Master Research Project

Guide for

Examiners and Supervisors



Utrecht University

Graduate School of Life Sciences

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Preface

This guide is intended for staff members of the Graduate School of Life Sciences or supervisors at host institutes charged with the task of examining and/or supervising students performing a Research Project as part of their Master's programme. A corresponding guide has been drawn up for students. The purpose of this guide is to provide a helping hand, and refer to other sources for additional information or support.

Chapter 1. Quick guide gives you an overview of the most important information you need to know in order to successfully examine and/or supervise a student during their Research Project.

Chapters 2 and 3 provide more extensive information for those that are interested.

Additionally, the Teacher's Guide website is a useful tool created to provide support to examiners and supervisors. Here you can find a wealth of information on all of the topics mentioned in this guide as well as all forms and documents you may need.

The research projects of the GSLS Master' s programmes are governed by a number of rules and guidelines recorded in the GSLS Education and Examination Regulations, the Rules and Regulations of the Board of Examiners and the Student' s Charter. The latest version is available on the Teacher' s Guide.

The Graduate School of Life Sciences

The Graduate School of Life Sciences (GSLS) at Utrecht University is a higher education institution that combines the expertise and educational facilities of the Faculty of **Science** –departments of Biology, Chemistry, and Pharmaceutical Sciences– are combined with the clinical research and education of the Faculties of **Medicine** (University Medical Centre Utrecht - UMC Utrecht) and **Veterinary Medicine**. The GSLS falls under the responsibility of the Deans of these three participating faculties. The Deans have appointed a Board of Studies for management of the GSLS.

The GSLS provides research training and education for Master' s and PhD students, incorporating theory and practice at both levels and allowing overall quality control and consistency. All research Master' s programmes at the GSLS are linked to renowned research institutes within Utrecht University.

Master's programmes

The GSLS offers 17 Master's programmes that belong either to **Biosciences** (Faculty of Science) or to **Biomedical Sciences** (University Medical Centre Utrecht). The rules and regulations of the GSLS are the same for every student.

All GSLS Master's programmes follow a general structure although the Master's programmes can slightly deviate from the general structure (check every programme individually). Common to all Master' s programmes is the beginning with the Introduction Week (Introducing Life Sciences) where they get all the information about the GSLS and their individual programme. Additionally, all Master's programmes have a research project and the minimum requirement of 7 months of practical research work mandatory to reach the end goals of the Master' s, as well as a series of scientific seminars that they should attend during the course of their programme.

GSLS principles on scientific integrity

Plagiarism, falsification and fabrication are the top three actions of scientific misconduct. More information about what precisely these actions entail can be found in the Education and Examination Regulations (EER). More information about the actions expected from the examiner and supervisor can be found on section 3.7 of this guide.

The GSLS follows the principles of scientific integrity, as described in the European Code of Conduct for Research Integrity (Pieter J.D. Drenth, 2010) and The Netherlands Code of Conduct for Research Integrity (2018). Both Codes set out the principles that should be observed by each individual concerned, which are the following basic norms: honesty, reliability, objectivity, impartiality and independence, as well as open communication, duty of care, fairness and responsibility for future science generations. When a student conducts research during a research project, they enter the world of scientific research, with the responsibility of following the scientific code of conduct, based on the above principles of proper scientific behavior.

Chapter 1. Quick guide

The main part of the training of Master' s students within the Graduate School of Life Sciences (GSLS) at Utrecht University (UU) consists of one or, in some cases, two research projects. The Graduate School of Life Sciences maintains a high standard of education. With many research projects being supervised both inside and outside the UU and UMC Utrecht, the uniform assessment of these projects is a major challenge. Although the majority of the projects are carried out at renowned and excellent research groups, each institute/country has its own standards when it comes to assessing student research projects. In order to ensure a uniform and high standard of education, including assessment, we hereby provide guidelines for supervision and assessment of the research projects performed by GSLS students.

