Hochschule für
Wirtschaft und Recht Berlin
Berlin School of Economics and Law

Recommendations for the preparation of scientific papers

(Bachelor and Master Theses)

Prof. Dr. Nadja Jehle
Prof. Dr. Ursula Walther

Last update: 18.10.2018

Recommendation for the preparation of scientific papers
(Bachelor and Master Theses)

1 FOREWORD

For many students, writing a good thesis is a big challenge. On the one hand, a large number of formal rules must be observed. In addition, a high degree of independent work is required during the elaboration of the topic and the later elaboration, which differs fundamentally from the requirements in lectures and exercises.

For scientific work there are rules regarding:

- Determining of the topic and work with literature,
- Structure and outline of the text as well as
- Language and expression.

These guidelines form the "basic rules of of scientific work" and **must be** adhered to in **all** scientific work. Within this framework, there is a certain freedom of design with regard to formal presentation and personal style. However, **two principles** must be strictly followed:

- **Any** content taken from another source, either verbal or in form and content, must be **specifically** marked! This includes text passages, any reference to the thoughts of other authors as well as any direct or indirect transfer of data and other facts from contributions by other authors. Whoever takes over the thoughts of other authors without proof of the source commits plagiarism! This offence is generally considered to be serious and, even if the work is done satisfactorily in other aspects, leads to the assessment "failed" because the work does not meet the standards of scientific work.
- The formal design chosen by the author must be on par with the minimum requirement and be applied consistently (see part 4).

The following information should not only clarify the formal framework, but also provide orientation for independent work. Last but not least, it provides insight into the assessment criteria. For all remaining questions, please contact your supervisor.

Important! Please note that there are differences between the various subjects and the respective faculty cultures, especially with regard to the formal criteria of scientific work!

Each supervisor of a bachelor or master thesis can therefore replace these notes with his/her own document with slightly different rules if necessary. Please ask your supervisor if such an alternative document exists.

Good luck with your thesis!

2 BASICS FOR THE CREATION OF SCIENTIFIC WORKS

2.1 Scientific work and writing

The quality of scientific work is determined by its content and form. An excellent external form is no guarantee for a (very) good grade, but a compelling requirement for above-average scientific work.

Scientific work is the examination of existing findings in a specific context. You are not expected to "reinvent the wheel" or develop a basic scientific innovation (you can do this in your doctoral thesis). The aim is to raise a relevant scientific **question**, to identify the state of knowledge on this question and to answer it on this basis as well as on one's own considerations (and, if necessary, an independent empirical study).

Scientific work means,

- to answer **questions** that are of interest. The motivation and meaning of the question(s) raised and the answers sought must be explained at the beginning of the work (why is this question relevant and for whom?). Make yourself aware of your topic and separate it from similar topics.
- to start from **existing knowledge** and to build on it. For this, literature must be evaluated and applied to the own question. In particular, you must check what knowledge is currently available on the question being dealt with (status of literature). Basically this means that **all** existing knowledge must be raised (ten or 20 sources are not enough!). It is clear that this can only succeed with narrowly defined questions).
- that statements and arguments must be **comprehensible**. Scientific statements are the result of a **complete** and **logical** combination of arguments and, if necessary, empirical findings that lead to certain conclusion.
- that statements and arguments must be **verifiable**. One principle of empirical research is that results must not depend on random influences. Therefore, the use of the same methods must always lead to the same result. The method of collection and the method of evaluation must be precisely disclosed so that the reader could repeat the examination in exactly the same form. In addition, the fundamental requirements of empirical research must be taken into account.
- no reproduction of textbook knowledge. Knowledge from the courses of your studies may be assumed by the reader. Aspects important for the work can be briefly retrieved, but do not have to be derived or explained in detail. Refer to a (good) textbook for this.

Ultimately, a work must meet demands in three different dimensions:

- ethical: ideas adopted from others must be marked as such ("intellectual honesty"),
- technical: objectivity, reliability and validity must be given:
  - Objectivity: "Intersubjectivity" = the statement made is verifiable for everyone and can be traced in all steps with regard to its initial situation and its occurrence. Anyone who starts from the same starting position and follows the same path in the same way also

achieves the same result. Only in the final interpretation and evaluation of results subjective considerations play a role.

- Reliability: empirical methods used must deliver exactly the same results when repeated.
- Validity: an empirical model, measurement or test procedure must actually measure the characteristic to be measured.

- stylistic: linguistic style and written layout of the text.

2.2 Scientific language

Scientific writing differs significantly from journalistic or literary writing (Table 1). Scientific language is not "better" than other styles of language. It pursues another purpose, namely the factual and objective transfer of knowledge. Therefore, orientate yourself on the writing style of scientific essays and reference books, but not on the style of non-scientific sources such as daily newspapers, magazines or novels, etc. (even if you find other language styles more beautiful or entertaining).

Table 1: Comparison of scientific and journalistic writing styles

Scientific texts	Journalistic texts
• serve the acquisition of knowledge and the imparting of knowledge	• are used for information and/or entertainment, if necessary also for influencing or manipulation
• require detailed references	• do not require references
• derive statements according to scientific rules.	• usually contain unverifiable statements
• are formulated in scientific language	• are formulated in everyday language

The style of expression and language of scientific work should be objective, neutral, differentiated and easy to understand. Try to use clear, precise language. Avoid overlong sentences and the exaggerated use of foreign words. Only use terms whose meaning is very clear to you. An understandable, fluid style is desirable: Bachelor's and Master's must be easy to read.

Under no circumstances should you make claims in your work that are not either well substantiated or conclusively derived from what has previously been said. You'll have to provide justifications for all statements. Examples help, but are not enough on their own. The stronger your claim, the more carefully you must justify or infer. Of course, you must not become entangled in contradictions. Avoid general statements ("as is well known", "one can assume"). Inappropriate are also colloquial formulations, filler words ("actually"), empty content ("sometimes", "maybe"), exaggerated expressions ("very"), ("enormous") as well as arguments ("of course", "certainly"). Also note that a scientific paper is not a biography. Therefore, leave out personal information (e.g. how you came to your topic and why you are interested in it). Exception: such statements are made in interviews and can be substantiated.

There are different views on the question of whether the ego form may be used in a scientific paper. In case of doubt please contact your supervisor! Phrases like "I think", "in my opinion", "you say", "you should" etc. are (still) not very common in German-speaking countries (exception: literal quotations). A distanced formulation is therefore appropriate, e.g:

- Instead of "in my opinion..." you use: "within the scope of this work the concept of Wöhe (2017) is followed".
- Instead of "in the following I prove ...", "in the following is proven ..." is better.
- Instead of "will I provide an overview..." you write: "an overview will be provided".

