## UNIVERSITY OF TARTU

School of Economics and Business Administration

### STUDENTS' WRITTEN ASSIGNMENTS

Methodological guideline

Tartu 2023

#### Table of contents

Table of contents
Introduction
1. Composing the written assignment
1.1. Types of students' written assignments
1.2.Choosing the topic
1.3. Structure of the assignment
1.4. Working with academic literature
1.5. Ethics considerations and avoiding plagiarism
1.6.Cooperation between the student and supervisor14
2. Formatting the assignment
2.1.General requirements
2.2.In-text citation
2.3. The language of the written assignment
2.4. Tables, appendices, figures, formulas and lists
3. Submitting, defending and assessing the written assignment17
3.1.Submitting the assignment17
3.2. Defending the written assignment
3.3.Assessing the assignment
Appendix A. OPINION OF THE REVIEWER25

#### Introduction

This guideline contains recommendations and requirements for the students of the University of Tartu School of Economics and Business Administration (hereinafter SEBA) for composing and formatting written assignments. It also contains information about the submission, defence and assessment of the assignments.

Most points from this guideline apply to all written assignments undertaken by students. The general term "assignment" has been used to refer to them in this document. If necessary, differences in requirements have been emphasised.

This guideline on students' written assignments contains more information about the following types of assignments:

- bachelor's level:
  - research paper
  - bachelor's thesis
- master's level:
  - master's thesis as a monograph
  - master's thesis in the form of an article<sup>1</sup>
  - case study of economic problems<sup>2</sup>

In the first chapter, the types of students' written assignments from different curricula are listed first, including the general requirements that have been established. Next, recommendations are given for choosing a topic for the written assignment. The guideline provides information about the requirements for the structure of the assignment, how to work with academic literature and which ethical requirements the assignment has to meet (incl. avoiding plagiarism). When writing the assignment, it is important to cooperate with a supervisor<sup>3</sup>. It is not possible to submit research paper or thesis without having formal supervisor from university. This guideline also contains suggestions about this. In the second chapter, requirements for formatting the assignments are given, including how to cite sources correctly, how to compile tables, appendices, figures etc. The development of artificial intelligence and text bots has led to changes in text creation and academic writing. The guideline describes how to refer to and ethically use artificial intelligence when preparing written assignments. The third chapter gives an overview of the submission, defence and assessment of assignments.

<sup>&</sup>lt;sup>1</sup>The specific requirements are available on SEBA's homepage under the materials of the relevant curriculum.

<sup>&</sup>lt;sup>2</sup>The specific requirements are available under the course materials of the respective course.

<sup>&</sup>lt;sup>3</sup>A written assignment can have several supervisors but for the sake of the reading experience, the singular form has been used in this guideline.

#### 1. Composing the written assignment

#### 1.1. Types of students' written assignments

In this section, the written assignments that students need to write during their studies in both the bachelor's and master's programmes are described.

A research paper, case study of economic problems and thesis (bachelor's and master's theses) are academic works written independently by the student. These need to be in accordance with the requirements given in this methodological guideline and are written on topics assigned by the supervisor or suggested by the student, if the topic is accepted by the supervisor. When writing the assignment, students shall demonstrate their skills in formulating and establishing limitations to the research problem, finding and using the relevant scientific literature, setting a specific research aim and research tasks, selecting an appropriate research methodology and empirical material for completing the tasks, analysing data based on the relevant theoretical or conceptual frameworks, finding answers to the research tasks set in the assignment as well as analysing and generalising the findings of the research. It is important for the student's contribution in solving the research problem, synthesising the scientific literature, applying the research methodology and analysing as well as generalising the findings of the research to be clearly presented.

The completed written assignment also needs to demonstrate that the student has acquired the use of language and formatting skills necessary for undertaking scientific research.

During the bachelor's programme, all students need to write a **research paper** in the autumn semester of their third nominal year, as this will be developed into a bachelor's thesis in spring (taking the bachelor's graduation exam is an alternative to the thesis). The first step of composing the research paper is choosing the topic of the bachelor's thesis and submitting a graduation thesis application about the topic by the date marked in the academic calendar. The schedule for writing the research paper, the deadlines for submitting parts of the work, and the form as well as the time of receiving feedback from the supervisor are agreed between the student and the supervisor.

The essence of the research paper is to compose an overview of earlier empirical research (scientific journal articles, reports on policies) on the topic chosen for the bachelor's thesis, at first defining the key concepts related to the topic. In addition to this, it is necessary to formulate the research problem of the bachelor's thesis, to select the appropriate methodology for solving the problem and to justify it, and to describe the data intended to be

used. Thus, during the process of writing the research paper, the student needs to acquire the skills of working with academic literature, setting a research problem, choosing an appropriate methodology and data for addressing it. In addition, the aim of writing the research paper is to acquire the skills of correct written self-expression (scientific use of language and academic terminology) and formatting (following the requirements set in this guideline).

A thesis (both on the **bachelor's** and **master's levels**) is an analytical assignment with a clearly defined problem where scientific methods are applied in order to address a specific object of research. The **bachelor's thesis** is a development of the research paper in two ways: 1) adding a theoretical approach to the work and 2) conducting an empirical analysis based on the methodology and data from the research paper.

