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Guideline for the Preparation of Scientific Papers and Theses

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Chair of Organization
and Innovation

Prof. Dr. Karin Hoisl, MBR

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1 General remarks

This guideline applies for all seminar papers, bachelor and master theses to be prepared at the Chair for Organization and Innovation. The guidelines are binding. Deviations are **only** possible in justified cases and **after previous consultation** with the supervisor.

2 Formal requirements

2.1 Length, number of copies, submission

The following details regarding the **length** (number of pages) of the theses refer to the **text part including figures, tables and diagrams**.

	Seminar paper	Bachelor thesis	Master thesis / Diploma thesis
Length	15 pages (+/- 1)	20 pages (+/- 2)	50 pages (+/- 5)
Preparation time	6 weeks	2 months	4 months
Number and format of copies	1 electronic version to the supervisor via email (Format: *.doc or *.tex, and *.pdf)	2 paper versions stapled + 1 electronic copy to the supervisor via email (Format: *.doc or *.tex, and *.pdf)	2 paper versions Binding: Adhesive binding + 1 electronic copy to the supervisor via email (Format: *.doc or *.tex, and *.pdf)

2.2 Elements

A scientific paper consists of the following elements, the order of which is obligatory:

- Title page no numbering
 - Table of Contents
 - List of appendices (if applicable)
 - List of figures (if applicable)
 - List of tables (if applicable)
 - List of abbreviations (if applicable)
 - List of symbols (if applicable)
- } consecutive Roman page numbering
- Text
 - Appendix (if applicable)
 - Bibliography
 - List of interviews (if applicable)
- } consecutive Arabic page numbering
- Declaration of authenticity only for diploma, bachelor and master theses (sample attached) no numbering

2.3 Formatting

Seminar papers, diploma, bachelor and master theses must be prepared on white paper (**DIN A 4**). The sheets are printed on **one side** only. The following format specifications are given:

- **Page margins:** left: 4 cm; right: 2 cm; top: 2 cm; bottom: 1 cm
- **Font:** Times New Roman
- **Font size:** 12 pt
- **Line spacing:** 1.5-line
- **Adjustment:** full justification (hyphenation is recommended)
- **Page numbering:** top center of the sheet between two indents.
- **Formatting of footnotes:** Footnotes are positioned – separated from the text part by a left-justified, horizontal dash – below the text. Font: Times New Roman; font size: 10 pt; line spacing: 1 line within footnote; 1.5 lines between footnotes.

3 Explanations regarding the elements of a scientific paper or thesis

3.1 Title page

A sample of the title page of seminar papers, diploma, bachelor and master theses can be found as an appendix.

3.2 Text part

3.2.1 Language and style

The scientific paper shall **be independently** prepared with regard to language, and shall not contain a mere stringing of citations from external sources. Formulations must **be correct with regard to** language. Please note the following:

- use clear and explicit formulations
- form precise, clear and complete sentences
- clearly define important terminology
- do not exaggerate the use of foreign words outside the subject area

3.2.2 Structure

The text part starts on a new page after the corresponding lists. It is logically structured into the following **three parts**: Introduction, main section and conclusion.

The **introduction** explains the problem, defines the research gap, and describes the structure of the thesis. In the **problem definition** the topic is motivated, the objectives of the thesis are depicted and, if necessary, a limitation of the thesis to one or several partial aspects is described and substantiated. The line of argumentation is portrayed briefly in the representation of the **structure of the thesis**.

In the **main section** the topic is dealt with in accordance with the structure.

In the **final section (summary, outlook etc.)** the most important contents of the thesis – coordinated to the objectives set forth in the introduction – are (briefly) summarized and/or an outlook is given.

3.2.3 Figures and tables

Figures and **tables** should complement the text in a brief and clearly organized manner. They serve for illustration purposes or for the summary of relevant – possibly complex – relationships. Attention must be paid here to a balanced relationship between text and graphic representations. Figures and tables are **consecutively numbered** and provided with a **title** that reflects their content. The exact indication of the **source** is obligatory. In the case of self-created figures or tables, the following must be added: "Own representation", and in the case of substantially modified representations: "Own representation based on...".

3.2.4 Formulas

Some topics require the use of (**mathematical**) **formulas**. However, these should not appear incoherently in the thesis, but should be sensibly **integrated into the text** and **explained**.

