

UNIQUE EUROPEAN MASTER'S PROGRAMME
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BOLOGNA

INNSBRUCK

OSLO

ROTTERDAM

**The European Master in
Health Economics & Management**
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Thesis Guideline 2022-2024

This document has been drafted by the Eu-HEM Consortium Board, which represents the Erasmus University Rotterdam, the University of Oslo, the University of Bologna, and the Management Center Innsbruck.



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



UiO : University of Oslo



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Section 1 – DEFINITIONS

<i>Local Coordinator</i>	<i>The persons responsible for the management and administration of the processes related to the study program (one for each university)</i>
<i>Examination Committee</i>	<i>The persons (one of each university) who ensure that the assessment process of the thesis is conducted in accordance with the joint regulations</i>
<i>External Assessor</i>	<i>A member of the academic staff from a track specific Eu-HEM partner university who co-reads the thesis and participates in the Thesis Examination Committee. The External Assessor should meet the academic requirements mentioned under paragraph 4.4 Supervision</i>
<i>Final Exam</i>	<i>The presentation and defence of the thesis</i>
<i>Supervisor</i>	<i>A member of the academic staff of one of the Eu-HEM partner universities involved in the specific track the student is taking who guides a student during his/her thesis process and participates in the thesis Examination Committee. The Supervisor should meet the academic requirements mentioned under paragraph 4.4 Supervision</i>
<i>Thesis Examination Committee</i>	<i>A committee of persons present during the final exam and responsible for the grading of the thesis and exam</i>
<i>Thesis Proposal</i>	<i>A document which identifies a research problem, gives a preliminary view of existing research on the problem, identifies resources needed and sets down the schedule for the research and writing process</i>
<i>Track Coordinators</i>	<i>The persons who are responsible for the harmonized content of a specific Eu-HEM track. Each specialization track has two coordinators (one per partner university involved in the track)</i>

Section 2 – GENERAL PROVISIONS

This Thesis Guideline applies to the master thesis track of the European Master programme in Health Economics and Management (Eu-HEM), jointly offered by the University of Bologna (UniBo), the Management Center Innsbruck (MCI), the University of Oslo (UiO), and the Erasmus University Rotterdam (EUR). The Eu-HEM Examination Committee is responsible for all matters concerning the overall programme. For any aspect not covered by this guideline, and in case of conflict with national and local binding laws and regulations, the latter will take precedence.

Section 3 – MASTER THESIS

3.1 Learning goals

The learning goals of the Eu-HEM Master Thesis and the final exam are:

- To explore an area of health economics and/or health management in depth, to synthesize the main theories and models, and to discuss their applicability.
- To conduct independent scientific research on a topic approved by the study programme and to report the study results and conclusions in an academic and clear way.
- To make appropriate use of all relevant knowledge and skills acquired in the study programme, and not only of the specific topic covered by the thesis.
- To consider the ethical implications of the research question and methodological approach applied.
- To explain the possible societal or policy impact of the outcomes of the study, based on the specific institutional settings.
- To acquire and demonstrate skills in scientific writing.

3.2 Entry level

Students need to have obtained at least 60 ECTS of Eu-HEM courses before their thesis proposal (see 4.1) can be considered. This requirement is checked by the Eu-HEM International Programme Coordinator before sending the proposals to the Track Coordinators.

The thesis defence is the final exam of the programme and can, therefore, only take place once all courses have been successfully completed!

3.3 Format

There are two possible formats of writing a Eu-HEM master thesis:

- a “standard/monograph” thesis of maximum 20,000 words including the abstract (summary) but *excluding* title page, declaration of oath, table of contents, tables, references, and appendices.
- a research paper “ready for submission” together with an extensive introduction and appendices. The paper should have a maximum of 6,000 words *excluding* appendices and references.

Students should indicate in their preface which format they have chosen.

Accurate referencing and a bibliography are important elements of the thesis. Students should adopt a standard citation system (e.g., Harvard, Vancouver, etc.) and a bibliography format. Students are advised to discuss with their thesis supervisor what style to adhere to and use this consistently throughout the thesis.