The aim of the **case study of economic problems** is to compose and defend a more practical assignment. The case study is to be written by a master's student as an independent research project under the guidance of a supervisor. The structure, methodology and research problems of the case study are coordinated and discussed with the supervisor of the case study.

The approximate volumes and requirements for the content of students' written assignments depend on the curriculum and level of study (see Table 1). The higher the level, the smaller the part presenting other authors' views and the greater the synthesising part offering new knowledge need to be.

The bachelor's level research paper, the bachelor's thesis and the master's level case study of economic problems are to be written independently, the master's thesis can have two authors.

#### **1.2.** Choosing the topic

The topics offered by potential supervisors are listed on SEBA's homepage at the beginning of each academic year. The deadlines for choosing a topic are given in the academic calendar and the relevant graduation thesis application forms are available on SEBA's homepage. Students need to choose something from the provided topics or suggest their own topic.

When choosing the topic, it is advisable for the student to mind the following:

- how topical and original the topic is
- how specific and defined the topic is
- access to the scientific literature and empirical information

• their interests and abilities

#### Table 1

Type of assignment Volume of the No. of In use in the Credit points content (chapters) in authors of following (ECTS) programmes pages the assignment Bachelor's level research 3 8-12 BA, BBA One paper Bachelor's thesis 6 25-30 One BA, BBA Master's thesis as a 20 35-40 One or two KAMA, monograph TUFI, SJ, ETJ Master's thesis as a CAMES 30 45-60 One monograph Master's thesis in the form 20 25-40 One or two KAMA, TUFI, of an article (preferably in SJ, ETJ, English)<sup>4</sup> MTM, ITM Case study of economic 10 KAMA, 20-25 (incl. the One problems<sup>5</sup> theoretical section TUFI, SJ, ETJ 8-10 pp., the empirical section 12-15 pp.)

The volume and number of authors in students' written assignments

Note: BA – Business Administration (bachelor's program in Estonian), BBA – bachelor's programme in English, TUFI – master's programme in Marketing and Financial Management, SJ – master's programme in Strategic Management, ETJ – master's programme in Entrepreneurship and Technology Management, MTM – master's programme in Quantitative Economics, ITM – master's programme in Innovation and Technology Management; CAMES- Contemporary Asian and Middle Eastern Studies; KAMA – master's programme in Contemporary Economy

Before making the final choice, the topic and content of the written assignment need to be discussed and agreed with the potential supervisor. It is advisable to start the process of choosing the topic early since there might be competition for the more popular topics and supervisors.

#### **1.3. Structure of the assignment**

Table 2 shows the individual parts that the assignment consists of in the order in which they appear in the work. Please note that an abstract only needs to be written for a master's thesis written in the form of an article. A foreign-language summary (up to 500 words) needs to be written in English in the case of bachelor's and master's theses written in

<sup>&</sup>lt;sup>4</sup> The guideline for writing a master's thesis in the form of an academic research article can be found on SEBA's homepage under the course materials of the relevant curriculum.

<sup>&</sup>lt;sup>5</sup> The guideline for the case study of economic problems is available under the course materials of the relevant course.

Estonian, and in Estonian in the case of theses written in English. A foreign-language summary is not necessary in the case of research papers and case studies of economic problems. Submitting a non-exclusive licence is necessary in the case of bachelor's and master's theses (for monographs and articles both).

The **title page** of the students' written assignments needs to contain the following items:

- the name of the university and the School of Economics and Business Administration;
- the first and last name(s) of the author(s);
- the title of the assignment;
- the type of the assignment (e.g. research paper, bachelor's thesis, master's thesis etc.);
- the supervisor's name together with their position (professor, lecturer etc.);
- the place (Tartu) and year of defending the assignment.

With the author's declaration on the overleaf of the title page, the student confirms that they have completed the assignment independently and that all other authors' works and data used in that assignment are cited.

	Bachelo	or's level	Master's level		
	Research	Bachelor's	Master's	Master's	Case study
	paper	thesis	thesis as a monograph	thesis in the form of an article <sup>6</sup>	of economic problems
Title page	X	Х	Х	Х	Х
The author's declaration about writing the assignment independently (on the overleaf of the title page)	Х	Х	Х	Х	Х
Table of contents Abstract	Х	Х	Х	x	Х
Introduction	Х	х	Х	X	х
Content	Х	х	Х	Х	х
Conclusion	Х	Х	Х	Х	Х
List of references	Х	X	Х	Х	х
Appendices (if necessary) Foreign-language summary (résumé)	х	x x	X X	x x	Х

#### Table 2

c 1. cc

<sup>6</sup>A specific guideline regarding the structure of a thesis written in the form of an article can be found in the guideline of writing theses in the form of academic research articles, which is available under the materials of the relevant curriculum.

In the **table of contents**, it is necessary to list all subheadings of the written assignment which are in exact accordance with the headings and page numbers where the relevant subsections actually start within the work. Hence, the table of contents consists of the serial numbers in front of the subsections, the headings and page numbers of the subsections. Only the content chapters and their subsections are marked with serial numbers (Arabic numerals in the decimal system, e.g. 1.; 1.2 etc.). All appendices are to be listed in the table of contents separately together with their headings.

