

# Experimental Master Thesis in Molecular Health Science (45 ECTS)

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|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title               | Experimental Master Thesis in Molecular Health Science (45 ECTS)                                                                                                                                  |
| Semester            | F2024                                                                                                                                                                                             |
| Master programme in | Molecular Health Science                                                                                                                                                                          |
| Type of activity    | Master Thesis                                                                                                                                                                                     |
| Teaching language   | English                                                                                                                                                                                           |
| Study regulation    | Read about the Master Programme and find the Study Regulations at <a href="https://ruc.dk">ruc.dk</a><br>Læs mere om uddannelsen og find din studieordning på <a href="https://ruc.dk">ruc.dk</a> |

## REGISTRATION AND STUDY ADMINISTRATIVE

|                              |                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | Tilmelding sker via <a href="#">STADS-Selvbetjening</a> indenfor annonceret tilmeldingsperiode, som du kan se på <a href="#">Studieadministrationens hjemmeside</a>                                                                                                                                                                                                                                           |
| Registration                 | Registration through <a href="#">STADS-Selvbetjening</a> within the announced registration period, as you can see on the <a href="#">Studyadministration homepage</a> .<br><br><b>Please note: Students starting their Master Thesis on 1st of August 2024 will follow the study regulation from 1st of September 2024 - <a href="#">Experimental Master Thesis in Molecular Health Science (45 ECTS)</a></b> |
| Number of participants       |                                                                                                                                                                                                                                                                                                                                                                                                               |
| ECTS                         | 45                                                                                                                                                                                                                                                                                                                                                                                                            |
| Responsible for the activity | Lotte Jelsbak ( <a href="mailto:ljelsbak@ruc.dk">ljelsbak@ruc.dk</a> )                                                                                                                                                                                                                                                                                                                                        |
| Head of study                | Lotte Jelsbak ( <a href="mailto:ljelsbak@ruc.dk">ljelsbak@ruc.dk</a> )                                                                                                                                                                                                                                                                                                                                        |
| Teachers                     |                                                                                                                                                                                                                                                                                                                                                                                                               |
| Study administration         | INM Registration & Exams ( <a href="mailto:inm-exams@ruc.dk">inm-exams@ruc.dk</a> )                                                                                                                                                                                                                                                                                                                           |

Exam code(s) U60188

## **ACADEMIC CONTENT**

The exemplary nature of the master's thesis ensures that the students acquire knowledge, skills and competences that they can use in a wider context than the master's thesis itself. The students are free to choose the contents of the master's thesis within the framework of the study regulation and its objectives. The ability to critically assess the quality of their own efforts and their own knowledge base in relation to a given research question is an important objective of the participatory and problem-oriented thesis work. The process is supported by one or more academic supervisors. The supervisor(s) help to ensure that the thesis work meets the requirements of the study regulation.

Overall  
objective

In the thesis report, the student must document knowledge and skills in using scientific theories and methods while working with a limited, academic and relevant research question. The student must document skills in analysing, categorising, discussing, arguing, evaluating and reflecting on a scientific basis as well as being able to choose and relate critically to sources, literature, theory and methods used in the master's thesis. The master's thesis must demonstrate the students' proficiency in communicating about an academic study to colleagues and to demonstrate competences in initiating, managing and completing a longterm academic study and writing process.

The Master's thesis work generally takes place in groups of up to 2 students. Students have the right to complete the thesis work individually.

Detailed  
description of  
content

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Course material and Reading list

Relevant literature for the project is decided by the students in collaboration with the supervisor(s), but within the overall subject of the education. It is expected that the students conduct independent literature searches.

### **Master Thesis 45 ECTS / 1215 hours**

Overall plan and expected work effort

- Master Thesis Seminar: 4 hours
- Exam and assessment: 1 hour
- Supervision: 25 hours
- Report writing: 225 hours
- Literature search: 175 hours
- Practical project work (laboratory, model design, analysis, field work): 735 hours
- Exam preparation: 40 hours

Format

Evaluation and feedback

All master thesis' processes will include ongoing dialogue-based (oral) evaluation between the students and the supervisor. Both students and supervisors are expected to provide constructive feedback and viewpoints during the process. Feedback concerning the academic content and progression, process and collaboration. When the master thesis is handed in, there will also be an evaluation through a questionnaire in SurveyXact concerning the master thesis process and the master program in general. The Study Board will handle all evaluations. Furthermore, students can, in accordance with RUCs 'feel free to state your views' strategy through their representatives at the study board, send evaluations, comments or

insights from their project process to the study board during or after the master thesis process.