3.4 Layout and content

The thesis must be written in English and include several elements:

- **Title page:** a concise and compelling title without the use of acronyms that clearly indicates the thesis subject matter. It should also include the student’s name, student number, name of thesis supervisor, as well as place and date of submission.
- **Declaration in lieu of oath page:** in addition, students must sign the declaration in lieu of oath (Annex 2) in the SIN-online system before submitting their thesis.

- **Summary or abstract page:** a separate sheet containing an abstract (summary) of maximum 350 words must be included in the thesis. The content should include the research question and motivation, methodology, and the most important findings or solution to the problem. It must be self-contained, meaning that it should be clear to someone who has not read the entire thesis. Therefore, it should not refer to the text of the thesis, and not include references to the literature, quotations, tables, or figures.
- **Table of contents:** chapter titles and section headings to permit the reader to get a good impression of the structure of the document at a glance.
- **Chapter 1. Introduction:** introductory chapter, description of the topic of the thesis, the rationale for this topic, and point and its relevance. The chapter concludes with the research question and a short overview of the chapters.
- **Chapter 2. Theoretical framework.** This chapter makes clear what is already known on the subject and what knowledge is lacking. Any contradictory results from previous studies in the field are discussed as well (although this could be put in the discussion chapter). Based on the literature, the thesis question is further explored and elaborated on. Within the theoretical framework the student addresses the main concepts from the thesis question (for example choice of definitions) and describes the interrelations between these concepts. This may result in a conceptual model. The student will further develop the (theoretical) perspective using brief summaries of known studies and then position his/her study in the debate. Based on this knowledge the thesis question may be broken down into several sub-questions. Depending on the nature of the research and the sub-questions, these questions may be included in the introduction. It should be clear from this chapter which track you are following.
- **Chapter 3. Research methods:** This chapter describes the approach to answer the thesis question and sub-questions. It should describe the complete setup of the study including justification of all the choices made. For example, for empirical studies, students describe the relevant characteristics of the study population, the variables that were used, selection and drop-out of subjects or respondents, the materials or instruments that were used, the procedures and interventions, the manner of data collection, the statistical models, and so on. Thesis in disciplines and topics, which do not involve empirical research, should also clearly explain, and provide full details on the adopted framework, disciplinary setting and research method, following the standards of research (ethics) in the relevant discipline.
- **Chapter 4. Results/findings:** Description of what the study eventually revealed, and presentation of the data collected, if any. The research outputs should be presented in a concise way and neatly arranged in tables and figures, if relevant. The text is restricted mainly to the most important and most striking findings, as identified by the research question and the theory. The student demonstrates how he or she made use of the theoretical concepts in the analysis, reflects critically on the interpretation that he or she provides. For empirical studies, it should be clearly stated that the data cannot be used to trace recognizable persons unless the student has obtained prior consent from the persons in question.
- **Chapter 5. Discussion and conclusion:** In the discussion, chapter students broaden the view from the minute details of their work to focus on its general relevance. This chapter gives the writer the opportunity to interpret the results by linking them to the thesis question, the literature and theoretical framework. For research in which theory formation was the primary goal, a conceptual model is developed and discussed because of the study results. Any limitations of the study are addressed. This chapter discusses how far the findings of the study are valid in the light of the limitations. The question is to what extent (and why) specific limitations have far-reaching

consequences, or not, for the value of the results. This chapter contains recommendations: What could others learn from this study? Are there any practical recommendations after answering the thesis question? Only recommendations that clearly follow from the results obtained should be provided. What further studies would be needed? What are possible ethical considerations?

- **References:** All literature sources referred to in the text should be compiled in the list of references. Various reference styles are possible and include the APA style, which is mostly used in the social sciences, the Vancouver style, notably used in the biomedical sciences, and the Chicago style (author-date system). Students discuss at an early stage with their thesis supervisor what style to use.
- **Appendices (optional):** Students may add appendices to present information that is too long or too detailed for the main body of the text, but still relevant to the assessment of the research. For example, the questionnaires or topic lists/interview schedules applied, or one or two large tables.

3.5 Workload

The thesis will be awarded with 30 ECTS and the required workload is estimated for at least 20 weeks (750 – 900 hours).