If heading styles (Heading1, Heading2 ...) are used for formatting the headings throughout the written assignment, the word processor will compose the table of contents automatically. The advantage of an automatically composed table of contents is that the formatted headings and page numbers within the document and the table of contents match. However, it needs to be checked that the font of the automatically produced table of contents would also be *Times New Roman*, font size 12 pt. and line spacing 1.5.

The aim of the **introduction** is to:

- Justify the relevance of the topic and why it was chosen. To explain why addressing this problem is important for you as a researcher, but first and foremost for society. Substantive argumentation is the best form for the reasoning, not appealing to the opinions of third parties. The research problem needs to be presented as specifically as possible, analysing its background and research gap.
- Set the aim and limitations of the assignment: what and why will be discussed in the written assignment and what solutions are searched for; why setting such a research problem is necessary and where the findings of the research could find application and development. The aim of the assignment needs to state clearly what the desired results of the research are.
- Formulate the research tasks: this helps to specify the stages that need to be passed to achieve the set aim. The final research task needs to lead to achieving the aim and be in accordance with it. The research tasks cannot surpass the aim that was set or deviate from the direction of the aim.
- Explain the structure of the written assignment: which parts the content consists of (a couple of sentences about each subchapter) and how the parts of the assignment are related in order to achieve the aim.

8

- Briefly introduce the theoretical background, the data and methods used.
- At the end of the introduction, you can point out people or institutions who helped you in composing the assignment. If the assignment is based on some of the student's previous assignments to a significant extent, it needs to be noted in the introduction (except for the research paper that was developed into the bachelor's thesis). It is also necessary to point out if the assignment was composed in relation to performing work duties (e.g. if the author uses text, data etc. from a report they composed for work purposes).
- The volume of the introduction is 5-10% of the volume of the content (except for master's theses written in the form of an article).
- List keywords characterising the written assignment at the end of the introduction. You can use the English version of the <u>Estonian Subject Thesaurus</u> for finding up to five keywords. In case suitable keywords are missing, it is allowed for the author to suggest the keywords.
- In the case of master's theses, list <u>research classification code(s) (CERCS)</u> at the end of the introduction.

In the **content section**, the student is completing the research tasks necessary for achieving the aim set at the end of the introduction. As a rule, the content section of a thesis needs to contain both the theoretical as well as the empirical parts (not in the case of research papers). The ratio of the theoretical and empirical analyses depends on the topic under research and the aim that was set. When structuring the chapters, it is recommended to opt for two-level subdivisions (1.1, 1.2 etc.). At that, it needs to be observed that the chapters and subchapters of the assignment would be proportionate in terms of the volume.

Generally, in the **theoretical part** of the assignment first the key concepts of the research problem are defined, then the basic theoretical positions are presented on the basis of scientific literature, and an overview of the findings of similar earlier empirical research is given.

In the **empirical part** of the written assignment, first the data used for conducting the analysis are introduced, also describing how they were collected. In case an organisation was studied, this also needs to be introduced. It is advisable to describe the research process as in much detail as possible, followed by a substantive data analysis, presenting the findings and conclusions of the analysis together with relevant tables and figures. The good practice is that the description of the research process should be detailed enough in order for somebody else

to be able to repeat the research. Depending on the research problem, the availability and nature of the data etc., the decision is made for using a quantitative or qualitative method, or a combination of both. The selection of the method(s) needs to be justified substantially, also outlining which approach has been used in similar assignments previously.

In the case of quantitative research, it is not necessary to describe common methods (e.g. correlation or regression analysis), but the software for data processing used in the analysis needs to be noted (e.g. SPSS, STATA etc.). The results of the empirical analysis need to be related to the theoretical perspectives that were presented earlier – how the results received resemble and differ from what was claimed in theoretical chapter.

In the case of the qualitative approach, the research process needs to be described in depth (e.g. how the interviewees were selected, how long the interviews were, in which format and when they were conducted, how the analysis was conducted, adding coding tables etc.). Presenting qualitative findings cannot be a retelling but a logical analysis, relating the findings with what was stated in the theoretical chapter and confirming the key messages with short quotes from the interview, for example.

Although students' written assignments do not usually bring about fundamental innovation in economic theory, each assignment needs to have a clear **personal contribution** of the student to addressing the problem. This can be indicated in the form of comparing the evidence provided by different authors in combination with the student's own view and assessments; in generalisations, conclusions or operational suggestions relying on the researched material; in evaluating the applicability of some theories or models under specific conditions (based on specific data) etc. Additionally, it could be a generalisation of the findings of the empirical analysis, combining the theoretical part with the findings of earlier research etc.

The **conclusion** serves to provide answers to the questions raised in the introduction, to indicate the opportunities for completing the set research tasks and to reveal the findings. The main aim of the conclusion is to:

- present the theoretical basis that was described in the content section of the assignment, the main results of the empirical analysis, assessments etc.;
- point out the conclusions or suggestions arrived at in the course of the assignment as well as possible areas for further research. The conclusions or suggestions need to be derived directly from the analysis conducted during the writing of the assignment.