Please also note the following:

- Important **terms**, especially those that are common but often ambiguous, must be defined. This must be done at the latest during the first use of the technical term. It is often helpful to have a "basic chapter" at the beginning of the work in which the most important definitions can be found.
- You should pay attention to absolute correctness of **spelling**, sentence construction and punctuation. (Recommendation: Activate the spell checker in Word!)
- **Abbreviations** should be used moderately and introduced at the first mention in their written form. The abbreviation is written in brackets behind the term (example: "the Handelsgesetzbuch (HGB) contains..."). Remember creating a list of abbreviations.
- If you use **images**, tables or other representations, reference **must be** made to them in the text. In doing so, do not only reproduce what is already visible right away, but make clear which argument or which statement is supported or substantiated by the presentation.

2.3 Content requirements

The aim of a thesis is to *scientifically* answer a well-defined question. This requires on one hand a clear understanding of the topic and the associated problems and on the other hand a sharp limitation to the topic. In the case of a **term paper, it** is regularly sufficient to give a clear presentation of a topic and the current status of the discussion in the literature. The own contribution lies in the understanding of the topic and its partial problems, the research of the literature and its reproduction in a well-structured understandable form as well as a summary of the results.

In a **Bachelor's thesis**, the focus is on posing an independent **question** (research question) and answering it on the basis of the literature (as well as an empirical study of one's own, if necessary). The own contribution goes beyond a term paper, since apart from the pure reproduction of literary knowledge also the own conclusions and answers of the author are demanded. These must be derived conclusively from the collected material and the empirical work carried out independently.

If you have worked independently on your work - starting with the identification of topics, continuing with literature research and ending with elaboration - it is always "new" enough to meet all relevant requirements. It is quite normal that similar questions have already been dealt with by others.

However, when working independently, the results usually differ greatly. Plagiarism arises (only) from the adoption of foreign elements.

Much of your work will be based on **discussions in the literature**. The following aspects must be considered:

- Discussions of literature must be recognized and (within the chosen core point) fully named.
- Views of literature must be systematized and evaluated (explained!).
- On the basis of what you have read, try to develop your own thoughts and come to independent solutions. Students may take a critical look at literature and formulate their own solutions. However, all statements must be comprehensible and well-founded.

It is important that the topic is covered completely, but not exceeded, and that the explanations agree with the topic. An important assessment criteria is whether the work accurately describes the subject matter and whether this is clear to the reader (not just the supervisor). The title must be meaningful and the table of contents well structured. The work must also explain why a particular priority has been set.

If your work contains an **empirical part** in which you collect quantitative or qualitative data and/or evaluate them yourself, you must describe the method used in addition to developing a research question (and possibly literature-based hypotheses). The techniques of qualitative and quantitative research are explained in corresponding (teaching) books, which can be found in the literature references. Consult your supervisor about the design of the empiricism with regard to scope, selection of the sample and the instruments to be selected! The planned methodology must fit the problem and be feasible. You should also clarify access to the required data in advance.

2.4 Work and time planning

At the beginning of writing a scientific paper, the student should first spend a few weeks to gain an initial overview of the problem area. Afterwards the topic should be discussed with the supervisor and the further approach coordinated as well. Arrange a further consultation at least after the structuring has been completed, in order to clarify the correct coverage of the topic and also the focus of the thesis. It is not the task of the supervisor to discuss the structure in detail (e.g. with regard to the system or formulation). Assistance must be limited to general references, since the structure of the work as well as the explanations in the text are to be expected from the students as their own constant achievement.

It is advisable to create a work plan or schedule at the beginning of the work. Table 2 gives an overview of important partial steps and their time shares. This seems unnecessary to many students. Experience has shown, however, that every "project" - from crafting to business consulting - needs structured time and resource planning in order to avoid nasty surprises. The plan later makes it visible whether you are still in the schedule or need to make adjustments. The following belong to a plan:

- enough information about the work order,
- the planning of appointments,
- necessary equipment, tools and spare parts (flipchart etc.), to be available on time,
- the definition, planning and weighting of the necessary work steps,
- the observance of one's own working environment,
- the consideration of other activities (e.g. examinations in other subjects),
- knowledge of one's own learning habits (during the day, at night?) and
- the control of work progress.

Check for yourself: do you know all your own habits?

Don't overlook risk management either. Regular backup copies on other data storages are important and, if necessary, a replacement laptop, printer etc. should also be provided.

Table 2: Approximate time required for the individual work steps

	expenditure of time
Topic determination (if not specified) gathering Information Work and time planning Literature research, procurement and review Literature processing (structuring), evaluation (reading, summarizing) Creating outline Discussion with the supervisor	approx. **1/3 of** the total time
Revision of the structure First version of the work (+ follow-up research of the literature)	approx. **1/3 of** the total time
Final version of the work and formatting Final correction (e.g. by other persons) Printing, copying, binding	approx. **1/3 of** the total time

2.5 Research and types of literature

The search and evaluation of literature is a **central element of** scientific work, which typically stretches from the beginning to far beyond the middle of the processing period. The quality of the work depends essentially on the breadth and depth of the literature research. There's plenty of information. You must, however, filter out the **relevant** information and make it usable for their work. To do this, you must first find the literature, then evaluate it in terms of quality and finally evaluate it.

As an **introduction** to a topic you can get a first (!) overview of the Internet (possible keywords for the concrete search), e.g. Google, Wikipedia, Bing, Yahoo or Amazon. Please note, however, that

some of the sources found there **cannot be quoted**. They only serve as a first orientation.

The **relevant literature can** be found in scientific libraries and databases. For a brief overview at the beginning of the literature search, standard works are often suitable (one-word textbooks, manuals, hand dictionaries). For more detailed and in-depth research and to understand the relevant aspects of the topic, you will need relevant essays (special journals), specialized reference books (such as dissertations and their reference list) as well as further sources for your topic.

Literature has very different appearances. Used can be what makes **sense in terms of content and is scientifically justifiable**. This does not include Wikipedia, for example, because it is not subject to quality control and is therefore not reliable. In order to assess the quality of literature, you should pay particular attention to the following points:

- Where and by whom was the text published? Essays in a scientific journal have mostly been reviewed by experts and are therefore very reliable. Dissertations and high-quality specialist books from good publishers are also subject to scientific quality control. Scientists working at universities or other research institutions are more likely to produce good scientific sources than other practitioners (of course there are exceptions).
- For what purpose was the text published? Good scientific literature serves exclusively to make research results known. This is not the case, for example, with publications by lobby groups or management consultancies. They serve the purpose of influencing or marketing and can therefore only be used with caution. Be critical!
- How is literature dealt with in the text? Is the contribution based on (good) literature and is it cited in a scientific manner (as described in this document)? If this is not the case, there is a high probability that it is not scientific literature and you have to be very critical with the content.
- Language and layout. Are the language and external appearance of the text factual and neutral? Are arguments derived and substantiated, or is something simply claimed? Be critical!