All formulas are **consecutively numbered**. The formula itself is centered. Its number stands between two brackets with right justification in the formula line (see the following example).

$$E = mc^2 \quad (1)$$

When using a **symbol** for the first time, it should be explained in the text; all symbols are to be added to the list of symbols.

3.2.5 Footnotes

Footnotes contain **complementary, relevant** remarks of the author, which may impair the reading flow of the text. They serve the purpose of making reference to further literature, supplying complementary information that is not necessary for understanding the thesis as well as referring to other sections, pages etc. Furthermore, examples or (additional) definitions can be stated.

In the text part, footnotes are marked by **numbers in superscript**. If the footnote refers to a whole sentence, then the number in superscript follows the concluding punctuation mark, which is normally a full stop. The text in the footnotes is worded as a full sentence. The first letter of a footnote is written in capital, and each footnote is concluded with a full stop.

3.3 Lists

3.3.1 Table of Contents

The table of contents should reflect the logical structure and main contents of the thesis. It should be transparent and comprehensible for the reader, without being too detailed. Bullet points on the same structure level should have roughly the same rank within the thesis. Particular attention should be paid to the equal weighting of the bullet points. Furthermore, the order of the items should be chosen in such a way that the contents of the sections

are based on one another. Attention is to be paid that each item or sub-item is followed by a second one (no 1.1 without 1.2).

The numbers of the individual sub-items are separated by full stops. The section numbers **do not have concluding** full stops.

Example:	1	Introduction
	1.1	Problem formulation
	1.2	Structure of the thesis
	2
	2.1

The **table of contents** contains **all constituent parts** of the thesis stating the corresponding **page numbers**. The lists of the thesis thus appear in the table of contents with page numbers, but are not numbered (they do not represent chapters). The title of the thesis is not repeated here.

The chapters contained in the table of content must be identical with the headings in the text part.

3.3.2 List of appendices

A list of appendices must be compiled, in which all parts of the appendix are listed with the corresponding titles and page numbers, if the thesis contains numerous appendices.

3.3.3 List of figures and tables

All figures or tables must be named in separate **figure** or **table lists** stating the number, title and page number.

3.3.4 List of abbreviations and symbols

All abbreviations used in the thesis must be explained in **alphabetic order** in a **list of abbreviations**. Here, the abbreviations stand in the left column, the respective meanings in the right one.

As a general rule, as **few** abbreviations as possible (in particular not for reasons of mere convenience) should be used. **The** use of **common** (cf. Duden / Dictionary) and **field-specific** abbreviations (e.g. EDP) as well as **usual abbreviations** of journal names (e.g. ZfB) and institutions, organizations or companies (e.g. BMFT, ZAW, AEG) is allowed.

If **formulas** or **mathematical symbols** are used in the thesis, a separate **list of symbols** is additionally required.

3.3.5 Bibliography

The **bibliography** comprises a full summary of **all references**, cited in the scientific paper or thesis.

See in detail section 4 with regard to the regulations for stating references in text and list.

3.3.6 Interview protocol and list of interviews

If a great deal of **information** is quoted from **interviews**, then it is essential to **prepare an interview protocol** and to add it to the appendix of the thesis. The permission of the interview partner must be obtained for the release

of the interview protocol. This is documented by means of signature. The interview must still be documented in a **list of interviews**. This contains the name of the interview partner(s) as well as the place, date, duration and topic of the dialogue.

In the event of **brief discussions** providing only few items of information for the thesis, the source can be stated in a footnote,

e.g. ...¹

¹ Communication by telephone with (name) on (date).

In this case, no further written permission is required; the approval of the dialogue partner for publication must however at least be given orally.

3.4 Appendix

The appendix serves for **documentation purposes, not for argumentation**. It therefore contains materials **to which reference is made in the thesis**. These include, for example, complementary diagrams or statistics, extensive mathematical evidence, interview protocols, Internet printouts and excerpts from new laws, ordinances or directives. Diagrams required for the comprehension of the text must be integrated in the text part. Sources that are not generally accessible or that have not yet been published such as e.g. (company-)internal documents must also be added to the appendix unless this is opposed by reasons of confidentiality.