In the conclusion, the student's contribution to achieving the aim and to completing the research tasks mentioned in the introductory section need to be displayed. In the conclusion, the aim is not to be repeated, new research problems are not set, new sources are not included, positions are not presented or conclusions drawn in matters that have not been discussed in earlier sections. In the conclusion, equal attention needs to be paid to all content sections of the assignment. However, the conclusion cannot be a mechanical compilation (copying and pasting) of paragraphs from previous sections. The volume of the conclusion is, similarly to the introduction, approx. 5-10% of the volume of the content (except for if the master's thesis was written in the form of an article).

The **list of references** has to contain all sources that were cited in the written assignment (incl. the interviews the author conducted, enquiries via e-mail etc.) and all sources that appear in the list of references need to be cited within the text of the assignment. The sources need to be numbered and ordered alphabetically based on the surnames of the authors. If there are no authors' names, then on the basis of the first word of the title.

In the case of written assignments at SEBA, the <u>APA (American Psychological</u> <u>Association)</u> version 6.0 needs to be followed for in-text citations and the list of references. It is necessary to include the DOI number, or in case of its absence the URL link, of scientific journal articles and serial publications taken from online databases. It is advisable to use the reference management software <u>Zotero</u> as a tool for managing references.

**Appendices** are for presenting numerical data and other materials that are important for addressing the research problem, but which do not need to be included in the text itself, or if they are too voluminous to be included in the main text. Appendices and their headings (without measurement units) are to be listed in the table of contents as well. The appendices need to be listed in the order in which they appeared in the text. Including appendices that are weakly related to the main text of the written assignment should be avoided. Tables and figures placed in the appendices are not numbered. Each figure or table that is included as an appendix is to be an independent appendix. Several small appendices can be placed on one page. The survey questionnaire used in the assignment needs to be presented as an appendix and if (rating)scales were used together with it, a description of the scales needs to be presented in the questionnaire as well as the figures and tables compiled on the basis of it. If necessary, the font size in appendices can be smaller than 12 pt.

A short foreign-language summary or **résumé** of up to 500 words long is placed at the end of bachelor's and master's theses. If the assignment was in English, the résumé is

expected to be in Estonian and vice versa. The résumé needs to provide a generalised and sufficient overview of the written assignment and an exact translation of the assignment's title needs to be presented.

Bachelor's and master's theses are to be submitted together with an electronic **non-exclusive licence** (permission) allowing the preservation and publication of the thesis in the digital archives of the University of Tartu Library. The non-exclusive licence needs to be at the end of the document in the same file as the electronic thesis (in a PDF format) and it is a prerequisite for the author to be allowed to defend the thesis. The non-exclusive licence does not need to be signed. See more: <u>Publication Procedure of Graduation Theses</u>.

#### **1.4.** Working with academic literature

Finding the literature necessary for writing the assignment, processing it, analysing and synthesising it is the student's responsibility. Via the online consolidated directory <u>ESTER</u>, users have access to the directories of all major libraries in Estonia. The <u>databases</u> most used at SEBA are, for instance, EBSCO, Emerald Insight, Science Direct, Sage Journals Online, Scopus etc. There are several search engines available for finding materials online, e.g. <u>Google Scholar</u> etc. When first starting to work with the literature, attention needs to be paid to getting to know the key concepts related to the topic. The literature chosen for indepth analysis needs to be as versatile as possible, covering different authors. Basing the written assignment only on the texts of one author is not appropriate. Primarily, the research of renowned scientists in the relevant field of study should be used as literature sources. Popular science materials, journalistic articles, textbooks and course materials can only be used in exceptional circumstances when comparing the points of view presented in them with the empirical information from scientific sources. Caution is advised when using earlier bachelor's and master's theses as their quality can vary.

In the case of some topics, there is a vast amount of material available. Should this occur, the aim should not be to use as many sources written on the topic as possible when composing the assignment. Rather, the ones with the highest quality and relevance should be chosen.

#### 1.5. Ethics considerations and avoiding plagiarism

When composing written assignments, research ethics principles need to be observed in full. Thereby, the main principles always need to be observed: as it is scientific work, scientific sources need to be relied on in the writing process, and other authors' thoughts need to be cited correctly. **All viewpoints of other authors, the research problems they set,** 

**quotations, numerical data, schemes etc. need to be cited accurately as a citation or by paraphrasing.** The sources that the author actually used need to be cited. If it is not possible to get access to the original source, secondary source citation has to be used. Citing sources correctly means that the reader has to be able to find the original source from which the according excerpt or reasoning was taken using the information provided in the reference so that the text can be checked or more can be found out about it.

If one of the author's earlier written assignments was relied on when writing the thesis, this also needs to be cited according to the rules and the original text has to be either paraphrased or presented as a quotation, not copied again verbatim (except for the research paper that was developed into a bachelor's thesis and thus constitutes a part of the thesis).

