

Research Group: Entrepreneurship and Innovative Business Models

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Evaluation criteria for final thesis of Bachelor and Master students

Name of student: _____

Student ID (Immatrikulationsnummer): _____

Bachelor: Master:

Thesis title: _____

Start date of thesis: _____ Submission date of thesis: _____

Supervisor(s): _____

Final grade (0-15):

Date: _____ Signature supervisor: _____

Name of student:						
Criteria		Insufficient (0-5)	Sufficient (6-8)	Satisfactory (7-9)	Good (10-12)	Very good (13-15)
Introduction to topic 10%		1. Contemporary nature of the topic				
		2. Demonstrated relevance of the topic (from an academic and practical viewpoint)				
		3. Formulating a clear research question				
Main body of the thesis 40%	Literature	4. Identification of literature and key concepts and constructs				
		5. Pertinent use of the relevant literature and concepts				
	Hypotheses	6. Formulating testable hypotheses				
	Methodology	7. Relevant choice of methodology				
		8. Quality of data collection and measurements				
	Data analysis	9. Quality of data analysis				
Discussion 25%		10. Reiterate the research problem/State the major findings				
		11. Explain the meaning of the findings and why they are important				
		12. Relate the findings to similar studies				
		13. Consider alternative explanations of the findings				
		14. Indicate theoretical and managerial implications				
		15. Acknowledge the study's limitations				
		16. Make suggestions for further research				
Conclusion 5%		17. Personal reflections and analysis of the work				
Overall writing style 15%		18. Ink ratio (the ratio between the length of the document and its contributions)				
		19. Organization: Use of stylistic functions such as styles, automatic insertion of table of contents, insertion of headers /footers/footnotes				
		20. Readability, flow, grammar and spelling				
		21. Respect for referencing and citation rules				
		22. Pertinent use of tables, figures, text boxes, graphs etc. as illustration, presentation or summary of data analysis or results				
Diligence in process 5%		23. Adherence to project plan, frequency and engagement with tutor				
Final grade		/15				

Notes: This is a guideline for evaluations of projects. Adaptations can be carried out by the reviewer.

General guideline “Evaluation criteria for final thesis of Bachelor and Master students”

Each of the criteria used for evaluating the final thesis or project is explained in detail below:

1. Contemporary nature of the topic of research
The student is expected to identify a topic that is relevant and currently debated in the context of entrepreneurship, innovative business models, innovation management and/or international business.
2. Demonstrated relevance of the topic of research (from an academic and practical view point)
The topic chosen by the student should not only address a current problem faced in the academic literature/discourse, it should also address a problem worth exploring. In other words, it should not be a problem that has already been fully discussed and addressed in several published research papers and books or has already been implemented and thus provides no new knowledge or decision levers. The topic should add something to the ongoing academic discussion. Moreover, convey to the reader why the topic might be of practical relevance in our economy and business world. It is important that the student (wherever relevant) is able to provide one or more examples demonstrating the significance of his/her topics.
3. Formulating a clear research question
The student must be able to formulate a clear and concise research question (usually one sentence/question) which s(he) aims to answer with this thesis.
4. Identification of the literature and key concepts, theories and models
One of the challenges that a student faces is how to identify the literature that is most pertinent and deserves to be cited in a thesis. The student is not required to cite everything that has been said about a certain topic, but only the literature that is the most cited and/or well-known related to the topic (s)he is exploring. In particular, the student is required to identify the major concepts related to his/her topic and to capture the established knowledge around them. It is equally important to cite academic literature coming from peer-reviewed academic journals. Moreover, students are welcome to additionally include other sources of literature (news, business reports, websites etc.). A final thesis is a piece of academic research. Thus, relying completely on articles from popular press or on internet-based sources such as Wikipedia is not advisable.
5. Pertinent use of the relevant literature and concepts
As mentioned above it is important for the most relevant and pertinent literature to be cited in the thesis. However, it is not sufficient to merely cite the literature. It is equally important to understand it, synthesize it and criticize it in light of other approaches/literature.
6. Formulating testable hypotheses
And an overarching research question for the thesis has been formulate. However, in a next step this research questions needs further broken down into several testable hypotheses. A testable hypothesis is a hypothesis that can be supported or rejected as a result of collecting appropriate data and applying a relevant methodology for analyzing it.

Developing concise and testable hypotheses forces students to think intensely and specifically about the outcomes of a study. It enables students to understand the implication of the research question and the different variables involved in the study. It helps in making precise predictions for the current research based on prior research. Hence, good hypotheses build on the knowledge and findings summarized in the literature review.

Students should try to write hypotheses as an if-then statement. *If* a specific action is taken or happens, *then* a certain outcome is expected. A hypothesis proposes and examines the relationship between an *independent variable* and a *dependent variable*. The effect on the dependent variable (the factor being tested, the variable to be explained) depends on or is determined by what happens when you change the independent variable (the factor being changed, the explanatory variable).