1.1 Learning outcomes of the research project

After finishing their research project, students are capable of:

- Translating a Life Sciences problem into a relevant research question, suitable for research development or product design.
- Designing a suitable research plan to test the formulated research questions, according to methodological and scientific standards.
- Independently performing research, with the required accuracy. Graduates are able to handle, analyse, interpret and evaluate the empirically derived data in a correct manner.
- Discussing the outcomes of empirical research and linking them with scientific theories.
- Indicating the importance of research activities for solving a biomedical question or problem, if applicable from a social perspective.
- Critically reflecting on their own research work in Life Sciences, from a social perspective.
- Comprehensibly reporting research results orally and in writing, to specialised and non-specialised audiences in an international context.

1.2 Start of research project

Students can only start their research project after:

- They and their examiner/supervisor have received an email from Osiris Case, confirming the approval of the project by the Board of Examiners.
- When applicable, the student has arranged everything regarding visa issues, accommodation, insurance and financial support. If required, your help as examiner/supervisor is appreciated.

Note: For approval of the application and assessment access to Osiris Case is needed. If you do not have an account in Osiris Case, an email will be sent with instruction on how to log in. Please make sure to check your spam folder, if you did not receive this email.

1.3 Supervision terminology and responsibilities

Definitions

Examiner:

- is affiliated to UU/UMCU, Princess Maxima Centre, or the Hubrecht Institute as a full, associate (UHD) or assistant (UD) professor with a tenured (track) position. Professors on a UU/UMCU special chair (bijzonder hoogleraar), but in daily life affiliated to a non-UU/UMCU institute, can also act as examiner.
- cannot be a postdoc or PhD candidate.

Supervisor host institute (only applicable for projects outside UU/UMCU):

- works at the host institute (outside UU/UMCU, Princess Maxima Centre, or the Hubrecht Institute) where the project is carried out.
- is an expert in the field (cannot be a PhD candidate or postdoc)

Daily supervisor:

- can be the same as examiner or supervisor host institute. If this is not the case: the daily supervisor can be a PhD candidate or postdoc. If the daily supervisor is still rather junior (e.g., PhD candidate or postdoc), a senior scientist (e.g., their own supervisor) must provide support.
- works at the institute where the project is carried out.
- must be sufficiently capable of supervising a MSc student.

Second reviewer (only applicable for projects at UU/UMCU*):

- is an expert in the field (cannot be a PhD candidate) and is not directly involved in the supervision of the student or the project the student has been working on. Ideally, the second reviewer is a staff member from a different group than the examiner and daily supervisor.
- can be from outside UU/UMCU, Princess Maxima Centre, or the Hubrecht Institute.

*For projects outside UU/UMCU both examiner and supervisor host institute grade the research project, therefore a second reviewer is not required.

Responsibilities

The examiner:

The examiner can be the daily supervisor of the student. If that is the case, please ignore the role of the supervisor host institute or daily supervisor in the responsibilities below.

- is familiar with the research field of the project
- ensures the academic master level of the proposed project
- supervises at a distance if the project is preformed outside the UU/UMCU
- monitors the proposed end date and, if necessary, checks in with the student to review planning and progress to prevent delays
- discusses grading process and academic level of the research project with supervisor host institute (for projects outside UU/UMCU) or daily supervisor (for projects at UU/UMCU) before the start of the project
- discusses rubric/assessment criteria with student and supervisor of the host institute or daily supervisor at the start of the project
- communicates regularly with supervisor host institute or daily supervisor and student during the research project
- discusses and judges the progress of the student during the interim assessment, if possible, together with supervisor host institute or daily supervisor in a single session, using the rubric
- ensures that the interim assessment occurs timely and is submitted
- discusses the achievement of the student during the final assessment together with the supervisor of the host institute or daily supervisor, preferably using the rubric
- establishes grades for all parts (research skills, research report and final presentation) based on own observations and on in depth discussions with the student about the research performed (at least twice, in the middle and at the end*)
- determines the final grade
- supports grades with feedback (preferably using rubrics)
- can only assess maximum two of the following components for the same student: major research project, profile project, writing assignment, and business internship

*Recommendation for a project outside UU/UMCU: Let the student defend the performed research in front of the examiner and a second teacher, which may be the supervisor host institute, e.g. after the final presentation. However, any other means that ensures fair assessment of student research skills may be applied by the examiner instead, provided the grade is well substantiated by feedback.