Typical forms of appearance of **scientific** literature are:

- Articles from scientific journals. They are often more up-to-date than books, for example, and the facts are more condensed. These are the most important sources for many topics.
- Books (monographs, often dissertations). However, these are often not very numerous, especially with current topics.
- Articles from collective works (e.g. commemorative publications, yearbooks, conference proceedings, etc.)
- Expert opinions and research reports, laws, commentaries, official statistics, annual reports.
- Special dictionaries
- Publications by governments, public and non-public organizations (World Bank, IMF, EU, etc.) or associations. These sources often contain important material (e.g. data, statistics, studies) that can be used. Please note that the publications also pursue non-scientific

purposes such as political opinion-forming or lobbying. You have to be critical with the statements.

- Working papers play a special role. This is often the first form in which scientific works are published. They are therefore particularly recent. However, they have not yet undergone any scientific quality control. A later publication in a scientific journal only takes place after examination and, if necessary, revision - and with some papers even not because they do not meet the requirements.

Other, **non-scientific sources should not be cited, or only to a limited extent.** This includes in particular websites and documents downloaded from them, internal company material, unpublished lecture scripts and materials, Wikipedia and general dictionaries. Such sources can be part of your work, e.g. because you report from them or give examples. Then these will also be proven and appear in the bibliography. However, you cannot accept statements made there as secure knowledge and use them for your argumentation. If you use online sources that may not be accessible later, save the corresponding pages and attach them to your work electronically.

Important! Coordinate the acceptance of literature with your supervisor! There are very different views on this subject and also differences that are technical or subject-related.

The library of the HWR offers the extremely useful function for **literature searches "HoWeR."** Here you can perform a keyword search in all media available via the library (printed and electronic). Use this search engine but be careful when searching for your keywords. As part of your thesis, you are expected to access not only the literature available in the HWR library, but also literature from other libraries. It is helpful to search the library catalogues, which contain several libraries, see. Figure 1. In order to get an overview of the existing literature, the catalogue of the University of Karlsruhe can be used, which searches all library catalogues. The KOBV is particularly helpful for you, since most of the libraries listed there are located in Berlin and are physically accessible for you.

Figure 1: Spatial distribution of important library catalogues

Meta catalogue KVK:
https://kvk.bibliothek.kit.edu/index.html

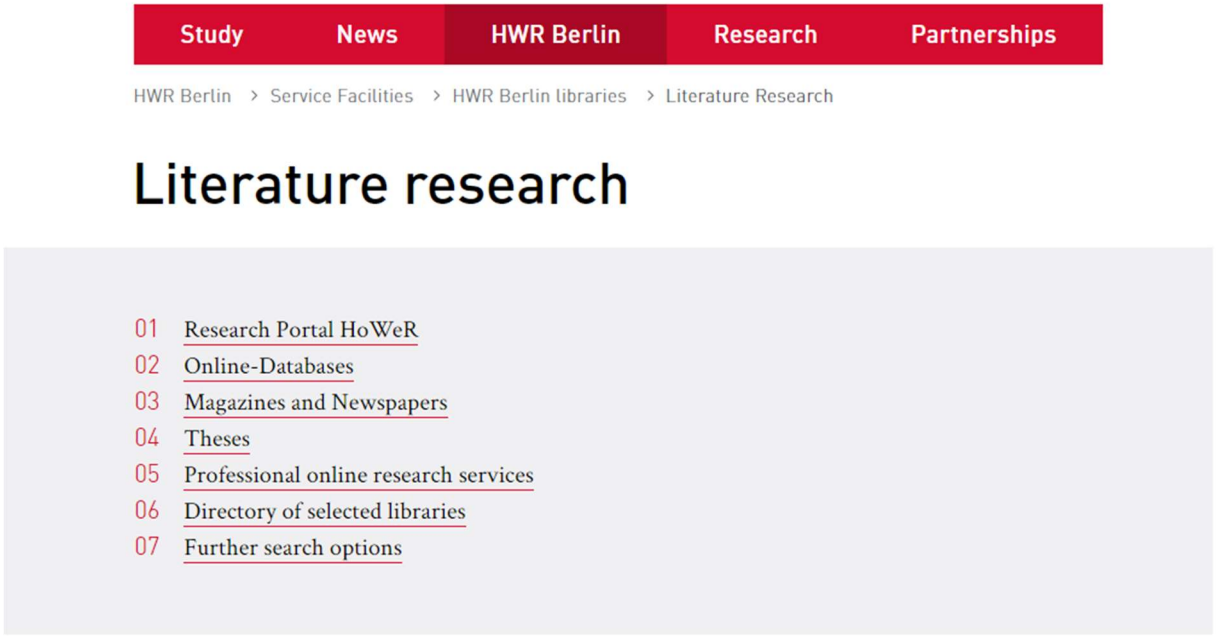
Journal catalogue ZDB-OPAC:
http://www.zdb-opac.de

Library catalogues:

- KOBV: Berlin-Brandenburg Cooperative Library Network
- GBV: Common Library Network
- HBZ: University Library Centre
- HEBIS: Hessian Library information system
- SWB: Southwest German Library Network
- BVB: Bavarian Library Network

In addition, the HWR library has important databases that you should use. It is essential that you use several search paths in order to achieve sufficient coverage. Figures 2, 3, 4 show important search paths on the HWR homepage.

