English language.

The research gap is elaborated according to a thematically consistent common thread, introducing the conflict priorities and offering an adequate discussion, including analysis and conclusions on the topic as well as an outlook and implications for further research.

### 1.2 Structural Requirements for Academic Writing

The structure in academic writing is rather rigid and its variations relate to the particular piece of literature. In general, an academic piece consists of the following structural elements:

- Abstract
- Research question
- Hypotheses / Model as appropriate
- Elaboration of own study as appropriate / Methods
- Interpretation of results
- Critical assessment / implications for future research
- Bibliography

#### Prof. Dr. Alexander Fliaster



Bachelor, master and diploma theses can be summed up in three types which are described in the following chapters 1.2.1 to 1.2.3.

#### 1.2.1 Literature Review

The literature review refers to the reprocessing and evaluation of existing literature regarding the given topic. By giving a holistic overview of the context it offers the possibility to draw new conclusions.

The literature review is characterized by the following steps:

- Intensive literature research in given databases
- Thorough analysis of particular existing literature on the topic
- Comparison and assessment of the existing literature on the topic
- Interpretation of the existing literature with reference to new and current facts

## 1.2.2 Thesis in Collaboration with an Industry Partner

The thesis in collaboration with a partner from industry systematically investigates a specific artifact and its changeability. It is usually defined by its practical application to a company or an organization in which this artifact occurs. The artifact as well as its ability to change is investigated by means of various methods of analysis and combination of those. This process results in the elaboration of new findings which help to optimize the artifact. The thesis in collaboration with a company is characterized by the following steps:

- Analysis of relevant literature
- Analysis of circumstances that are specifically relevant for the respective company
- Evaluation of the results in a case study, interviews, etc.

## 1.2.3 Empirical Study

An empirical study is quantitative work along an investigation design usually drawing a scheme of hypothetical correlation. Hypotheses and research questions are tested by

## Prof. Dr. Alexander Fliaster



means of statistical methods. The empirical study is characterized by the following steps:

- Analysis of relevant literature
- Development of hypotheses and questions of investigation
- Test of hypotheses with respect to the development of the research methodology, implementation and evaluation

### 1.3 Working Title

Every piece of scientific writing has a working title. The working title depicts the overall target and is not supposed to change significantly with respect to the final title. **Each** change of the working title requires the previous confirmation of your advisor and can only be made after a consulting appointment!

#### 1.4 Citation Guidelines

Before the question of *how* to cite is the question *what* to cite. This means to distinguish between citable literature and sources which are not eligible for citation. In general, citable literature comprises the following:

- Scientific books
- Doctoral theses / postdoctoral theses
- Articles in Journals
- Electronic Journals

Not eligible for citation:

- Text books
- Notes / scripts
- Term papers / theses
- General internet sources
- Technical encyclopedias
- Technical dictionary
- Popular magazines

#### Prof. Dr. Alexander Fliaster



#### Basic rules:

- Any opinion of an author has to be highlighted by means of citation!
- Any citation has to be verifiable; correct citation is an expression of scientific accuracy!
- Citations from other languages must be translated with a note by whom the translation was done

Since winter term 2016/17 it is permitted to use the Harvard and APA styles for citation (see also American Psychological Association, 2010; Pears/Shields, 2013). A summary of the APA Style is listed here: http://www.scm.nomos.de/fileadmin/scm/doc/APA-6.pdf

Regardless of which citation method is used, make page references!

In particular, it is important to guarantee a constant use of the chosen style in all references.

**Direct citations** start and end with quotation marks and require literal accuracy. Deviations from the original should be highlighted with additions in parentheses and a reference, e.g. [Author's note]. The omission of several words is indicated by three points [...]. The exact page numbering of the primary source must be indicated and in general the direct citation should only be used when necessary.

Example: "[In]formal know-how trading can usefully be seen as an inexpensive, flexible form of cross-licensing" (von Hippel 1988, p. 89).