Supervisor host institute:

- is responsible for the daily supervision
- communicates regularly with examiner and student during the research project
- monitors the achievements and progress of the student
- discusses and judges the progress of the student during the interim assessment, if possible together with examiner in a single session, using the rubric
- provides grades for all parts (research skills, research report and final presentation) based on own observations, observations of the daily supervisor (if applicable) and on in depth discussions with the student about the research performed
- discusses progress/performance with the student during the final assessment, if possible together with the examiner, using rubric/assessment criteria

Daily supervisor:

- guides the student during practical work and while preparing the report and presentation
- communicates with student and examiner (for projects at UU/UMCU) or supervisor host institute (for projects outside UU/UMCU)
- advises on grades to examiner or supervisor host institute

The second reviewer (only applicable for projects at UU/UMCU*):

- provides grades for the research report and final oral presentation

*For projects outside UU/UMCU both examiner and supervisor host institute grade the research report and final presentation, therefore a second reviewer is not required.

1.4 Duration of the project and extension

- The duration of the different projects can be found in the Teacher's Guide. The total duration includes the time for writing the report and preparing the final presentation.
- During their project, students might spend time on courses, trainings or holidays that they will indicate in their application form. Including the additional activities, the project should finish before the end date listed on the application form.
- Some projects can be extended with credits from the elective component. The student should apply for this extension before the start of the project in the application form.
- If the project is running past the deadline, the student should apply to set a new end date. This can be done through Osiris Case. If the student experiences difficulty during this process, they can contact the research project coordinator.

1.5 Contents of the research project

- Every research project consists of several key stages: drawing up a timetable, reviewing literature, drawing up a research plan, carrying out experiments/collecting data, data analysis, writing the report and presenting orally.
- Group meetings and other research group activities are part of the research project.
- The final report should be written in English containing a summary specifically aimed at informing the general audience about the content of the project (plain language summary: ~500-word summary for an audience that understands Biology at high schoollevel). A Dutch report is allowed by exception for research projects conducted in companies or government organizations that require a Dutch report. In this case, an English summary must be provided. No more than one report in Dutch is allowed during the Master's degree programme.
- The final presentation should take place at the research group of the examiner (and, if applicable, also at the hostinstitute).
- The GSLS has Generative AI guidelines in place to help students and supervisors navigate the use of these tools responsibly and effectively. Please also refer to the GSLS GenAI Research Project Guidelines for Master's students and supervisors. Students should always discuss first with you as supervisor before using Generative AI in their project.

1.6 Interim assessment – meeting and report

The interim Assessment meeting is a mandatory evaluation session that should take place two or three months after the start of the research project. During this meeting, the student receives feedback on their work, progress and performance. We strongly advise the examiner and supervisor to use the 'Rubric for Research Skills' as a tool to discuss the strengths and points of improvement of the student. Please note: this interim assessment conversation is different from regular work discussions.

- For research projects at UU/UMCU: the meeting takes place with student and examiner (preferably also with the daily supervisor).
- For research projects outside UU/UMCU the meeting is between the supervisor host institute, the student and examiner (preferably in a single meeting).
- After the meeting, the student has to submit the highlighted rubric or write a short report (½ A4) summarizing the meeting to the Master's Administration Office. If the project is registered via Osiris Case (*Osiris Zaak* in Dutch), the student must upload the mandatory interim assessment form in Osiris Case, after which the examiner will be automatically requested to approve the submitted

document.
(For more information about the supervision of the research projects please read chapter 3 of this document)

1.7 Fraud and plagiarism

Fraud or plagiarism is absolutely not allowed. The examiner:

- has the responsibility to ensure that no fraud or plagiarism takes place. If you find or suspect that your student is committing fraud or plagiarizing during their research project, it must be reported to the Board of Examiners. You are invited to contact the Board of Examiners first for advice and more information can be found here.
- should check the final research reports for plagiarism using the UU/UMCU supported plagiarism checker Ouriginal (see Teacher's Guide). If a student wrote computer codes as part of the research project, these should be checked separately with specialized software (MOSS is an option).
- should attach a letter to the assessment form in the cases that the reported percentage of plagiarism is >10% for reasons other than plagiarism, explaining the reasons.