Submitting content created by artificial intelligence and text bots under one's own name should be considered as academic fraud. So, while a text bot can be a useful tool, the student needs to understand that the content produced using it needs to be referenced. If the text robot is used as a source or as an aid for text creation, it must also be correctly cited. For example, "I used the chatbot ChatGPT to organise my notes on xx.xx.xxx". The APA Citation Style Guide to citing ChatGPT is a good resource for understanding how to correctly cite textbots <u>https://apastyle.apa.org/blog/how-to-cite-chatgpt</u>

When using text bots, one must be careful when entering personal data. Without the consent of a specific person, his/her personal data may not be entered into the text robot. It is definitely necessary to critically evaluate the output of text bots, as they may provide information out of contect or be misleading. At the same time, the student must always consider that the content created by artificial intelligence is not necessarily true and must always be checked. For more information on the use of AI, see:

#### https://ut.ee/en/node/151731

**Plagiarism** or the theft of intellectual property is presenting other authors' work, parts or sentences from them, ideas or key concepts contained in them in your own written assignment so that without proper academic referencing, other authors' ideas are attributed to the author of the assignment. There are various forms of plagiarism and their level of severity differs. Nevertheless, plagiarism is still plagiarism. The idea that adding a reference to a text excerpt solves the issue of plagiarism is wrong.

Before submitting the thesis for defence, it is advisable to first check for any possibilities of plagiarism. The plagiarism detection system Ouriginal enables to check how original written assignments are, meaning that you can compare them with publications that are online, in the databases of the University of Tartu Library and other student assignments. Ouriginal can be used via Moodle. NB! Ouriginal and other plagiarism detection systems only have a supportive role and cannot guarantee that there is no plagiarism in the assignment

at all as they cannot recognise all mistakes. Eventually, the responsibility lies with the author of the written assignment.

#### 1.6. Cooperation between the student and supervisor

The cooperation between the student and supervisor starts with choosing the topic and ends with defending the work. The supervisor will advise the student when specifying the topic, establishing the main problems, wording the aim and research tasks, choosing the research method and will give recommendations for finding appropriate sources. At the beginning of the cooperation, the supervisor and supervisee will establish mutual xpectations and cooperation rules, e.g. the most important deadlines, preferred communication channels, means of providing feedback to the assignment etc.

The student will keep the supervisor up to date with the work process and will turn to the supervisor or other members of the teaching staff for advice, explanations or consultation. In order to finish the assignment on time, any possible obstacles and delays need to be taken into account which might occur in the period of composing the assignment. The student needs to inform the supervisor of any difficulties that have occurred, any possible changes in the set research problem, wording the topic and other similar matters.

The supervisor will point out any mistakes and shortcomings in the assignment, to weaknesses in argumentation and structure, will evaluate the research methodology and terminology. The supervisor is not the co-author or editor of the student's assignment, their task is not to correct the content of the assignment, not to mention linguistic and stylistic errors. The student is responsible for the accuracy of their written assignment's data and viewpoints.

The supervisor's role is specified in the <u>good practice of supervising</u> approved in Social Sciences.

#### 2. Formatting the assignment<sup>7</sup>

#### 2.1. General requirements

The assignment needs to be formatted according to the requirements of <u>APA</u> (<u>American Psychological Association</u>). In comparison to the rules of APA, SEBA has the following exceptions:

- instead of double spacing, 1.5 spacing needs to be used;
- when formatting tables, figures and appendices, instead of double spacing, the text needs to be single spaced;
- the headings of chapters and subchapters need to be numbered;
- the list of references needs to be numbered;
- all pages of the assignment need to be numbered (except for the title page).

14

## STUDENTS' WRITTEN ASSIGNMENTS **2.2. In-text citation**

At SEBA, **in-text citations** are used, in the case of which the reference needs to be written in parentheses after the text that is cited. There are two types of in-text citations: 1) paraphrasing, 2) direct quotation.

**Paraphrasing** presents the viewpoints or some parts of the text that another author presented in their work by rewording it, using the student's own words. It is very important to observe that the original would be paraphrased sufficiently. In the case of paraphrasing, quotation marks are not used, but it is necessary to cite the relevant source or author and the year when the work was published. Also, adding page numbers in the case of paraphrasing is not necessary. **If the assignment contains a verbatim translation, a complete or close representation of text from the original source and it is not formatted as a quotation, it is a case of plagiarism even if it is cited correctly.** In the case of lists, a reference to the source needs to be placed at the beginning so that it would be clear that this is not the author's creation. Sometimes, paraphrasing can rely on the different works of several authors, in the case of which all of them need to be cited. When writing the assignment, attention needs to be paid that the ratio of paraphrased text would not predominate. It is unacceptable if in some subsection there is no contribution of the author at all and the text consists completely of paraphrased material.

A **direct quotation** needs to be a precise match of the original in wording, orthography, punctuation as well as special features (spacing between letters etc.). In the case of a quotation, own words are not added, words changing the author's point are not omitted, in a quotation it is not allowed to join excerpts of different sentences into one sentence. Any parts of the sentence or words that are omitted by the author (since they are consider unnecessary) are to be replaced with three dots. A quotation needs to be presented using quotation marks. The reference is placed directly after the quotation marks. Quotations are used in exceptional circumstances when it is necessary to reproduce the exact wording (it is important, for instance, when comparing definitions). In the case of a quotation, in addition to stating the author(s) and the year of publication, the **page number** from which the quotation was taken also needs to be given.

#### 2.3. The language of the written assignment

The text of the assignment needs to be logical and coherent as well as unambiguous. In Estonian curricula, the language of the written assignments is usually Estonian but as an exception theses can be written in English as well. If the master's thesis is written in the form of an article, English is preferable. When writing the assignment, it is important for it to be in correct language and style so that the author's discussion of problems, reasoning and

<sup>&</sup>lt;sup>7</sup>All technical examples regarding the formatting of the written assignment are available in the assignment template that can be found on SEBA's homepage under the materials of the relevant curriculum

conclusions could be followed easily. Here are some tips for achieving this.