**Indirect citations** represent the expression of other authors' thoughts in own words. The primary source should be indicated by stating the exact page number and "cf.".

Example: According to Humm, the use of expert interviews is the most frequently applied method for the collection of job advertisements (cf. Humm 1978, p. 26).

Direct as well as indirect citations from secondary sources should be avoided. If however used, the primary source will be mentioned with the note "... quoted from: ...".

## Prof. Dr. Alexander Fliaster



# 2 Procedure of Scientific Writing

Scientific writing requires some project management appropriate to the respective dimension of the work. Hence, the individual steps listed below have to be kept in mind:

- Topic identification e.g. via own proposals or adaptation of existing topics offered by the Chair for Innovation Management
- 2. Literature review e.g. via the University library (OPAC), databases, scientific journals, etc.
- Literature evaluation and administration e.g. via CITAVI or Zotero. From fall term 2016/17, the Chair for Business Administration, especially Innovation Management approves the citation styles APA and Harvard
- 4. Application of the literature to own research question
- 5. Structure
- 6. Draft of extended structure considering the literature
- 7. Revision was it possible to identify a solution to the stated research question? This part requires the illustration of implications for future research and limitations of one's own research.
- 8. Format / Proofreading / Print the schedule should include enough time for these final steps.

## 3 Literature Review

As already mentioned in chapter 2 the literature review can be carried out using the following sources:

- Encyclopedias
- OPAC (Bamberg University Library)
- DBIS (Database Information System)
- Virtual libraries e.g. ECONIS (Economic Information System), etc.

## Prof. Dr. Alexander Fliaster



# **4 Format Requirements**

## 4.1 Language

The paper/thesis must be elaborated either in German or English language. British as well as American English are accepted by the Chair for Innovation Management; however, a consistent use of only one notation is mandatory.

#### 4.2 Extent

The prescribed extent of papers/theses should be respected. Tables and figures within the written text are considered part of the page count. Deviations from the prescribed extent and page count are sanctioned during the determination of the final grade.

Term paper: see respective course syllabus

Bachelor thesis: 30 pages (+ max. 10%)

Master thesis: 60 pages (+ max. 10%)

Diploma thesis: 60 pages (+ max. 10%)

#### 4.3 Cover

Term papers have to be delivered using folders. Theses must be delivered with a hard (book) cover.

### 4.4 Paper

White paper,  $80g/m^2 - 100g/m^2$ , DIN A4, print one-sided.

#### 4.5 Headings, Font style, Structure

You may select between the serif font Times New Roman (12 pt) and the sans serif font Arial (11 pt). Font color is black. First level headings are formatted in 14pt. All remaining subchapters are formatted in 12pt.

## Prof. Dr. Alexander Fliaster



An example for structure is shown below:

- 1 Heading chapter (bold, 14pt)
- 1.1 Heading subchapter (bold, 12 pt)
- 1.1.1 Paragraph subchapter (bold, 12 pt)
- 1.1.1.1 Further level (bold, italic, 12 pt)
- 1.1.1.1.1 Further level (italic, 12 pt)

# **4.6 Interspaces**

Top and bottom 2.5 cm

Left 3.5 cm

Right 1.5 cm

Line spacing 1.5 lines

## **4.7 Page Numbers**

Page numbers are to be positioned at the right bottom of the document. Arabic as well as Roman numberings are used. Title page and abstract do not carry page numbers. The table of contents starts with Roman numberings for every index and ends with the text. The text starts with Arabic numberings. All indices after the text are consecutively indicated with Roman numberings.

## 4.8 Submitting the paper/thesis

Before submitting the paper/thesis the following requirements have to be accomplished:

- Is the paper/thesis complete? Are there mandatory parts missing?
- Are the table of contents and the page numbers correct and updated?
- Is the citation correct?
- Has the affirmation at the end of the paper/thesis been signed?