Figure 2: Search path to the online research portals on the HWR homepage



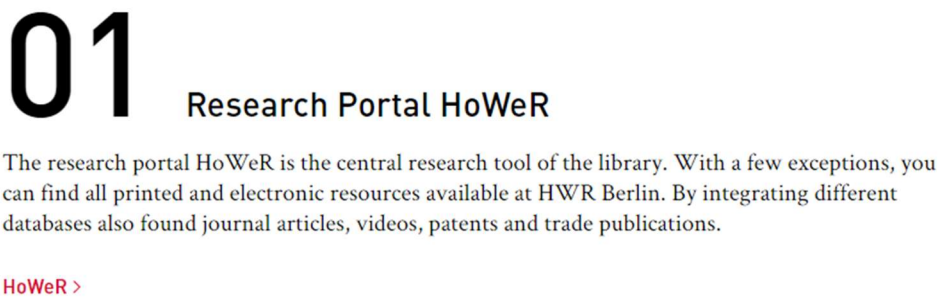


Figure 3: Search path to online databases on the HWR homepage

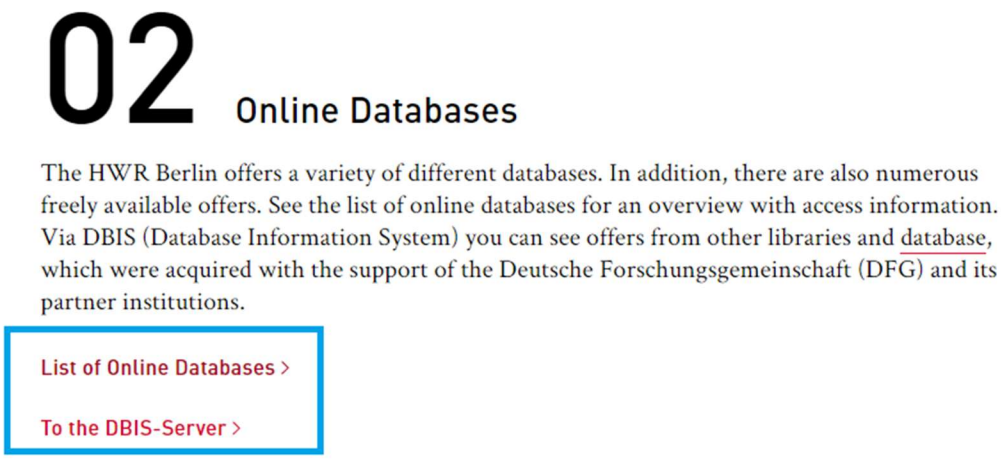
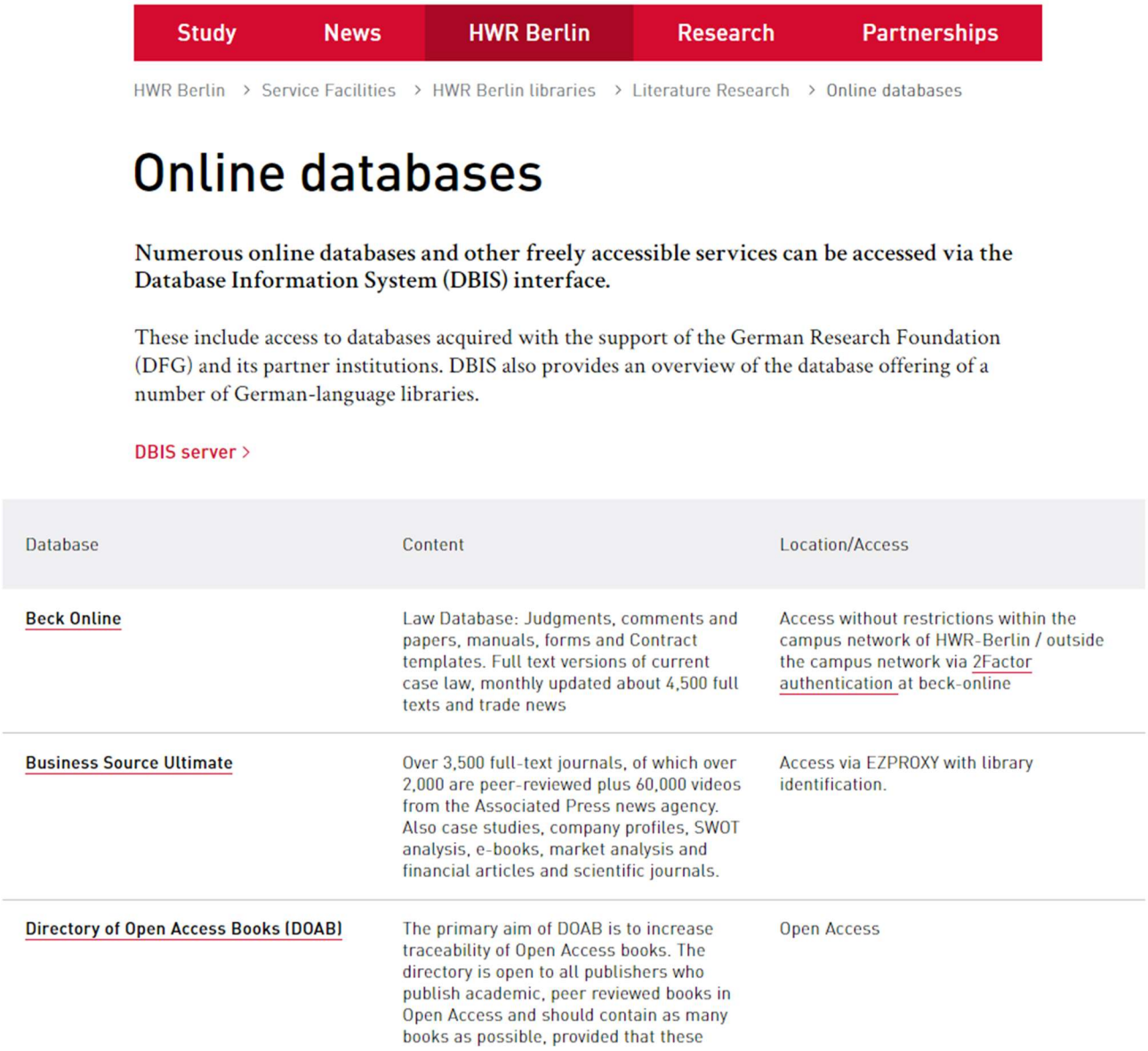


Figure 4: Available online databases according to HWR homepage



Study | News | HWR Berlin | Research | Partnerships

HWR Berlin > Service Facilities > HWR Berlin libraries > Literature Research > Online databases

Online databases

Numerous online databases and other freely accessible services can be accessed via the Database Information System (DBIS) interface.

These include access to databases acquired with the support of the German Research Foundation (DFG) and its partner institutions. DBIS also provides an overview of the database offering of a number of German-language libraries.