Section 4 – THESIS PROCESS

4.1 Thesis supervisor and topic

Students write their thesis under the supervision of a faculty member from one of the universities in their track, in accordance with the requirements detailed in paragraph 4.4. Each university specialises in different topics. Students need to decide where they want to write their thesis by **November 1st**.

There are two ways for a student to find a thesis supervisor and topic:

- The student independently chooses a topic and tries to involve a qualified supervisor either individually or via a Track Coordinator (TC)
- The TC offer a list of thesis topics/supervisors and the student can apply for one of them

Finding a thesis topic and supervisor varies across universities:

- In Rotterdam students will be able to choose from various thesis topics provided by the supervisors or the student proposes a topic of their own. Students are responsible for finding their own supervisor.
- In Bologna students will be able to choose from various thesis topics provided by the supervisors or the student proposes a topic of their own. Students also find their own supervisor.
- In Innsbruck students will be able to choose from various thesis topics or the student proposes a topic of their own. Students also find their own supervisor. In case a student proposes a topic of their own, they can contact the TC, they can point the student to a supervisor that might fit.
- In Oslo students propose a topic of their own or they can choose from a list of suggested topics (proposed by supervisors). They can contact the TC at UiO for information on current research projects. TCs in Oslo coordinate the allocation of students to qualified supervisors.

The topic should be related to the content of the courses belonging to the chosen track.

Students ideally find a thesis topic and supervisor by mid-November. Students will receive a request from the Education Service Centre at EUR to submit their topic and the name of the supervisor. The International Programme Coordinator (Victoria Lorenzo Sanchez) will then inform the TC so that they can check if topic and supervisor meet the Eu-HEM requirements.

For the fourth semester the student will be registered at the university where the supervisor is located. In case the student is late with choosing a topic, it may take extra time for the TC to find a supervisor.

4.1.1 Working together with a supervisor

The supervision process can vary from one supervisor to another. It is advisable for both parties to establish clear agreements at the onset regarding the frequency of contact during the proposal stage and throughout the development of the thesis. It is important to outline and discuss the expectations and goals of the student and the supervisor throughout the entire trajectory. This proactive approach ensures a structured and effective supervision process, fostering mutual understanding and facilitating the successful completion of the thesis. The track coordinator's expertise and experience can be instrumental in resolving any issues that may arise, ensuring that the supervision process remains on track and the thesis reaches its desired outcome.

4.2 Thesis proposal

Students are required to write a thesis proposal using the dedicated Eu-HEM thesis proposal form (Annex 1). They submit the proposal via the SIN-online system no later than **November 15th**. The respective TC will assess the proposal after it has been submitted in SIN-online. The Education Service Center at EUR will forward the instructions for uploading the thesis via SIN online to the students and TC.

The approval of the thesis proposal by both the supervisor and the TC is a prerequisite before a student can commence their thesis. This approval process may necessitate revisions and a resubmission within two weeks from the initial submission.

The assessment of the thesis proposal is conducted based on six critical criteria. The supervisor will primarily evaluate the first five points, while the TC will review and approve these. These five points include:

1. Relevance of the thesis question
2. Relevance of the literature used
3. Appropriateness of the theoretical framework
4. Scientific validity and ethical justification of the proposed method
5. Feasibility of the project, given the timeline

Upon favourable evaluation and approval of the above points by the supervisor and the TC, the sixth criterion is primarily judged by the TC:

6. Alignment of the proposed study with the chosen track

It is important to note that both the supervisor's and the TC's approvals are integral to the progression of the thesis project.

The local TC will appoint an external assessor from the partner university of the same track. Annex 3 gives an overview of all TC.

4.3 After thesis proposal

In the third semester, several sessions will be organised to prepare further for the writing of the thesis (in the fourth semester). In Oslo, these sessions are part of the Research Design Course. At the other locations, sessions are organised by the TC.

4.4 Research assignment

While an internship may result in valuable work experience, it usually does not result in material relevant for a thesis. This is only the case if the internship has a clear research assignment which includes:

- 1) A short overview of the current state of the literature.
- 2) A claim on how the study attempts to theorize beyond the current state of literature.
- 3) A research objective.
- 4) A research method.
- 5) A brief outlook on ethical implications/ considerations regarding the own research.
- 6) An overview of the data that the student will have access to.
- 7) A statement of the company that the thesis can be published in the public thesis repository.
- 8) An outline of the qualifications and expertise of the research team involved.
- 9) A description of other deliverables than the thesis, if relevant.