4 Citing regulations

4.1 Types of citations

4.1.1 Literal citations

If part of a sentence, a whole sentence, or several sentences are **literally adopted** from a text source, we speak of a **literal citation**. The beginning and end must be identified by quotation marks. Literal citations are practical if the **exact wording** is important, as in the case of definitions, for instance. Here, attention must be paid that the citation is not taken out of context and possibly be misunderstood as a result. The following peculiarities must be observed in this context:

- **Interruptions** or **omissions** in a lateral citation must, in the case of one word, be marked by two full stops in brackets) "(.)", and in the case of several words by three full stops "(...)". There are no full stops in case of omissions at the beginning or end of a citation; this particularly applies when a citation is integrated into the own text.
- if the syntax of the own sentence requires a **grammatical modification** of the literal citation, then this takes place in square brackets. The same applies to extensions of the citation, which must be additionally marked with the sentence "[Author's comment]".
- Upper and lower case letters at the beginning and end of the citation **as well as the punctuation** can be adjusted to the own text. All other changes, e.g. in punctuation, correction of outdated notations or spelling mistakes are not allowed in a literal citation; they can, however, be marked with a "[sic!]" or "[!]" after the corresponding word.

- **Highlights** in the original text must also be adopted. Own highlights in the citation must be marked by adding "[Highlighted by the author]".

4.1.2 Analogous and multiple citations

An **analogous citation** is understood to be the **transfer of the sense** of external ideas. A literal citation cannot simply be converted into an analogous citation by omitting or adding a few words. This type of citation must also be absolutely accompanied by the statement of the corresponding source. As the text of a scientific paper should be independently formulated, the type is the "normal case".

If several sources can be named for one line of thought (**multiple citation**), then the sources should be stated in the chronological order of the years of publication. Here, the **oldest publication is stated** first. Multiple citations do not serve to artificially extend the bibliography.

4.1.3 Secondary citations

Secondary citations are citations from the works of an author A, which are not cited from the original text of the author A, but from a secondary source (author B).

Generally, all citations should be quoted from the **original source**, i.e. checked in the original. This is necessary in order to determine in which context the citation stands and whether it was correctly cited in the secondary source. In exceptional cases, if the original source cannot be procured, this must be marked when stating the sources (B, cit. acc. to A).

4.2 Citation obligation and citability

4.2.1 Preliminary remark

Generally, every idea that has been adopted from others must be cited. A breach of this citation obligation is a severe violation of the scientific character and leads to an evaluation of the thesis with the grade "unsatisfactory".

The use of parts of a sentence from a text source without clear marking as a literal citation represents a plagiarism. **Citable** is generally anything that can be comprehended and checked by the reader, i.e. usually **published** works. These also include discussion and working papers that are publicly available. **Unpublished sources** can only be used with the consent of the author and must be included in the appendix of the thesis. This should, however, only take place in exceptional cases. **Revision course scripts, lecture scripts etc.** for example, are not citable.

4.2.2 Reference to sources in the text of the scientific paper

The list of sources is intended to enable the reader to clearly identify the origin of the source. In all scientific papers prepared at the Chair for Organization and Innovation, the **American short citation format** is to be used.

Here, the source **is listed in the text directly after the citation** in brackets as follows: (Name of author, year, page number). If the name of the author has already been used in the text in the corresponding paragraph, then it is sufficient to state the year and page in brackets after the name of the author.

Examples:

Furthermore, the structures of the decision problem are not clear and the variables are usually not at all, or not fully known (Hauschildt 1997, p. 26).

Hauschildt (1997, p. 26) argues that the structures of the decision problem are unclear and that the variables are usually not at all or not fully known.

If the cited work was written by **two authors**, both names are mentioned in the text separated by 'and'; in case of more than two, i.e. three and more authors, it is sufficient to state the first author and to add "*et al.*" (here: and other authors). However, all authors must be named in the bibliography in any case.

Examples:

... All new developments of the company aiming to create an added value for customers are considered: technical, organizational and business field related innovations (Zahn and Weidler 1995, p. 355ff.).

Harhoff et al. (2001, p. 284) show that both of the following assumptions do not sufficiently reflect the research and development in the field of genetically manipulated food.

If the author cannot be clearly identified in the source, then the publishing institution can be stated.

Example:

Thus, the research project can provide numerous scientific arguments in the current sociopolitical discussion regarding management salaries (Handelsblatt 2008, P. 4; Tagesspiegel 2008, p. 16).