## Prof. Dr. Alexander Fliaster



In case of a thesis the following requirements are to be met when delivering it to the examination office (Prüfungsamt):

- Two copies with hard cover
- CD-ROM comprising all data files (docx, xlsx, SPSS files, audio files mandatory in case of conducted interviews, etc.)

## 4.9 CD labeling

The CD labeling contains the information about the first and surname, student number and the title of the thesis/paper.

# **5 Content Requirements**

The following structure is proposed:

- 1. Title page
- 2. Abstract
- 3. Structure
- 4. List of abbreviations
- 5. List of symbols
- 6. List of figures
- 7. List of tables
- 8. Text
- 9. Bibliography
- 10. Annex (tables, figures, list of interviewees, transcripts etc.). More than one annex makes an index necessary!
- 11. Affirmation

The items 3-10 must be indicated in the structure!

#### Prof. Dr. Alexander Fliaster



### 5.1 Title Page

The title page must be designed according to the requirements of the examination office. You will receive a model when registering. However, the title page must comprise the following information: Family and given names, registration/matriculation number, address, major and minor (including semesters of enrollment (Fach- und Hochschulsemester)), faculty, chair, names of the professor and the assistant, delivery date.

#### **5.2** Abstract

The abstract is a brief summary of the presented paper/thesis and follows the subsequent requirements:

- Objective
- Short and concise (max. 1 DIN A4 page)
- Precise and complete

#### **5.3 Table of Contents**

The table of contents reflects the logic of the paper/thesis (thread) and provides initial information about the content of the paper/thesis. Therefore, headlines are supposed to provide an insight into the content of each chapter.

A consistent and coherent reasoning is reflected in a logical structure. Subchapters usually derive from a common higher-ranked point of view, which means that items 2.1.1. to 2.1.4 contribute to the superordinate complex 2.1.

When creating subchapters, each of them needs to comprise at least two subchapters (1.1 must be followed by 1.2). Subchapters should avoid a literal repetition of the higher-ranking chapter headlines. Please avoid too detailed subdivisions (min. ½ page written text per subchapter).

#### **5.4 List of Abbreviations**

The list of abbreviations displays all abbreviations used in the text. Commonly used

Prof. Dr. Alexander Fliaster



abbreviations such as "etc." or "cf." are permitted and do not need to be listed. If the abbreviation is listed in a dictionary and/or encyclopedia it is not necessary to list it.

#### **5.5 List of Symbols**

The list of symbols gives an overview of all symbols used in the text.

### 5.6 List of Figures

The list of figures lists all figures used in the text indicating their position by means of the page number. The title and source of the figure is to be indicated **below** the figure. All kind of figures are to be integrated into the list of figures. This includes own figures, too.

Generally, the author should refer also in the text to the used figures with its numbers and if needed page number.

Figures are listed either at the top or at the bottom of a page, not within the written text.

Example: FIGURE

Figure 1: Example of scientific writing

Source: Arlt (2006), p. 12

resp. FIGURE

Figure 1: Example of scientific writing

Source: Author's own based on Arlt (2006), p. 12

## **5.7** List of Tables

The list of tables lists all tables used in the text indicating their position by means of the page number. The title and source of the table is to be indicated **above** the table. All kind of tables are to be integrated into the list of tables. This includes own tables, too. References in the text should be also made to tables noting its numbers and if needed page numbers. Tables are listed either at the top or at the bottom of a page, not within the written text.

#### Prof. Dr. Alexander Fliaster



Example: **Table 1: Stages of development of the internet** 

Source: Arlt (2006), p. 35

**TABLE** 

resp. Table 1: Stages of development of the internet

Source: Author's own based on Arlt (2006), p. 35

**TABLE** 

#### **5.8 Text**

The text is characterized by the following elements:

#### 5.8.1 Introduction

An introduction comprises necessarily an overview of the context and the relevance of the topic. This includes the explanation of and reasons for research constraint as well as the verbalization of the central research question. Furthermore, the structure of the paper/thesis should be described and explained.