DBIS server >

Database	Content	Location/Access
Beck Online	Law Database: Judgments, comments and papers, manuals, forms and Contract templates. Full text versions of current case law, monthly updated about 4,500 full texts and trade news	Access without restrictions within the campus network of HWR-Berlin / outside the campus network via 2Factor authentication at beck-online
Business Source Ultimate	Over 3,500 full-text journals, of which over 2,000 are peer-reviewed plus 60,000 videos from the Associated Press news agency. Also case studies, company profiles, SWOT analysis, e-books, market analysis and financial articles and scientific journals.	Access via EZPROXY with library identification.
Directory of Open Access Books (DOAB)	The primary aim of DOAB is to increase traceability of Open Access books. The directory is open to all publishers who publish academic, peer reviewed books in Open Access and should contain as many books as possible, provided that these	Open Access

2.6 Processing of information and literature

To put it simply, all relevant literature should be processed for scientific work. However, due to the abundance of publications on many topics, this is not always possible. However, a very thorough study of literature is a prerequisite for any scientific work. Therefore, you need to get a good overview of the literature available on the subject. It's not about gathering "enough" sources. A certain number like "fifty" or "one hundred" does not ensure that you have captured all the important aspects. But that's what matters. It should by no means be left to chance whether a scientific work is consulted on the problem at hand or not. You must separate the important from the unimportant in a meaningful way and cover the topic comprehensively. For this it is very important to consider the **newer literature,** since according to experience the results of older works have also been processed in it. Typically, after a while you'll notice that the texts you're evaluating are increasingly referring to sources you already know and it's getting harder and harder to find a "new" idea at all. That's a good sign. Unfortunately, there's never complete certainty that you haven't overlooked something important. Only perseverance and thoroughness in researching can help against this risk.

It takes a lot of time to organize and evaluate the existing flood of information, but this is (almost) the most important task during the whole work: invest in the beginning, save twice the time in the end. Try to collect the information and sources in a structured system where you can later find your way around. One possibility is a (physical or virtual) folder and sorting by subitems of the outline or other meaningful keywords. The use of a literature processing program is also helpful,

e.g. CITAVI. You can ask at the library about it.

When copying or downloading, make sure that you note the source. Later you can hardly reconstruct this information. The following information should be mandatory: Author, title, year, location, library/location as well as important information in the source, corresponding bullet point, page number, etc. At the same time, it is helpful to create the bibliography from the beginning. This has the advantage that nothing gets lost and mistakes are already noticeable here (e.g. page reference, journal name missing).

In summary, the following **requirements** can be placed on literature processing:

- All more recent relevant literature must be fully processed, i.e. intensive literary research (dissertations, at least the last three volumes of the relevant periodicals, literature databases, literature by relevant authors).
- A suitable selection of the older literature (important works) is to be made.
- Current legal developments (laws, jurisdiction) must be taken into account.
- Always use the latest editions (if necessary: use older editions in addition). Every (quotable) foreign thought (literally or analogously adopted) must be identified as such by stating the source. Always quote the original source. Secondary sources may only be used if they are objectively inaccessible. Examples:

  - When writing about Maslow's pyramid of needs, please quote Maslow and not a secondary source such as Wöhe.
  - If you quote Müller, e.g. "According to Müller, the earth is a slice", then the source must be "Müller". It is not possible for Meier to be mentioned in the footnote because you have read it in a book by Meier about Müller.

3 GENERAL STRUCTURE AND STRUCTURE OF THE TEXT

3.1 Text portions

A scientific paper basically consists of the three parts Introduction, Main Part and Conclusion, even if these points are called differently. The introductory and concluding parts must be weighted appropriately (rule of thumb: approx. 5 to 10 % of the total text part of the work in each case):

1.Introduction:

The introduction leads the reader to the topic and gives motivation (why is the topic interesting, for whom?). The most important element is the elaboration of *the problem*. The topic must be clearly

defined and a goal must be formulated, which should be worked towards in the work. Your *approach* should also be explained and, above all, the reasons given. The introduction can be developed from a previously prepared exposé, but is not intended to anticipate the main part. It is usual to briefly describe the individual parts and chapters at the end of the introduction.

2.Main part:

The main part is usually divided into several chapters and sections. The individual chapters of the main section should logically and consistently lead to the goal set in the introduction. Typically, definitions and basics are found at the beginning of the main section, after which the contents become increasingly specific. The reference to the problem and the task of the respective chapter/section must always be clear for the reader! If necessary, the reference should be explained. For longer work it can be useful to connect the chapters with each other by short transitions or intermediate summaries in order to clarify their relationship to each other. The decisive factor is that a "central theme" is visible that follows through the entire work and makes frequent turning back to the introduction or other chapters unnecessary. A sequence of foreign thoughts from literature is insufficient. Controversial positions should be compared. In the main part all essential conclusions and the results of the work are derived and formulated.

3.Conclusion:

The conclusion frames a work together with the introduction. It summarizes the results and, where appropriate, systematizes them. The questions formulated in the introduction get answered or conducted. No important results are to appear for the first time or completely new aspects are to be raised. Rather, the results achieved in the main part are summarized and above all linked to the question. Also state which part of the question is still open or which further questions are raised by the work (future outlook). In the conclusion, you cannot correct any weaknesses in the main part (which you may have discovered last). The conclusion should enable the reader to record the results of the work without reading them completely (introduction and conclusion must be sufficient for the hurried reader).

3.2 Outline

The outline must clearly express the structure of the thought process and, if applicable, the chosen main focus (without reading the text). The outline must be constantly rethought and corrected until the end (first outline ≠ outline of the finished work).

The first structure reflects a preliminary overview of the topic (already during the sources collection). Individual relevant parts are named and related to each other (e.g. mind map method). It is to be understood as a personal instruction for action and serves to control the progress achieved so far.

Sections should not exceed *four* subsections in the bachelor thesis. If a subdivision is further subdivided, at *least two* subsections must follow (no 1.1 without 1.2).

Make sure that the respective outline points of a section are equivalent in content, do not overlap or contradict each other and cover the respective top point.

Depending on the topic, different structuring options can be offered:

- chronological arrangement (according to the chronological sequence of an event),
- Structure according to cause and effect,
- Structure from the general (familiar) to the special,
- comparative or opposing (discursive) structure,
- inductive structuring (leading from proof or example to theory)
- deductive structuring (leading from theory to application, vice versa).

If necessary, different structuring styles can also be combined with each other, e.g. a historical work can have chronological, but also comparative aspects. Important: Readers should be able to understand what is dealt with in the work and where and should be able to understand the course of the argumentation.

3.3 Logic and rationale for the conclusions

After the completion of a first version, you should carefully examine the work to see whether the reasoning is logical and the conclusions well-founded. Experience has shown that assertions made in the first draft are not yet sufficiently substantiated and substantiated by corresponding sources. You can avoid mental leaps if you carefully check the first version of the paper to see whether all thoughts follow one another logically. Particularly dangerous is the blanket adoption of statements from other works, since the logical derivation and the factual connection in one's own work are usually missing.