If **several publications** are cited for one line of thought, then they must be stated in brackets and separated by semicolons after the corresponding paragraph.

Example:

... (Larisch 1987, p. 34; Wipsmith 1988, p. 150; Ohmstead 1990, p. 28)

If several sources from the same author (or institution) from the same year of publication are used in the scientific paper, then "a, b, c..." are added to the years:

for a publication: (Brockhoff 1998a, p. 65), for the following ones accordingly: (Brockhoff 1998b, p. 87) and (Brockhoff 1998c, p. 114) etc.

Citations from **legal regulations** must be verified by stating paragraphs and articles as well as sections, (half) sentences, numbers, figures or letters, if applicable. This statement must also be followed by at least the brief designation of the respective legal regulations. In the case of **court judgments**, the designation of the court, the reference number and date of the judgment, if applicable, must be stated.

Example:

Acc. to § 433 subpar.1 BGB (German Civil Code), the following shall apply....

In the case of **unpublished sources**, which should only be cited in exceptional cases and with the explicit permission of the author, the author or publisher, title, year and location of the source must be listed.

Electronic publications (e.g. books or encyclopedias on CD-ROM) are usually marked by the same bibliographic details as books or magazines. Therefore, citation takes place in the same manner.

Internet sources such as reports from Spiegel Online, market research institutions or other online articles, for instance, are cited in the same way as the previous examples. If no author of the source is named, it is sufficient to state the institution (e.g.: Brockhaus Online, Spiegel Online etc.). If this is also not available, then the remark "n.a." (no author) may be used in exceptional cases. However, in such cases, it must be checked whether this is citable or even suitable for citation.

Example:

The current Gründungsreport of the ZEW Mannheim reports that the number of company foundations in Germany in 2007 has declined again for the third year in succession. In 2007, 226,000 companies were founded, which is 5% less than in 2006 (ZEW, 2008).

4.2.3 Source references in lists

The bibliography contains all literature sources used in the scientific paper. These are sorted **alphabetically** according to the **authors'** surnames or, in case of several works by the same author, according to the **publication date**. Works by one author with one or several co-authors appear in the literature list after the scripts written by the author alone.

It must be generally observed that the stated designation enables a **clear identification** of the source. The following citation specifications must be absolutely observed in this respect:

- **Monographs**

Name of the author, first name(s) of the author (year of publication): *title of the work: if applicable subtitles*, place of publication

If an **edition** is stated, then this is positioned before the place of publication without additional remarks such as "extended" or "completely revised". If **no details** regarding the **year** or **place of publication** are given, then this must be marked "n.y." or "n.p.".

Example:

Hauschildt, Jürgen (1997): *Innovationsmanagement*, 2nd edition, Munich

In the case of **several authors**, these are all mentioned in the corresponding order and separated by a forward slash.

Example:

Pleschak, Franz / Sabisch, Helmut (1996): *Innovationsmanagement*, Stuttgart

In the case of several places of publication, only the first is named with "et al." added (here: and other places). If a work comprises **several volumes**, then each one used in the thesis must be stated as an individual source. In this case, the number and title of the volume must be listed after the title of the entire work.

- **Articles in collective works**

If an essay from a collective work or commemorative publication is cited, then the addition "in:" follows the name of the author and the title of the essay and then the full bibliographic details of the book as well as the pages from the beginning to the end of the article. The name of the editor(s) is followed by "(Ed(s).)". The year of publication is stated after the place.

Example:

Harhoff, Dietmar (1998): Die Finanzierung von Innovationsprojekten: Übersicht und aktuelle Forschungsergebnisse für mittelständische Unternehmen in Deutschland, in: Franke, Nikolaus / von Braun, Christoph-Friedrich (Eds.): *Innovationsforschung und Technologiemanagement: Konzepte, Strategien, Fallbeispiele*, Berlin et al. 1998, S. 233-248

- **Articles in journals and newspapers**

The source reference of articles from newspapers or journals is similar to that of collective works. Publisher and place of publication are not stated, but the title of the journal, year/volume, number, page are listed. In the case of generally known journals, usual abbreviations can be used, which must then be stated in the list of abbreviations. If the name of the author is not stated or only by initials not explained in the imprint, for example, then the institution named in the continuous text is used or, in exceptional cases, "n.a.".