Programme

## **ASSESSMENT**

After completing the master thesis, the students will be able to:

- discuss and analyze the selected subject areas and understand and reflect on one's own thesis research and how it fits into an academic context
- discuss the academic genre with the academic target audience for which the master's thesis is intended.
- use and master scientific theories and methods while working with a specific, academic and relevant research question
- identify scientific issues
- analyze, categorize, discuss, argue, reflect and evaluate complex data on a scientific basis
- critically view and select scientific sources, literature, theory and methods
- discuss and participate in academic argumentation
- write in accordance with academic text norms and for an academic target group
- use experimental methods in a research process
- initiate, manage and complete a lengthy academic research and writing process
- identify and take responsibility for their own professional and written language development and specialization
- select, adapt, improve or design experimental methods in problem solving processes, teaching and working environment.

Overall  
learning  
outcomes

Form of  
examination

Master thesis written individually or in a group

Permitted group size: 2-2 students.

The student(s) can choose whether the assessment should be based on solely the written product or on both the written product and the oral exam.

The character limits of the master thesis are:

for 1 student: 48,000-144,000 characters, including spaces.

For 2 students: 48,000-144,000 characters, including spaces.

The character limits include the cover, table of contents, summary, bibliography, figures and other illustrations, but exclude any appendices.

The master thesis must include a summary. The summary can either be written in English or Danish.

The summary is included in the overall assessment with a weighting of 5 percent.

Before submitting a master thesis written by a group, that have chosen an assessment solely based on the written product, each member of the group must clearly indicate which part(s) of the thesis they are responsible for. All group members are responsible for the introduction, conclusion and summary.

The oral exam is individual for students that have written the thesis alone, or students that have requested an individual exam. All other oral master thesis exams are conducted as group exams.

Time allowed for exam including time used for assessment for:

1 student: 45 minutes.

2 students: 90 minutes.

There will be an individual assessment of each student's performance.

The assessment is an overall assessment of the master thesis and, where relevant, the oral performance.

Writing and spelling skills in the thesis are part of the assessment and will count for 15 percent.

Permitted support and preparation materials at the oral exam: Outline on maximum one A4 size-page and presentation material.

Assessment: 7-point grading scale.

Moderation: External examiner.

Form of Re-examination Samme som ordinær eksamen / same form as ordinary exam

Type of examination in special cases

The thesis is evaluated based on the students ability to discuss and analyze the selected subject areas and understand and reflect on one's own thesis research and how it fits into an academic context, use and master scientific theories and methods while working with a specific, academic and relevant research question, analyze, categorize, discuss, argue, reflect and evaluate complex data on a scientific basis, critically view and select scientific sources, literature, theory and methods, write in accordance with academic text norms and for an academic target group, use experimental methods in a research process.

Examination and assessment criteria

The assessment of the oral exam is based on the student's ability to meet the criteria mentioned above and their ability to

- clearly present and communicate the scientific content of the project
- engage in a scientific dialogue and discussion with the supervisor and assessor

Furthermore, whether the performance meets all formal requirements in regard to both for the written og oral exam

Exam code(s) Exam code(s) : U60188

## Course days:

**Hold: 1**

### Hand-in of Thesis (starting August 2023)

time 03-06-2024 10:00 til  
03-06-2024 10:00

forberedelsesnorm ikke valgt

forberedelsesnorm D-VIP ikke valgt

## **Hand-in of Thesis (starting January 2024)**

|                         |                                          |
|-------------------------|------------------------------------------|
| time                    | 01-11-2024 10:00 til<br>01-11-2024 10:00 |
| forberedelsesnorm       | ikke valgt                               |
| forberedelsesnorm D-VIP | ikke valgt                               |