4 FORMAL DESIGN OF THE WORK

4.1 Formal structure

A scientific paper basically consists of the following parts (in the order given):

1. cover page
2. Table of contents (with list of the Annex, if any)
3. List of abbreviations (where appropriate)
4. List of overviews (if applicable)
5. text
6. bibliography
7. Annex (as appropriate)
8. Declaration of Authorship (only for the thesis)

Foreword, acknowledgments etc. do not belong in the paper!

4.2 Design rules for bachelor and master thesis

4.2.1 Cover page, directories

The *cover page* contains:

- the exact, complete title of the work,
- the name of the university, the name of the degree program
- your full name, address and student ID number,
- the full name of the supervising teachers (in the case of Bachelor's theses, first and second evaluators),
- the subject of study and the deadline.

Creative elements such as pictures, ornaments etc. do not belong on the cover sheet!

The *table of contents* shows the structure of the work. The usual structure for business administration work is the new structure (1 - 1.1 - 1.1.1 etc.), for legal work the alphanumeric structure (A. - I. - 1. - a) etc.). Both systems can be subdivided either according to the gradation principle or the line principle. Table 3 gives an overview, Figure 5 shows a complete table of contents as an example.

Table 3: Comparison of classification systems

Graduation principle:	**Line principle:**
4 Heading 1	4 Heading 1
4.1 Heading 2	4.1 Heading 2
4.2 Heading 2	4.2 Heading 2
4.2.1 Heading 3	4.2.1 Heading 3
4.2.2 Heading 3	4.2.2 Heading 3
4.2.3 Heading 3	4.2.3 Heading 3
4.3 Heading 2	4.3 Heading 2

Figure 5: Example of a table of contents

The *list of abbreviations* should only contain abbreviations that are not in the dictionary. The abbreviation should be written out once the first time it is used in the text (despite abbreviation directory!).

Do not use abbreviations in the headings. Figure 6 shows an example.

Figure 6: Example of an abbreviation directory

LIST OF ABBREVIATIONS

APT	Arbitrage Pricing Theory
Avg.	Average
CAPM	Capital Asset Pricing Model
EBIT	Earnings Before Interest and Taxes
P/E	Price-to-Earnings ratio

If you use more than five figures or tables, enter them in a *list of figures and/or tables*. Figure 7 shows an example. Overviews as uniform names for tables, diagrams, figures and illustrations can also be entered in a *list of overviews. Make* sure that illustrations and tables are in a uniform format (centered?, frame?, same font as text, breaks, colors (not too colorful, ensure readability even in b/w printing). In the text, refer to the illustrations and tables, but do not only reflect what is directly recognizable anyway).

Figure 7: Example of a directory of figures

List of figures

4.2.2 Scope, page layout, font sizes and paragraphs

The *scope of* a term paper as well as a bachelor thesis is regulated in the examination regulations. It is essential that you check the relevant specifications! Depending on the formatting, bachelor thesis approx. 40-60 text pages (12,000-17,000 words) and master thesis approx. 60-100 text pages. Counting is done without table of contents, abbreviations and illustrations, appendix and bibliography, but with footnotes. The number of text pages may deviate from these specifications by a maximum of 10 %. The modeling of the topic and the duration of time to prepare the thesis are each adapted to this scope.

Each sheet is written on only on one side and the work is to be provided in the format DIN A4 (white, portrait). For the entire document, you have to set *justification* and continuous text (as in this text). It is recommended to activate hyphenation to avoid blocking. The following margins are recommended: top 2.5 cm, bottom 2 cm, left 2.5-3 cm, right 3-4 cm. If in doubt, coordinate it with your supervisor. The fonts recommended are those listed in Table 4:

Table 4: Overview of Font Types

	font	font size	line spacing
headings	Times New Roman	12 to 14 bold	1-line
text	Times New Roman	12	1,5 lines
footnote text	Times New Roman	10	1-line

Paragraphs: The text should be divided into paragraphs between two headings. A paragraph should contain at least three sentences! An additional spacing must be maintained between paragraphs in addition to the 1.5 line spacing (recommendation 6pt, no blank line; 12pt *before* headings, 9pt *after* headings).

Footnotes, figures, tables, etc. are numbered consecutively.

All sheets except the cover sheet should be marked with page numbers. The pages following the cover page are numbered with Roman numerals up to the text (lists, see Chapter 2.1). From the first page of the text, the pages are numbered with Arabic numerals, starting with 1. This numbering also extends to the annex and the bibliography.

4.2.3 Footnotes

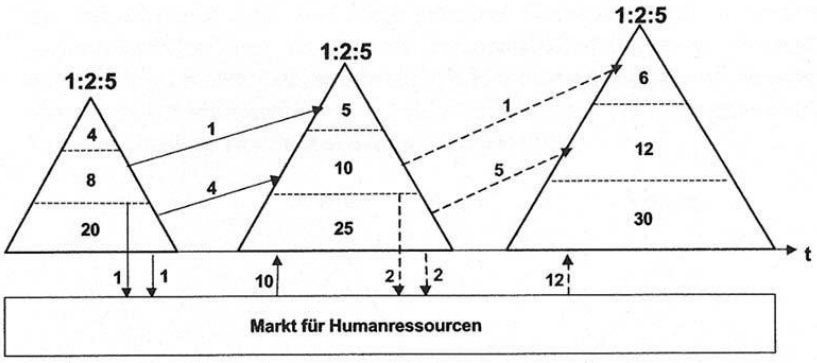
Footnotes[1] include the source references (See. Section 4.2.5). On the other hand, footnotes can include notes, explanations or cross-references within the work that are not intended to disturb the flow of reading but appear important enough not to be omitted completely. Central arguments or facts must not appear in footnotes! Use footnotes sparingly.[2] Depending on what the footnote refers to, the superscript number (Arabic numbers) may appear after a word, quotation mark or sentence (after the punctuation mark!). The footnotes must be separated from the text by a horizontal line (Word does this automatically).

4.2.4 Figures and tables

All overviews (tables, figures, etc.) are to be provided with a heading which exactly describes the respective content (e.g. also in relation to periods, units of measurement). Source information for overviews taken from other works is given by placing a footnote at the end of the heading of the overview **or** with the description "Source:" below the heading of the overview. Figure 8 shows both variants.