Students need to ask themselves: Does each hypothesis include both an independent and dependent variable? How are the independent and dependent variables later to be measured in the data?

An hypothesis is a written statement that includes an independent and dependent variables and predicts an outcome that can be tested. Two examples of testable hypotheses: *Students who attend the lecture have higher grades than students who do not attend the lecture.* This is testable because it is possible to gather and compare the grades of students who do and do not the lecture. *People exposed to high levels of ultraviolet light have a higher incidence of cancer than people exposed to low levels.* This is testable because it is possible to find a group of people who have been exposed to either high levels or low levels of ultraviolet light and then compare their cancer rates.

7. Relevant choice of methodology

A student who chooses to write a final thesis or project of an academic nature should be able to justify the choice of methodology. For example, the student should be able to explain why a certain methodology is the most appropriate for the topic that (s)he has chosen to explore. Why does this methodology lend itself to the measurement/exploration of the variables that are being studied?

8. Quality of data collection

The student needs to demonstrate that (s)he has collected primary data of good quality or to have access to secondary data to test his/her hypotheses and to answer his/her research question. He/she needs to explain how (s)he collected the primary data explaining on what basis the guide for interview or the questionnaire was built, the information selected, how they were administrated, how respondents were selected, their numbers, etc. All raw data needs to be provided and transferred to the research chair for potential audit purposes by the reviewer.

The data collection process needs to be clearly explained and documented.

Each variable needs to defined, explained and clearly marked as independent, dependent or control variable.

9. Quality of data analysis

Irrespective of the choice of methodology, the student is required to carry out in-depth data analysis. The method of data analysis should be coherent with the method of data collection chosen and the overall methodology chosen for the final thesis or project. If quantitative methodology is chosen, then it is not sufficient to limit the data analysis to the descriptive level. The student is required to carry out inferential statistical analysis (e.g. simple OLS or logistics regressions) in order to test his/her hypotheses. The results should be presented in appropriate tables and figures. Moreover, the most important results need to be described in the text (also with reference to the tables and figures).

10-16) Discussion

In the discussion section the student needs to link his/her findings back to the prior literature. The purpose of the discussion is to interpret and describe the significance of your findings in light of what was already known about the research problem being investigated, and to explain any new understanding or fresh insights about the problem after the student has taken the findings into consideration. The discussion will always connect to the research questions and hypotheses posed and the literature reviewed. The discussion should always explain how the student's study has moved the reader's understanding of the research problem forward from where the student left them at the end of the introduction.

A good structure of a discussion usually includes the following items¹:

10. Reiterate the research problem/State the major findings

¹ <https://library.sacredheart.edu/c.php?g=29803&p=185933>. This section contains also good advice on the other sections of a paper.

Briefly reiterate for your readers the research problem you are investigating and the methods you used to investigate them, then move quickly to describe the major findings of the study. You should write a direct, declarative, and concise proclamation of the study results.

11. Explain the meaning of the findings and why they are important

No one has thought as long and hard about your study as you have. Systematically explain the meaning of the findings and why you believe they are important. After reading the discussion section, you want the reader to think about the results [“why hadn’t I thought of that?”]. You don’t want to force the reader to go through the paper multiple times to figure out what it all means. Begin this part of the section by repeating what you consider to be your most important finding first.

12. Relate the findings to similar studies

No study is so novel or possesses such a restricted focus that it has absolutely no relation to other previously published research. The discussion section should relate your study findings to those of other studies, particularly if questions raised by previous studies served as the motivation for your study, the findings of other studies support your findings [which strengthens the importance of your study results], and/or they point out how your study differs from other similar studies.

13. Consider alternative explanations of the findings

It is important to remember that the purpose of research is to *discover* and *not to prove*. When writing the discussion section, you should carefully consider all possible explanations for the study results, rather than just those that fit your prior assumptions or biases.

14. Indicate theoretical and managerial implications

The student is required to demonstrate the theoretical implications of his/her work. This means that you are required to point out how your work adds to/contributes to/ complements existing literature in the domain. You are also required to show how (s)he has challenged past literature in the domain and how (s)he addresses a knowledge gap.

Since the final thesis or project is written in the department of business and economics it usually focuses on a managerial problem. Hence, it is important that you can offer guidelines or practical suggestions to managers in terms of how to address the problem in question. In conclusion, the managerial recommendations that you offer should be grounded in your results obtained after data analysis.

15. Acknowledge the study’s limitations

It is far better for you to identify and acknowledge your study’s limitations than to have them pointed out by your reviewer or professor! Describe the generalizability of your results to other situations, if applicable to the method chosen, then describe in detail problems you encountered in the method(s) you used to gather information. Note any unanswered questions or issues your study did not address.