1.8 Final assessment – grading

At the end of a research project, the student is expected to have met the learning outcomes. In order to assess whether the student has achieved these learning objectives we strongly advise the examiner and supervisor to use the rubrics for research skills (60% of final grade), report (30%) and presentation (10%). All three elements have to be awarded at least a 5.5 in order for the student to pass the final examination of the project. The student should be offered one chance for re-examination of each insufficient component. Student and examiner should discuss the deadlines and requirements for the re-examination and put it in writing.

For projects inside UU/UMCU, the assessment is performed by the examiner in close consultation with the daily supervisor and the second reviewer.
For projects outside UU/UMCU, the supervisor host institute grades all three components. The examiner and supervisor host institute should contact each other in order to make sure that the assessment of all components is performed according to the guidelines of the GSLS. The examiner establishes grades for all parts based on own observations and determines the final grade.
For projects abroad:

- First, the supervisor host institute determines the grades according to the marking system (e.g., Anglo-American letter grading (F-A^{+})) of that country in consultation with the examiner.
- Next, the examiner converts the grade according to the Dutch marking system. The conversion table is available here.

If the examiners and second reviewers or supervisor host institutes marks differ by 2 or more points, the examiner should notify the Board of Examiners.

In order to meet the *cum laude* requirements a student should receive an 8.5 or higher for their research project(s).

1.9 Final assessment – Submission

- The project is registered in Osiris Case, the examiner must submit the assessment digitally in Osiris Case within 10 working days after the student has handed in their report and gave their oral presentation. The examiner will receive reminders regarding the end date of the project.
- The assessment procedure for a project that is registered via Osiris Case is as follows:
    - For projects inside UU/UMCU, the examiner performs the assessment in close consultation with the daily supervisor and second reviewer.
    - For projects outside UU/UMCU, the examiner contacts the supervisor host institute to be informed about their grading and to make sure that the assessment of all components is performed according to the guidelines of the GSLS. Examiners are responsible for submitting the grades from both the supervisor host institute and themselves in Osiris Case.
- After the examiner has handed in the final assessment, the second reviewer (for projects inside

UU/UMCU) or supervisor host (for projects outside UU/UMCU) will need to approve the assessment in Osiris Case.
- The student will be requested to upload their report in Osiris Case after the examiner has submitted the assessment. After uploading the report, the Master' s Administration Office will be notified to finalize the results.

Take note that the end report of the student should only feature one author, which is the student. The end report should not be a compilation of efforts from multiple authors. It is essential that only the work by the student is handed in and graded. Should there be an interest in publishing the Writing Assignment in an academic journal, the process to prepare the article should start after grading. The final product for assessment should not have influences of multiple authors.

1.10 Copyright and publication rights

By signing the application form the student declares to transfer the copyright of all products (including the tangible and intellectual products) of the research project to the UU/UMCU or host institute. Depending on the magnitude of the scientific contribution, the student has the right to be a (co-)author of publications or to be otherwise acknowledged. Any questions in this regard should be addressed to the head of your research group.

1.11 Problems or questions and further information

In case of any problems or questions, feel free to contact the programme coordinator first, and otherwise reach out to the academic counsellor or research project coordinator. All official regulations of the GSLS are recorded in the Education and Examination Regulations and the Rules and Regulations, which can be found here.