[1] This footnote serves as an example. No information should be hidden here that is important for the reader. This footnote refers to the word “footnotes”.
[2] Too many footnotes can be an indication that the author was unsure which information was important. This footnote refers to the entire sentence, so it follows the punctuation mark.

Figure 8: Figure with source reference (Variant 1)[3]:

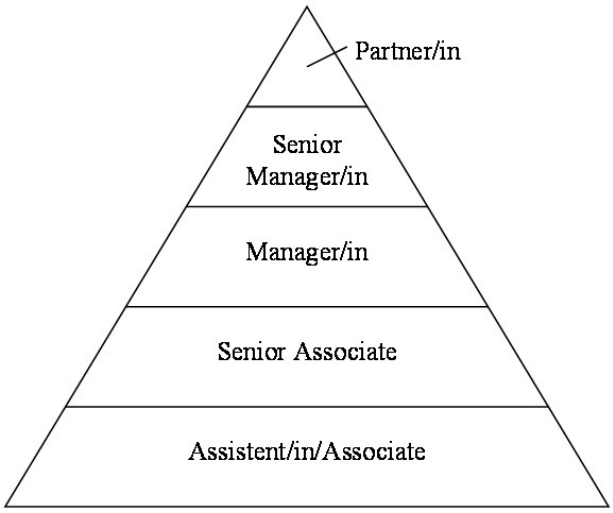


Source: KAISER/BÜRGER (2004, p. 401).

If you have created your own concept for an overview and have relied only partly on the literature, the corresponding source reference begins with the note: "Following:" (See Figure 9). For self-made figures or tables, please indicate as source

"own display" or "own editing".

Figure 9: Illustration with source reference (Variant 2):



Source: Own presentation based on BÜRGER (2005, p. 91).

4.2.5 Identification of content from other sources (citation method)

Every text passage taken from another source, either literally or in terms of content, every reference to the thought processes of other authors or the adoption of data and other facts from other sources must be marked accordingly according to the general rules of scientific work. The marking is divided into two steps:

- At the point in the text that cites foreign thoughts, data or a quotation, the source of the thought or data is indicated.

[3] EMPEROR/CITIZEN (2004, P. 401). This footnote is an alternative to the figure below. Please use only one of the methods.

- This source must then be included in the bibliography. Most important is that the source can easily be found in the bibliography and is thus searchable.

4.2.5.1 Quotes

Literal transfers (direct quotations) are enclosed in quotation marks. If such quotations are incompletely adopted, two dots are to be set instead of a single omitted word, if two or more words are omitted, three dots are to be used. Explanatory or supplementary additions to a quotation are indicated by square brackets. Translations by the author are to be marked as such. The source must be indicated after the closing quotation marks.

Longer quotations should not be made without comment, but should be introduced into the text and, if necessary, separated from the text (then possibly in one line), e.g.:

> Buchholz emphasises: „From the shareholders' point of view, the right to choose the revaluation reserve should be critically assessed if the tangible asset is used in the company."[4]

Shorter quotations can be included in the text, grammatically changed words are shown in brackets, e.g.:

> Buchholz emphasizes: "The right to choose the revaluation reserve must be critically assessed […] if […] tangible fixed assets are used in the business."[4]

Keep in mind that direct quotations often have a stylistic function. They always act like an exclamation mark in the text. Use them sparingly.

A **quotation in terms of content (or indirect)** is not enclosed in quotation marks, but must also be marked as a quotation (citation) and uses the subjunctive, e.g..:

> Buchholz emphasizes that the right to choose the revaluation reserve should be viewed critically from the shareholders' point of view.[4]

A secondary quote is a quote taken as a quote from another source (secondary source) because the other source is not *objectively* accessible. It is treated like a normal quotation, but the source must be referenced to the original source as follows:

> bibliographical data of the (older) original source, cited after: (more recent) source from which the quotation was taken, e.g. Grupp (1977, quoted from Egner, 1980, p. 94 ff.).

A **quote in a quote** is a quote that is in turn in a longer literal quote. It is placed in single quotation marks and does not need to be verified (separately). The author's work from which the entire quotation (including the embedded quotation) originates is sufficient as a source reference.

[4] Here must now be the source of Buchholz.

4.2.5.2 Transfer of general content

If thoughts, data or facts are taken over from sources, then the original source must be proven. This is done by a short documentation, which is inserted at the corresponding word or at the end of the respective thought. For the formal design of these short documentations, there are many variations, which often only differ in small details.

A short documentation consists of

- the name of the author,
- the year of publication and
- the corresponding (exact) page number.

In the case of up to two authors, both names are usually written out (Jehle/Walther, 2016, p. 5), from three authors onwards use et al. (which stands for "et alii" or "et aliae" and means "and others") is placed after the first name (Jehle et al., 2016, p. 18). This rule only applies to the short documentation. All names are written out in the bibliography. The first name can be written out as well (abbreviated). It is important that the source can be clearly identified in the bibliography. In the case of several contributions by an author or a team of authors with the same publication year, a letter will be added to the year (Jehle, 2016a, p. 67). If several sources are to be named as evidence for the same statement, the short documentations (separated by comma or dot) are listed one after the other. Some authors generally mark a quotation with the addition "cf. (compare) to distinguish it from a direct quotation (only for quotations there is no compare). Ask your supervisor about this as well.

Here are some examples of short documentations:

[1]See. Jehle, N. (2007), p. 4.
[1]See. Jehle (2007), p.4.
[1]See. Jehle, 2007, p.4.
[1]Jehle (2007: 4).
[1]Jehle et al. (2016):25, Frischdorf (2009), p.4.
[1]Jehler, Walter, 2016: 25.
[1]Harenberg/Jehle 2015, p. 163

Important! However you design the citation, ensure that the method is consistent as it is in scientific work.

4.2.5.3 Short documentation details

For listings, the footnote is behind the colon, e.g. the university highlights the following aspects:[1]

- Aspect 1
- Aspect 2
- ….

If the reference consists of several pages in the cited source:

[1]See. Jehle (2007), p. 4 f. (next page)
[1]See. Jehle (2007), p. 4 ff. (following, several pages)

For legal texts write the name of the law and the section (sect.), paragraph (para.), sentence in your main text. In the short documentation you add where and when it was published.

Example: Assets acquired through payment are valued at acquisition cost upon their addition in accordance with Sect. 253 para. 1 sentence 1 in conjunction with Sect. 255 para. 1 HGB (BGB1. 2009, I p. 2512).

For comments, margin number (m.n.), text digits (t.d.) etc. need to be specified.

Example: [1]See. Förschle/Kroner (2006), § 246m.n. 86.