**The use of language** needs to be strictly academic. Wordiness and repetition need to be avoided. Using the style of lecture notes and slang, journalistic, populist, daily and poetic phrases have no place in students' writing. Additionally, the use of (over)emotional adjectives when characterising phenomena or processes needs to be avoided.

After having adopted some terms and symbols, these need to be used consistently throughout the whole assignment. Synonyms should be avoided when presenting scientific terms.

The **grammatical mood and voice** in which the text is written needs to be consistent throughout the text. Using the personal voice ("I found" or "we found") as well as the passive voice ("the author found") is allowed. The indicative mood is preferable because using mostly conditional speech can leave the impression that the author is not quite convinced by the accuracy of their own standpoints.

**Orthography**. You can check the meaning of words and phrases as well as the spelling from online dictionaries, e.g. <u>Dictionary.com</u>, <u>Oxford</u>, <u>Merriam-Webster</u> or others. You can find out more about academic phrases and use of language from the <u>Academic</u> <u>Phrasebank of the University of Manchester</u>.

#### 2.4. Tables, appendices, figures, formulas and lists

In **tables**, data need to be presented in a systematic and generalised manner. Tables that are placed in the text of the written assignment should be as short and simple as possible. Usually, tables that are shorter than one page can be presented within the text. If the table is longer than one page, it should be placed in an appendix. The header or notes of the table need to contain all information that is necessary for the reader to understand the table (what the abbreviations stand for, the measurement units for numerical data etc.).

**Figures**. This term includes all illustrations that appear in the text, e.g. diagrams, graphs, geographical maps, drawings, schemes or photos. All figures need to have a title (placed under the figure) with a concise description of what is depicted in the figure. When designing a figure, it is necessary to bear in mind that the information there would be presented so that it can be differentiated and followed. For these purposes, use a suitable indication style.

Figures and tables are to be numbered. Each table and figure needs to have a title. Also, the source of each table and figure needs to be indicated. If the table has been compiled on the basis of published data, the source needs to be cited; if it is based on the author's calculations or data, this needs to be noted as such. Similarly, in the case of figures the source needs to be noted, or that the figure was compiled by the author.

**Formulas** are differentiated from the rest of the text with punctuation marks that obey the general rules of the English language. All symbols, numbers and letters need to be correctly placed within the formula and so that they are in accordance with the content of the formula. When formatting formulas, a formula editor needs to be used. Formulas need to be presented in a consistent style throughout the text. If there are several formulas within the text, they need to be numbered. The number of the formula is placed on the same line as the formula (preferably on the left) in parentheses. Measurement units are not marked within formulas, these are to be listed after the formula in the list of symbol explanations.

Items on a **list** are usually numbered when the order in which they occur is important or if any of the points is referred to within the text. Otherwise, the order indicators (numbers or letters) can be omitted and substituted with a dash or another symbol. Examples about punctuation in lists can be found <u>here</u>. Each level of the list needs to have at least two subpoints. All lists throughout the text need to be presented in a consistent manner and using various styles is to be avoided.

# 3. Submitting, defending and assessing the written assignment 3.1. Submitting the assignment

The finalised electronic version of the research paper, bachelor's and master's thesis or case study is to be uploaded in Moodle as a PDF-file by the deadline set in the academic calendar of the School of Economics and Business Administration. Assignments will not be accepted after the deadline has passed. In the case of bachelor's and master's theses, the supervisor will either approve the submission of the thesis for defence or decline the submission (in case the thesis does not meet the minimum requirements) in Moodle within three workdays after it was uploaded. In the case of both bachelor's and master's theses, a reviewer will be assigned after the supervisor has approved the thesis for defence. Only students, who have completed the rest of the curriculum in full and whose supervisor has approved the submission, are allowed to defend their thesis.

In the case of a master's thesis (both as a monograph and an article), there will be a preliminary discussion before the final defence during a period set in the academic calendar of the School of Economics and Business Administration. The complete version of the assignment that has been reviewed by the supervisor has to be submitted for discussion via Moodle by the deadline set in the academic calendar. No submissions will be accepted after the deadline has passed. The version of the thesis that is submitted for discussion, needs to contain all the main components (title page, table of contents, introduction, chapters, summary, list of references and annexes if applicable). The discussion is held between the author(s), supervisor and reviewer. The author(s) will be advised on how to improve the final version of the thesis, if necessary.

#### 3.2. Defending the written assignment

A short overview of the defence procedure based on the levels and types of written assignments are presented in Table 3.

#### Table 3

The procedure for defending the assignment

	Bachelor's level		Master's level	
	Research paper	Bachelor's thesis	Master's thesis as a monograph or an article	Case study
Preliminary discussion			Х	
Reviewer's written opinion		Х	Х	
Defence in front of the committee:				
- Presentation by the author(s)		Х	Х	Х
- Discussion with the reviewer		Х	Х	
- Discussion with the defence committee		х	Х	Х

The **research paper** will be assessed by the supervisor, there will be no defence in front of a committee. In case of the research paper, a reviewer will not be assigned.