Every research-based project, article or thesis has certain *theoretical limitations*. Therefore, you are required to identify the theoretical limitations of your work and acknowledge these as part of the thesis or project. It should be noted that in research circles, acknowledging the theoretical limitations of one’s work is a sign of self-reflection and not a sign of weakness.

16. Make suggestions for further research

Although your study may offer important insights about the research problem, other questions related to the problem likely remain unanswered. Moreover, some unanswered questions may have become more focused because of your study. You should make suggestions for further research in the discussion section.

17. Personal reflections and analysis of the work

At the end of his/her thesis the student should not only summarize the academic contributions and potential avenues for future research. It is essential that the student has also room to write about

his/her personal reflections and experience. This is the spot where a student can show what he/she has learned, this can include expected as well as unexpected developments and results during the time working on the thesis. The student needs to stand back from his own work, which then allows to draw a (personal) conclusion.

18. Ink ratio (the ratio between the length of the document and its contributions)

The student needs to show that he can write in a structured, precise and consistent manner. It is not the aim to fill pages with a lot of information that are “somehow” related to the topic. The student needs to concentrate on content and an empirical investigation that are related to the research question. Moreover, ideas and arguments need to be structured in meaningful paragraphs (containing more than just one sentence per paragraph).

19. Organization: Use of stylistic functions such as styles, automatic insertion of table of contents, insertion of headers /footers/footnotes

The content needs to be presented in a readable format, as for the reader to easily grasp the content. The structure needs to be clear and clean. All modern writing programs allow to structure the work by standardized formatting styles. Additional information (e.g. the complete survey or additional econometric robustness test) can be placed in an Appendix.

20. Readability, flow, grammar and spelling

Spelling and grammar are important parts of readable writing. Errors interrupt the reader's natural rhythm and ruin the flow. Students should assume what they have written once is final just because it appears on the screen. The student needs to take a critical look at issues such as excessive wordiness, repetitive sentence structures, dense paragraphs and improper grammar/spelling. Reorganize ideas, sentences and paragraphs can help to improve the flow and readability. Also, each student must proofread carefully! Far too many mistakes occur because the writer simply glances over common typos or frequently misspelled words. This undermines the professionalism of writing. Computer spell checkers are helpful (and should be used) but they cannot tell if the word or phrase makes sense in the context of the sentence.

21. Respect for referencing and citation rules

Academic writing follows rules which need to be obeyed. There is more than one style to do the referencing. A good standard is the Harvard Format Citation. Students are advised to follow those referencing and citations rules. For more information consult e.g. <https://www.mendeley.com/guides/harvard-citation-guide>. All references in the text should also be in the reference list/bibliography at the of the thesis, and vice versa. Just having read an article (but not cited in the thesis) is not sufficient to be placed in the reference list. In addition, a direct quotation reproduces word-for-word material taken directly from another author’s work. If a student use a direct quote, the words from the source need to be in inverted commas, also providing the author, year, and specific page number for that quotation. Not adhering to standardized citation rules can easily lead to plagiarism. Severe plagiarism can lead to a downgrading of the work and even a fail of the thesis.

All of the following are considered plagiarism:

- turning in someone else's work as your own
- copying words or ideas from someone else without giving credit
- failing to put a quotation in quotation marks
- giving incorrect information about the source of a quotation
- changing words but copying the sentence structure of a source without giving credit
- copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not

Most cases of plagiarism can be avoided, however, by citing sources. Simply acknowledging that certain material has been borrowed and providing the reader with the information necessary to find that source is usually enough to prevent plagiarism. A student needs to be fair and transparent with ideas and thoughts from other authors. Giving credit to those authors (through correct citations) makes the thesis stronger as a student builds his/her work on credible sources.

All works submitted to the research group of Entrepreneurship and Innovative Business Models will be checked for plagiarism e.g. with a plagiarism software.

22. Pertinent use of tables, figures, text boxes, graphs etc. as illustration, presentation or summary of data analysis or results

The student needs to show adequate usage of tables, figures, headers etc. Tables and figures containing essential information and are to be included *in* the text (not the Appendix). Also, tables and figures are never self-explanatory, the student needs to summarize for the reader the most important information that he/she wants to convey.

23. Adherence to project plan, frequency and engagement with tutor

It is the student's responsibility to organize, carry out and finish the thesis. Support is provided by a tutor from the research group of Entrepreneurship and Innovative Business Models. The tutor will offer the students several meetings (usually 2 to 3) to present and discuss important milestones in the development of the thesis. The student will benefit most when he/she comes well prepared to those meetings. Advice provided by tutors should be taken seriously and reflected upon. It is not the responsibility of tutors to check every step the student carries out. The interaction with the tutor should always be friendly and respectful, and vice versa.