Chapter 2. The research project from A to Z

2.1 Approval of a research project

The quality and suitability of the project is assessed by the Board of Examiners before the start of the project. The process is the following:

- The student discusses the project with the supervisor and examiner
- The student fills in the application form in Osiris Case which includes:
    - Agreements on the content of the project
    - Start and end date (Note: The research project duration is planned for 40-hour working weeks; only in exceptional cases, research projects can be conducted part-time)
    - Time off taken by student and supervisor (e.g., holidays, trainings, courses, etc.)
    - Activities that the student will participate on within the research group
    - Other details that can be found in the application form and should be discussed
- For projects outside UU/UMCU, the GSLS internship contract appears at the end of the application form. All students and supervisors host institute are obliged to fill in the internship contract to align the responsibilities and agreements on the project and supervision before the start of the project
- The examiner and the programme coordinator approve the application form (and supervisor host institute, if applicable) through Osiris Case.
- The Board of Examiners assesses and approves the project through Osiris Case.
- Student, examiner, supervisor and programme coordinator receive an approval email.

Note: The student must hand in the application form at least one month (20 working days) before the starting date of the project. Students cannot start the project until they have received the formal approval of the Board of Examiners.

Note: For approval of the application and assessment access to Osiris Case is needed. If you do not have an account in Osiris Case, an email will be send with instruction on how to log in. Please make sure to check your spam folder, if you did not receive this email.

2.2 Drawing up a timetable & a research plan

The timetable of a project specifies the timing for conducting the different project components. Having a clear timetable from the beginning of the project helps students concluding their projects successfully and avoiding delay. The student should draw the timetable during the first week of the project and keep updating and adjusting the plan along the project. Student and supervisor should discuss as often as necessary the timetable progression and occasionally identify targets that are not met to find solutions. Keep in mind that every project has an end date and the planning should aim to finish the project before the end date. Writing the final report and preparing the final presentation are essential components of the project and should be finished before the end date. The supervisor should try to prevent the student from exceeding the end date, while achieving the learning objectives. Acquiring more data for the project is not a valid reason to request an extension.

The research plan can be drawn in parallel with the timetable. In order to do so, the student conducts a literature review and defines the actual research topic of the project and the research hypothesis. For the student to learn to think independently, the research plan should be designed by the student and only afterwards discussed with the supervisor/examiner. During the discussion, the student should receive clear feedback and make adjustments based on feasibility. Investing sufficient time on the research plan will help the student move forward in the project in a confident way. The supervisor can also encourage the student to present the project plan to the group/department for additional feedback.

2.3 Gathering and processing data

The student can start the practical work once the research plan is ready. Depending on the nature of the project, the data collection will vary (e.g., laboratory/field-based experiments, computational models, database analysis, etc.). The student should keep a lab journal and save and organize all the gathered data. This is an important habit for the student as a researcher and it allows the supervisor and examiner to monitor the accuracy and progression of the student.

The student should have sufficient guidance at the start of the project and the involvement of the supervisor in the practical work should decrease over time. The supervisor should stimulate the student to ask for help and discuss new results, ideas and experimental planning.

2.4 Writing plan

The final report is an important outcome of the research project. The student needs to select, organize, interpret and put into context the data collected. The first steps include deciding on the scientific format of the report (e.g., scientific article, report, etc.) and preparing an outline. The supervisor can provide with a set of deadlines and feedback moments to give structure to the writing process and avoid possible delay. The final report is written in English unless an exception is made because the research is preformed in companies or government organizations that require a Dutch report.

The plain language summary is aimed at informing the general audience and fulfills the learning goal of comprehensively report to people outside the field. This summary should meet the requirements:

- Approximately 500 words long
- Understandable for people with high school Biology knowledge (VWO-level)
- In English or Dutch (if the supervisor speaks Dutch)

2.5 Presenting the project

At the end of the research project, the student gives a final presentation to the research group (in English). If the project takes place outside UU/UMCU, the student will give present both at the host institute and at the research group of the examiner. Ideally the student finishes the report before the final presentation. The supervisor should provide feedback on the presentation beforehand (e.g., clarity of the slideshow, order of the story, accuracy of the conclusions, etc.)

