

Course Specifications

Valid in the academic year 2022-2023

Master's Dissertation (1001507)

Course size (nominal values; actual values may depend on programme)

Credits 30.0 Study time 900 h Contact hrs 300.0h

Course offerings and teaching methods in academic year 2022-2023

A (Year) English Gent master's dissertation 300.0h

Lecturers in academic year 2022-2023

Bossier, Peter LA22 lecturer-in-charge

Offered in the following programmes in 2022-2023 crdts

Master of Science in Aquaculture 30 A

Teaching languages

English

Keywords

Scientific research, research techniques, scientific reporting, written manuscript, oral presentation

Position of the course

The master dissertation is an integration course that forms the final part of the master's program in which the scientific final competences are applied to the programme-specific knowledge competences

Students can choose the topic for their master's dissertation (thesis) in a broad range of disciplines in which the scientific staff of the master programs is active. In general, the students become involved in ongoing research within the research laboratories of their promoter(s). They can however also propose their own research topic. Students have to conduct research with the appropriate expertise in order to contribute to the development of a particular research domain.

The ultimate goal is to initiate students into research at an academic level so that, upon completion of their master program, they are able to carry out scientific research in a proper way.

For some programs, specific requirements will be mentioned in the practical procedure.

Contents

The master's dissertation is a written report of the scientific research the student has conducted

This manuscript contains the following items, similar to the structure of a scientific publication:

- o preface
- o table of contents
- o list of abbreviations
- o abstract
- o introduction
- o relevant literature: should contain only what is necessary to understand the work, with a focus on a critical synthesis
- o materials and methods: trivial and well known methods should not be explained in detail
- o results: raw data can be delivered in an electronic format
- o discussion
- o general conclusions
- o recommendations for further research
- o list of references
- o appendices (only in an electronic format)

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More information about the practical procedure for the master's dissertation and about the properties, rights and duties of those involved in the master's dissertation can be found on the website of the faculty.

Initial competences

A thorough scientific basic knowledge and knowledge of research techniques in the field of the master program.

Final competences

- 1 define a research problem
- 2 Formulate clear research questions and/or hypotheses
- 3 Establish a suitable methodology in accordance with the prevailing scientific standards of the research field
- 4 Systematically collect, search, critically interpret and integrate scientific literature
- 5 Collect data in an accurate way (existing and/or obtained through personal laboratory and/or fieldwork and/or surveys)
- 6 Process data in a correct way
- 7 Analyze data critically in a scientific context
- 8 Adjust independently the research process based on feedback from experts and critical selfassessment
- 9 Summarize and present data in a concise manner
- 10 Write a report on scientific and technical information, materials and methods, results and findings
- 11 Handle a problem critically, creatively, quantitatively with attention for ethical, social, international and sustainability aspects
- 12 Act according to the principles and good practices of scientific integrity
- 13 Show independence, motivation, commitment, a drive for innovativeness and creativity, initiative and perseverance to achieve learning outcomes 1 to 12
- 14 Present, defend and frame the research results vis-à-vis peers and experts

Conditions for credit contract

This course unit cannot be taken via a credit contract

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Master's dissertation

Learning materials and price

References

Practical Research: Planning and Design by Paul D. Leedy & Jeanne Ellis Ormrod, 2009, Prentice Hall. ISBN 978013715242

Course content-related study coaching

The master's dissertation is actively coached by the promoter(s) and tutor(s) during counseling meetings, during which the work as well as the ongoing learning process involved are reviewed

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Oral examination, Assignment

Examination methods in case of periodic assessment during the second examination period

Oral examination, Assignment

Examination methods in case of permanent assessment

Participation

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Extra information on the examination methods

Size of the dissertation manuscript: aim at 60 pages/ 20.000 words (from "introduction" up to and including "list of references)

Timing of the oral examination:

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o oral presentation: maximum 10 min

o interactive discussion: 15 min (no questions are asked by the promotor(s))

o deliberation and feedback: 10 min

Calculation of the examination mark

30 % of the evaluation for the process: scientific approach, technical elaboration, commitment, problem approach, adjustment of the research process

 $40\,\%$ of the evaluation for the Master's dissertation report: scientific quality, technical quality, design, structure, use of language

30% of the evaluation for the oral defence assessment: presentation (content, structure and design) (10%) and the answers to the questions (20%)

Note: following deliberation the jury can defer from the calculated score. This will always be motivated.

Students who eschew periodic and/or permanent evaluations may be failed by the examiner.

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