#### 5.8.2 Main Section

The main section of the paper/thesis should be coherently following the logical thread of thoughts. Every heading should refer to the text following and vice versa.

#### 5.8.3 Conclusion

The paper/thesis ends with a conclusion reflecting the contents, stating results and discussing implications and limitations.

# **5.8.4** Bibliography

The bibliography comprises all sources of literature and/or others cited within the text. Sources not cited in the paper/thesis are not part of the bibliography. All sources need to be listed alphabetically corresponding to the author's last name.

#### Prof. Dr. Alexander Fliaster



All references cited in the paper/thesis should follow either APA or Harvard citation style.

#### **5.8.5** Annex

The annex comprises all further documents mentioned and/or discussed in the paper/thesis such as interview guidelines, transliterated interviews, further definitions, lists and so on. This means that all conducted interviews have to be transliterated, attached to the annex and also added to the enclosed CD-ROM. If there is more than one attachment an index of annexes has to be elaborated and included into the table of contents.

#### **5.8.6 Affirmation**

The affirmation at the end of the paper/thesis represents the declaration that this work has been written by the signing person without any assistance from third parties. It also affirms that no sources have been used in the preparation of the paper/thesis other than these indicated in the paper/thesis itself.

The exact wording of the affirmation is published by the examination office (Prüfungsamt) and must be signed handwritten.

# 6 Particularities of team papers

Papers created in teams entail an overview of the authors at the end. This overview should clearly state the responsible parts of each team member. An example is shown below.

Example:	1	Research question (Mr. Brown)1
	2	Principles of innovation management (Mrs. Schneider)2

#### Prof. Dr. Alexander Fliaster



## 7 References

- American Psychological Association (2010). Publication manual of the American Psychological Association, 6th Edition. Washington, DC: American Psychological Association.
- Atteslander, P. (2010). Methoden der empirischen Sozialforschung, 13. Auflage. Berlin: Erich Schmidt Verlag.
- Berger, D. (2010). Wissenschaftliches Arbeiten in den Wirtschafts- und Sozialwissenschaften. Hilfreiche Tipps und praktische Beispiele. Wiesbaden: Gabler.
- Bogner, A./Littig, B./Menz, W. (2009). Experteninterviews. Theorie, Methode, Anwendungsfelder, 3. Auflage. Wiesbaden: VS Verlag.
- Burr, W. (2014). Innovation, 1. Auflage. Stuttgart: Kohlhammer.
- Cameron, S./Price, D. (2009). Business Research Methods. London: IPD.
- Ebster, C./Stalzer, L. (2013). Wissenschaftliches Arbeiten für Wirtschaftsund Sozialwissenschaften, 4. Auflage. Wien: UTB GmbH.
- Franck, N. (2011). Die Technik wissenschaftlichen Arbeitens: Eine praktische Anleitung, 16. Auflage. Stuttgart: UTB GmbH.
- Gläser, J./Laudel, G. (2010). Experteninterviews und qualitative Inhaltsanalyse, 4. Auflage. Wiesbaden: VS Verlag.
- Kornmeier, M. (2007). Wissenschaftstheorie und wissenschaftliches Arbeiten. Eine Einführung für Wirtschaftswissenschaftler. Heidelberg: Physica.
- Pears, R./Shields, G. J. (2013). Cite them right. The essential referencing guide, 9th Edition. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
- Stickel-Wolf, C./Wolf, J. (2011). Wissenschaftliches Arbeiten und Lerntechniken. Erfolgreich studieren – gewusst wie!, 6. Auflage. Wiesbaden: Gabler.
- Theisen, M. R. (2006). ABC des wissenschaftlichen Arbeitens. Erfolgreich in Schule, Studium und Beruf, 3. Auflage. München: Vahlen.
- Theisen, M. R. (2013). Wissenschaftliches Arbeiten, Technik Methodik Form, 16. Auflage. München: Vahlen.
- Yin, R. K. (2013). Case study research: Design and methods. Sage publications.