In the case **of bachelor's and master's theses**, the defence will take place in front of a defence committee according to the previously published schedule. A written review (see Appendix A) will be submitted via Moodle two days before the defence at the latest so that the author of the assignment can get acquainted with the reviewer's questions and assessment, and prepare for the defence.

In the case of a **case study of economic problems**, the defence will consist of the student's presentation and questions from the defence committee members. No reviewers will be assigned to a case study.

The defence procedure of **bachelor's and master's theses** is the following:

- a presentation by the author(s) of the thesis;
- the opinion of the reviewer;
- debating with the reviewer;
- questions from the defence committee members;
- statements, the opinion of the supervisor;
- closing statement from the student.

When preparing for the defence, the author(s) needs to make a presentation. In the case of bachelor's theses, the length of the defence will be up to 10 minutes, and in the case of master's theses and case studies of economic problems up to 15 minutes. The visualised presentation should contain the following:

- title slide with the name(s) of the author(s) and supervisor(s);
- the choice and topicality of the research problem;
- the aim and research tasks;
- a short overview of the theoretical part and an introduction of the key concepts;
- an introduction of the methodology of the empirical research;
- the findings of the empirical research;
- conclusions, generalisations.

The presentation needs to show the student's own contribution to discussing the addressed research problems. The defended assignment and written presentation can be used at the defence, but they cannot be read off the paper/screen. It is advisable to illustrate the presentation with illustrative materials (schemes, figures). When using illustrative materials, they have to be compiled in such a manner that they are visible and unambiguous enough to be followed (e.g. the font size in regular text should be at least 22 pt., at least 28 pt. in headings) and appropriate in the academic context.

If the assignment has a reviewer, the student's presentation will be followed by the reviewer's assessment to the assignment. The task of the reviewer is to give an objective assessment to the work. The assignment needs to be assessed based on the criteria for content and formatting (see Table 4) which have been established for this type of assignments and have been given as requirements in this guideline. The reviewer will present their written assessment based on all assessment criteria separately. After that, the student will get the opportunity to answer the reviewer's questions.

After the debate between the reviewer and the author of the assignment, the members of the defence committee and any other participants in the public defence will have an opportunity to ask questions. The members of the defence committee and other participants in the defence can have a say about the assignment. At the end of the defence, the student will have the chance to make a concluding statement (also to thank advisers, the reviewer, supervisor and others).

The results of the defence are announced immediately after the minutes have been finalised, usually on the same day. When determining a grade, the defence committee will take into account the content and formatting of the assignment, the student's presentation, the assessment of the reviewer and how the questions were answered.

If a student disagrees with the grade they got for defending their thesis, they have the right to write an appeal to the Vice Dean for Academic Affairs within three workdays after the grade has been announced. The Vice Dean will summon a new committee to review the appeal within seven days from receiving the letter. This appeals committee will handle the

appeal within seven days from when the committee was summoned. The committee's meeting will be recorded and the results can be disputed by submitting an appeal to the committee within 30 days.

#### **3.3.** Assessing the assignment

**Research papers** are assessed by supervisors according to the criteria below and have non-differentiated assessment: "pass"/"fail". The supervisors add in Moodle their reasoning to the grade and suggestions for improving the paper. Research papers that meet the following criteria will get a "pass":

- the assignment's title, aim, research tasks, structure and content are consistent;
- the assignment's structure is characteristic to that of a scientific work, all compulsory parts of the assignment stated in this guideline exist;
- the number and quality of sources used in the overview of earlier empirical research enable to address the problem with sufficient thoroughness, methodological approaches common for academic assignments are used (in the case of the description, analysis as well as synthesis, generalising results), the sources have been properly cited;
- the suggested methodology and data are appropriate for solving the research problem, choosing them has been reasoned well;
- in the research, the author's contribution in analysing and synthesising information from different sources is evident;
- there is no plagiarism in the written assignment and the assignment does not contradict other research ethics principles;
- the language use and terminology are correct in general, the mistakes that occur do not hinder understanding the written assignment;
- the technical formatting is in accordance with the requirements for students' written assignments at SEBA;
- when submitting the assignment, the relevant regulations and deadlines have been observed.

The **case study of economic problems** has non-differentiated assessment and the defence committee will assign "pass"/"fail". The more specific requirements for the assignment have been presented in the syllabus of the course "Economic Problems: a Case Analysis" in the respective curriculum.

The defence committee will assess the **bachelor's and master's theses** on the scale of A-F. Upon determining a grade, the following aspects will be taken into account:

• setting and achieving the research aim;

- the theoretical approach;
- the empirical approach;
- the written version of the assignment;
- the performance at the defence, including answering the questions of the reviewer and the defence committee members.

The more specific criteria for getting a positive grade for the theses are given in Table

- 4. A thesis cannot get a positive grade if there are any of the following shortcomings:
  - there is theft of intellectual property (plagiarism) in the assignment or it contradicts other research ethics principles
  - the assignment is not submitted by the deadline
  - at least one of the five criteria given in Table 4 is below the requirements for the lowest positive grade (E).

Table 4. Criteria for getting a positive grade for bachelor's and master's theses (both as a monograph and an article).