If the author cannot be identified use 'Anonymous' or 'Anon' and the title of the work and date of publication. The title should be written in italics. Every effort should be made to establish the authorship if you intend to use this work as supporting evidence in an academic submission.

Example: Marketing Strategy, Anon., 1999.

Please also note the following formalities:

- All footnotes begin with a capital letter and end with a full stop.
- Between "p." and page number (as well as between page number and "f.") belongs a blank space: p. 4 f.
- The same applies to "m.n.", "t.d.", sect., para. Etc. as well as between the paragraph sign "§" and the number if used.

If sources from the Internet are cited and no author can be identified, the owner of the website (identifiable to you) must be written in the footnote, e.g.

[1]See. IDW 2010.

If you link websites, remove the automatically generated hyperlinks. Please store internet sources on a data carrier and hand it in with your work. Many internet sources are also available as print versions (e.g. articles in journals). If possible, quote these.

4.2.6 Annex

Only complementary information is to be included in the Annex. Elements that explain the text (e.g. graphics, illustrations, overviews), or are even necessary for understanding, usually belong in the text. Questionnaires as well as interview guidelines and the data collected with them belong, for example, to the Annex of a scientific paper, whereas the evaluation has to be carried out in the main text.

4.2.7 Declaration of authorship

Theses are only accepted if you submit the following declaration (it will be checked during submission of your thesis)

I hereby declare that the thesis submitted is my own unaided work. All direct or indirect sources used are acknowledged as references. I am aware that the thesis in digital form can be examined for the use of unauthorized aid and in order to determine whether the thesis as a whole or parts incorporated in it may be deemed as plagiarism. For the comparison of my work with existing sources I agree that it shall be entered in a database where it shall also remain after examination, to enable comparison with future theses submitted. Further rights of reproduction and usage, however, are not granted here. This paper was not previously presented to another examination board and has not been published.

4.3 Bibliography

The bibliography lists **all** (and **only** the) sources listed in the text *in alphabetical* order of authors. Don't spice up your literature list with works you haven't even had in your hand, but don't leave out any titles to cover up a plagiarism either. The following are commented examples of the most common cases of literature sources. The examples show the minimum requirements. If you use types of sources that are not listed here, proceed in a reasonable and analogous way. If in doubt, ask your supervisor.

4.3.1 Independent work (monograph)

All authors of the source must be listed in the order given. First and last names are listed in reverse order (surname, first name). First names can be abbreviated with the initials (ensure consistency!). Academic titles and job titles are not listed. The names are followed by the year of publication. If you use an author or the same team of authors more than once in different publications within the same year, they are to be listed one below the other. The first work is given the year, e.g. 2001, the second 2001a, the third 2001b etc. followed by the title and subtitles. Use the year of the latest edition of a book which is generally stated on the back of the title page. Include the number of the edition in your full reference (e.g. 3rd edition), after the title. Do not include this if it is the first edition. Place of publication and publisher are listed at the end. If the source length extends one line, the following line must be indented. Use a full stop at the end of the source.

Names of the authors can also be written in italic or bold. Many variants to set punctuation marks exist (comma, dot, double dot, semicolon, slash etc.), but choose a variant and use it consistently.

Author, Initials., Year. Title of book. Edition. Place of publication (city): Publisher.

Example:

Redman, P., 2006. Good essay writing: a social sciences guide. 3rd ed. London: Open University in assoc. with Sage.

4.3.2 Article from a collected work

The name of the author(s) and the title of the article in the collected work are cited as in the case of a monograph. It follows the title of the collected work with the prefix “In”. You should include details of both the chapter author followed by the details of the entire work.

Author, Initials., Year (of cited article in the collected work). “Title of the article”. In: Title of the collected work. Place of publication (city): Publisher.

Example: Smith, J., 1975. A source of information. In: W. Jones, ed. 2000. One hundred and one ways to find information about health. Oxford: Oxford University Press. Ch.2.

4.3.3 Journal article

A basic journal reference requires the following elements in presented order:

Author. Initials., Year. Title of article. Full Title of Journal. Volume number (Issue/Part number), Page number(s).

Boughton, J.M., 2002. The Bretton Woods proposal: a brief look. Political Science Quarterly, 42(6), p.564

4.3.4 Newspaper articles

Newspaper articles require the following elements in presented order:

Author or corporate author, Year. Title of document or page. Name of newspaper, [type of medium] additional date information. Available at <url> [Accessed date].

Chittenden, M, Rogers, L. and Smith, D., 2003. Focus: Targetitis ails NHS. Times Online, [online] 1 June Available at: http://www.timesonline.co.uk/tol/news/uk/scotland/article1138006.ece [Accessed 17 June 2019].

4.3.5 Internet articles

E.g. web-based magazines, journals, Open Access articles found in institutional repositories.

Internet articles require the following elements in presented order:

Authors, Initials., Year. Title of article. Full Title of Journal or Magazine, [online] Available at: web address (quote exact URL) [Access date]

Kipper, D., 2008. Japan's new dawn. Popular Science and Technology, [online] Available at: http://www.popsci.com/popsci37b144110vgn/html [Accessed 22 June 2009].

4.3.6 Laws

Court Decisions, Court Orders use the following pattern: D. f. = Decision from, O. f. = Order from

Example:

BFH, D. f. 11.28.1980 – VI R 193/77, BStBl. 1981 II, p. 368.
BFH, O. f. 07.23.1999 – VI B 116/99, BStBl. 1999 II, p. 684.

4.4 Other formalities

In addition to the submission of the printed and bound work, a CD with the work as a file (to identify plagiarism) as well as all quoted pages from the Internet must be submitted to the Studienbüro.

5 PLAGIARISM

Plagiarism is an attempt to deceive and leads to the grade "not passed"! If you plagiarise, you have missed the learning objective, you will obtain a better grade than, for example, your honourable fellow students and build up your further access authorisations and jobs on false proof of performance.

Plagiarism results from the fact that you do not specify a source. This does not only mean Copy & Paste or the copying of a text. Translating a foreign-language text into German (even if it is translated freely) is plagiarism if you do not state the original source. Plagiarism also occurs when you mix different pieces of text such as puzzle pieces from different sources and do not specify them.

Assume that your text is checked using plagiarism detection software. The examination is based not only on openly available texts (Internet), but also on previous homework and theses stored in corresponding databases. The software "Turnitin" is often used at the HWR. Your supervisor can ask you to upload your work there and you will receive a password.

LIST OF REFERENCES

Our short overview cannot provide complete information on the basic rules of scientific work. Further information can be found in other books. If you have any questions, please ask your supervisor!