The assignment needs to be approved by the track committee member of the relevant track from the university where the student is registered for the master thesis.

4.5 Supervision

For thesis supervisors and external assessors, the following qualifications apply. They:

- are part of the academic staff at one of the partner universities involved in the chosen track,
- have obtained a doctorate degree, or have had a substantial contribution to the writing of at least 3 papers accepted in international peer reviewed journals in the last 5 years,
- are experts in the relevant (content and methodological) field.

Thesis supervisors carry out the following tasks:

- advise on the relevance and practicality of the research proposal,
- aid in refining the choice of research topic,
- give advice on relevant literature,
- discuss the design of the research and the proposed research method,
- agree on the timetable,
- discuss the research questions, and
- take part in the Thesis Examination Committee.

It is the responsibility of the supervisor to inform the TC of inadequate progress, serious slippage from the agreed timetable, serious disagreement concerning quality, relevance or direction of the research and any other issues that could endanger the in-time completion of the master thesis.

Once a student is assigned to a supervisor it is no longer possible to change to another supervisor without permission of the TC. Should changing of supervisor be needed, the TC first needs to be consulted first. Please be aware that it cannot be guaranteed that a replacing supervisor can be found in the middle of the academic year.

4.6 Deadline

The deadline for submission of the thesis is the **1st of June** and the defences take place in June.

4.7 Delay in thesis process

Students are recommended to discuss any bottlenecks in the time planning of their thesis writing process with their thesis supervisor. If students are unable to finish their thesis by the submission deadline, or if their thesis is granted a NO-GO, they should keep in mind that the second deadline for resubmitting the thesis is in **November**. In this case, students need to re-enroll for the new academic year and pay the participation fee. If students miss the second deadline, they will need to follow the thesis deadlines of the next cohort.

Should personal circumstances occur that influence the thesis planning, students are advised to contact the local TC.

Section 5 – GRADING AND ASSESSMENT

5.1 Credits

To obtain the Eu-HEM degree students will have to acquire 120 credits:

- 60 credits for compulsory courses during their first year,
- 30 credits for compulsory courses during their second year
- 30 credits for their master thesis.

5.2 Assessment guidelines

The thesis will be assessed on the following guidelines:

- research question: the objective addresses a clearly delineated problem in healthcare from an economic, policy or management perspective and is scientifically relevant; there is a clear research question (including secondary questions), problem analysis, theoretical framework, empirical research, conclusion;
- method: the empirical research meets the scientific criteria (is methodologically correct);
- argumentation: the empirical research actually answers the thesis question in a clear and efficient manner;
- research ethics: The student considers the specific ethical implications of the research question and methodological approach applied.
- format: the thesis document is written in English and meets the academic standards with regard to style and deepening of the subject.

What determines the grade?

- structure and length of the thesis must meet the requirements mentioned in the previous pages;
- the research must be methodologically sound;
- there must be critical reflection:
 - o the student must be able to indicate what he or she has learned or what he or she would do differently in a next study (note: this is not a matter of personal experiences but of academic insights);
 - o The student is able to reflect on ethical implications of his or her doing according the research standards. The student must be capable of arguing in a logical and clear manner;
- the student must be able to work independently (processing suggestions from the supervisor and solving any problems during the data collection on their own);
- presentation and oral defense;
- the extent to which the thesis yields new scholarly insights.

5.3 Final exam

The final exam (thesis defence) shall take place at the university where the student is registered in the fourth semester. It includes a 15-minute presentation by the student followed by a set of questions from and a discussion with the Thesis Examination Committee, the latter part lasting approximately 30 minutes.

All Thesis Examination Committees include the supervisor and external assessor from the other Eu-HEM partner university in the track appointed by the TC. For all other provisions, local rules apply.

After having defended their thesis, students must be prepared to answer additional questions by the Thesis Examination Committee and discuss topics covered by the Eu-HEM programme of study.