- At the assessment, the learning outcomes of the programme of the relevant study level are taken into account, on the basis of this also the student's level of preparation and the volume of the written assignment in ECTS are considered.
- When the final grade is determined based on the grades of the separate criteria, the ones that have more weight are setting the research aim, achieving it and the theoretical and empirical approaches. In the case of theses defended in the form of monographs and articles, there are certain differences (e.g. structural differences and usually research tasks are not set in the case of articles) that are taken into account at the assessment. If the theoretical or empirical contribution significantly exceed the criteria for the grade A, the committee will take it into account when determining the final grade.

	E	D	С	B	Α		
Setting and	• the title, aim, research tasks, structure and content are consistent						
achieving the	• the conclusions drawn in the written assignment are derived relying on the conducted analysis						
research aim	<ul> <li>the length of the content part does not diverge significantly from the suggested length</li> </ul>						
	The aim of the thesis						
	and research tasks are		•	appropriate and topical	very appropriate and		
	set vaguely, the aim is	5	and research tasks.	aim and reasonable	topical aim and		
	only partially achieved.		The aim has been	research tasks. The aim is			
		1	achieved, but the	achieved, the results,	tasks. The author		
	thesis enables to	conclusions are	conclusions are	conclusions and	achieved the aim, the		
			disputable. The	generalisations are	results, conclusions and		
	the problem was		structure of the	sufficiently good. The	generalisations are on a		
	addressed and the	assignment is generally		structure of the	high level. The structure		
	process of achieving	logical, some parts are		assignment is logical, all	of the assignment is		
	the aim.	weakly related with the	•	-	logical, all parts are		
		research problem.	the topic.	topic and are in good	related to the topic very		
				balance.	well and are in good		
					balance.		
Theoretical	It is mainly descriptive,			The used literature has	The used literature has		
approach		with a few	various sources has	been sufficiently analysed			
		comparisons,	been compared, the	and synthesised and	and synthesised, the		
	has not been compared.		author's		author has composed		
	Little scientific		generalisations and	and/or figures compiled	synthesising tables		
	literature has been	scientific literature has	conclusions are	by the author. When	and/or figures. When		

	E	D	С	B	Α
	used, but it enables to	been used, but it	sufficient. Sufficient	addressing the problem,	discussing the problem,
	create a minimally	enables to address the	relevant scientific	sufficient relevant	relevant scientific
	acceptable theoretical	problem at an	literature has been	scientific literature has	literature has been relied
	basis.	acceptable theoretical	used for addressing	been used.	on.
			the problem.		
Empirical	The method of analysis	The method of analysis	The method of	The method of analysis	The method of analysis
approach	has not been clearly		analysis has been	has been presented and	is presented and
	presented, but it is	5,	presented and	reasoned clearly, there are	
	recognisable from the	but its use has been	reasoned clearly,	sufficient data for	are sufficient data for
	discussion. Data for	poorly reasoned. There	there are sufficient	addressing the problem,	addressing the problem,
	addressing the problem	are sufficient data for	data for addressing	the analysis has been	the analysis has been
	are insufficient, the	0	the problem, the	conducted correctly. The	conducted very well.
		problem, the analysis is	•	findings have been	While interpreting the
	descriptive and/or there	mainly descriptive	conducted correctly,	interpreted sufficiently	findings, generalisations
	are significant	and/or there are some	in general. The	and are sufficiently	were reached, the results
	methodological	shortcomings in the	findings have been	related to the scientific	are related with the
	shortcomings. Findings		interpreted	literature.	scientific literature well.
	have been presented.	results have been	sufficiently and		
		presented and they	related to the		
		have been interpreted	scientific literature to		
		to a small extent.	a small extent.		
Presentation in	The text is generally	The text is	The text is logical	The text is logical and	The text is logical and
written form	understandable but	understandable but	and coherent, there	coherent, the terminology	coherent, on a high
	difficult to read.	difficult to read in	are some occasional	is correct. Citations are	academic level, the
	Citations are generally	places. Citations are	mistakes. Citations	correct. The formatting of	terminology is correct.
	correct. The formatting		are correct. The	the assignment is in	Citations are correct.
	guideline has been	formatting guideline	formatting has been	accordance with the	The formatting of the
	followed, but there are	has been followed, but	done according to	requirements, a few	assignment is in
	considerable mistakes.	there are several	requirements, but	occasional mistakes can	accordance with the
		mistakes.		occur.	requirements.

23

E	D	С	В	Α
		some mistakes can occur.		
enables to follow the content of the assignment, but it does not give a sufficiently clear overview of the findings. At the defence, the student can give at least partial answers to most questions about the	of the assignment and findings. At the defence, the student can answer most questions about their work.	The presentation gives a sufficiently meaningful overview of the assignment and findings. At the defence, the student can give substantial answers to most questions about the	presented fluently and gives a substantial overview of the findings. At the defence, the student gives thorough and meaningful answers to all questions about the work.	been structured well, is presented masterfully and gives a great overview of the findings. At the defence, the student gives thorough and substantial answers to all questions and can conduct an academic discussion with the
work.				reviewer and defence committee.

Appendix A.

Form for reviewing bachelor's and master's theses

#### **OPINION OF THE REVIEWER**