Examples:

Granovetter, Mark P. (1973): The strength of weak ties, in: *American Journal of Sociology*, Vol. 78, No. 6, p. 1360-1380

Handelsblatt (2008): Union und SPD stimmen Vorgehen bei Managergehältern ab, in: *Handelsblatt*, No. 129 dated 07.07.2008, p. 4

- **Working Papers**

Surname of author, first name(s) (year of publication): title of working paper, institution/university where the paper was written, no. of the working paper, other details if applicable

Example:

Arora, Ashish / Cohen, Wesley M. / Walsh, John P. (2014): *The Acquisition and Commercialization of Invention in American Manufacturing: Incidence and Impact*. NBER Discussion paper No. w20264, Cambridge, Mass.

- **Legislative texts and jurisdiction**

Laws, ordinances, official announcements etc. must be listed in the list of legal sources stating their announcement in the corresponding bulletin and the date.

Example:

Handelsgesetzbuch (German Commercial Code) dated 10. May 1987 (RGeBl. p. 219) in the amended version dated 28.10.1994 (BGBl. I p. 3210)

- **Websites**

In the case of all publications from the internet, the **exact internet address** (URL) and **date of access** must be stated. If possible, the usual details regarding the author(s), year or publication and title must be stated. If necessary and helpful (e.g. if the author is missing), the publishing institution is to be stated or, in exceptional cases "n.a."

Example: EVCA (2002): Risk Capital Action Plan, in: *EVCA Network News*, No. 7, December 2002, p. 3, http://www.evca.com/admin/attachments/tmpl_9_art_48_att_212.pdf, accessed on 24.02.2015

5 Notes on empirical works

In the case of empirical works, the **raw data set** of the work must be enclosed in electronic form. Furthermore, attention must be paid that **all data processing scripts are carefully documented**. In this respect it is recommendable to use the statistics software STATA. If STATA is used, the documentation must comprise all data transformations in the form of Do-files. Non-documented manual changes of the data are **not permissible**.

6 (Examination-related) Legal notices regarding the publication of diploma, bachelor and master theses

In general, a diploma, bachelor or master thesis is the intellectual property of the author or student. Furthermore, this is also an examination file, which **may not be published without the approval of the university**.

Appendix 1 – Sample for the title page of a seminar paper

Title of the seminar paper

Seminar paper for the research seminar
"Title of the seminar"

Instructor: Prof. Dr. Karin Hoisl, MBR.

Supervisor: (Name)

Submitted by: (Name)

Matriculation number.:

Course of study:

... . Semester

.... (Street)

.... (Postal code, town/city)

Tel.:

E-mail:

Submission deadline:

Appendix 2 – Sample for the title page of a diploma thesis

Title of the diploma thesis

Free scientific paper for obtaining the degree of a
Diplomkaufmann/Diplomkauffrau at the Business School
of the University of Mannheim

Instructor: Prof. Dr. Karin Hoisl, MBR.

Supervisor: (Name)

Submitted by: (Name)

Matriculation number:

Course of study:

... . Semester

..... (Street)

..... (Postal code, town/city)

Tel.:

Submission deadline:

Appendix 3 – Sample for the title page of a bachelor thesis

Title of the bachelor thesis

Free scientific paper for obtaining the degree
Bachelor of Science (B.Sc.)
at the Business School
of the University of Mannheim

Instructor: Prof. Dr. Karin Hoisl, MBR.

Supervisor: (Name)

Submitted by: (Name)

Matriculation number:

Course of study:

... . Semester

..... (Street)

..... (Postal code, town/city)

Tel.:

Submission deadline:

Appendix 4 – Sample for the title page of a master thesis

Title of the master thesis

Free scientific paper for obtaining the degree
Master of Science (M.Sc.) at the Business School
of the University of Mannheim

Instructor: Prof. Dr. Karin Hoisl, MBR.

Supervisor: (Name)

Submitted by: (Name)

Matriculation number:

Course of study:

... . Semester

..... (Street)

..... (Postal code, town/city)

Tel.:

Submission deadline:

Appendix 5 – Sample for the Declaration of Authenticity

Declaration of Authenticity

I declare, that I have written this thesis independently; to the best of my knowledge and belief the thoughts directly or indirectly taken from external sources are marked as such.

The thesis has not been formerly submitted to any other examination body and has also not been published.

Place, Date

Signature