Therefore, the examination will include the following components which also be documented in the examination protocol:

- Presentation of the thesis
- Discussion of the thesis
- Discussion of related topics relevant to the content of the chosen track

5.4 Grading

Students will receive one joint grade for both the written thesis and the oral exam. The Thesis Examination Committee uses the European grading system to decide on the final local grade. The final overall grade is published in the Diploma Supplement in the local grading system of the supervisor's university.

5.5 Plagiarism and fraud

Concepts and statements taken from the literature should be appropriately reworded and referenced. Exact citations should be clearly highlighted (e.g., between inverted commas or through a different font) and the source should include the page number. Online sources are admissible when they are appropriate and meet the required scientific standards., but generic sources such as Wikipedia are not necessarily scientific and critically assessed and should be avoided or only used with extreme care and parsimony. Similar rules for references apply for online resources as for academic publications. The theses will be checked upon plagiarism, using anti-plagiarism software. For some universities, this might include checks for text generated with artificial intelligence (AI) models (such as large language models). Plagiarism is taken very seriously and will have legal implications. The legal implications and actions follow the local laws and regulations.

5.6 Hardship clause

In very exceptional individual circumstances where the application of one or more provisions in these Master Thesis Guidelines would lead to unreasonable and/or unfair situations with respect to a student, the student may submit a written and reasoned application for a departure from the provision(s) in question to the Thesis Examination Committee.

ANNEXES

Annex 1 – Eu-HEM thesis proposal form (version 2022)

Annex 2 – Declaration in lieu of oath

Annex 3 – Overview Track Coordinators

Annex 1 - Eu-HEM thesis proposal form (version 2023)

Student name	
Contact e-mail address	
Specialization track	
Location (university) for writing thesis	

Provisional title

describe the topic of your thesis in one sentence

Topic

describe the topic of your thesis and the scientific and societal relevance (in max. half a page)

Research question

describe the aim of your thesis and the research (sub-)question(s)

Approach

describe your first ideas about theoretical framework, method (qualitative/quantitative) and data sources (in max. half a page)

Supervisor

state name and/or university if you have a specific preference; please mention if you are already in touch with a supervisor and include their name

Note: supervisors should be from the universities involved in your specialization track; your preference cannot be guaranteed because assignment depends on topics submitted by students and availability of supervisors

Ethical approval

Will you use individual level data?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
--------------------------------------------	-----------------------------	------------------------------

Ethical approval may be required for individual level quantitative or qualitative data. Describe the need for ethical approval and if your supervisor has applied or has access to data.

Anticipated barriers to reach expected outcomes and deadlines

identify potential barriers you might encounter in undertaking your research and describe mitigation measures

Key literature

identify 3 to 5 references to the literature that are central to your topic and its relevance, or the methods or data that you intend to use

Annex 2 - Declaration in lieu of oath

With this declaration, the student confirms having written the thesis him or herself without any outside help. Others' thoughts and ideas are clearly marked as such and the master thesis has not been handed in during the course of another program and has not yet been published. Exact formulation of this declaration:

"DECLARATION IN LIEU OF OATH

I hereby declare, under oath, that this master thesis has been my independent work and has not been aided with any prohibited means. I declare, to the best of my knowledge and belief, that all passages taken from published and unpublished sources or documents have been reproduced whether as original, slightly changed or in thought, have been mentioned as such at the corresponding places of the thesis, by citation, where the extent of the original quotes is indicated.

The paper has not been submitted for evaluation to another examination authority or has been published in this form or another."

Date	Signature

Annex 3 – Overview Track Coordinators

Economic and Policy	Member from UiO	Member from UniBo
	Jonas Minet Kinge	Elisabetta De Cao
Email:	j.m.kinge@medisin.uio.no	elisabetta.decao@unibo.it
Economic Evaluation in Healthcare	Member from EUR	Member from UiO
	Frederick Thielen	Eline Aas
Email:	tc-eeh-euhem@eshpm.eur.nl	eline.aas@medisin.uio.no
Management of Healthcare Institutions	Member from UiO	Member from MCI
	Trond Tjerbo	Raffael Heiss
Email:	trond.tjerbo@medisin.uio.no	Raffael.Heiss@mci.edu
Population Health Management	Member from EUR	Member from MCI
	Bram Wouterse	Claudia Zoller
Email:	wouterse@eshpm.eur.nl	Claudia.Zoller@mci.edu