2.6 Confidentiality for research projects outside UU/UMCU

The host institute may require the student to apply confidentiality during and/or after the research project. In that case the following applies:

- The examiner should be allowed to have access to the report of the student at all times.
- The Board of Examiners should be allowed to have access to the report upon request.
- The student should be able to give their final presentation at the research group of the examiner.

In case of confidentiality, however, the student does not have to provide a copy of the report to the Master's Administration Office but just one page including the following:

  - Title of the project
  - Student name, number and Master's programme
  - Name, email address and affiliation of the examiner and supervisor host institute
  - Short summary of the project and remarks regarding confidentiality.
  - Signature of the examiner

Also, in case of confidentiality the final report should be checked for plagiarism. Check the Teachers' Guide for the option to upload under embargo.

2.7 Publishing

The final report can be written as a scientific article. However, writing a scientific article and preparing it for submission to a scientific journal is a difficult skill to master. This can have a negative influence in the final assessment. The supervisor should make sure that the student finishes the project on time and the assessment is completed before the start preparing the article for publication.

Please note that the product a student will hand in to the school should be an **individual** product. That means it cannot be edited for publication by you or other co-authors. Of course, feedback can be given. If you / your group decide to publish the part of research, you can rewrite the report after the student has handed in their individual report.

2.8 Premature termination of the research project

No credits will be allocated to prematurely terminated research projects.

Termination by the student: This could be due to a variety of reasons (e.g., the research project has failed to meet expectations, the student is experiencing personal problems that interfere with continuation of the research project, etc.). Before deciding to terminate the project prematurely the student is advised to contact the academic counsellor. The student must notify the supervisor/examiner as soon as possible on the decision to terminate the research project and inform the programme coordinator as well. An insufficient grade will be registered by the Master's Administration Office after confirmation by the examiner.

Termination by the examiner and/or supervisor. This may be the consequence if the student fails to honor the agreements or to remain in contact with the supervisor/examiner, without giving substantiated reasons. Please, visit the Teacher's Guide about this matter. The following guidelines should be used:

- The student has failed to honor the agreements laid down in the application form (and the internship contract, if applicable) and has been reprimanded clearly on several occasions by the supervisor and/or examiner.
- The student has been granted at least two opportunities to redeem themselves by continuing the research project in the agreed manner. The student must have been notified in writing.
- The supervisor and/or examiner has stipulated a clear deadline in the second communication, warning the student that the research project will be terminated in the event of continued non-compliance. The student will be notified in writing if the research project is deemed to have been terminated.
- The supervisor and/or examiner has sent copies of this correspondence to the programme coordinator and Research Project Coordinator.

An insufficient grade will be registered by the Master's Administration Office after confirmation by both student and examiner. The student is entitled to submit an appeal against this decision to the Examinations Appeals Board.

Chapter 3. Supervision of the research project

3.1 What is supervision?

There is more to supervising a student than giving a first instruction, keeping an eye on how things are going and grading their final product. As a supervisor you are also overseeing students' learning process, preparing them student for their future careers and mentoring them. This includes giving constructive feedback during the project and the writing phase.

3.2 Expectations

Before the start of the project, it is important to discuss the expectations, learning outcomes and the matching assessment criteria. During the project, evaluation meetings should take place in which the supervisor and student discuss the learning process of the student. These evaluation meetings preferably take place every 2 months and at least once 2 or 3 months after the start of the research project (interim assessment meeting). Apart from discussing expectations, strengths and points for improvement, student and supervisor could discuss future career perspectives. The student can also provide feedback on the supervision and the feedback received.

Together with the Life Sciences Representatives (LSR), we developed the SEED tool for supporting students during those meetings. You can find the form here. The purpose of the tool includes setting expectations, making agreements and two-way feedback, meaning students will also provide you as a supervisor with constructive feedback about supervision and your collaboration so far, from a respectful and professional point of view.

3.3 Feedback

Constructive feedback is an important part of a successful learning process. In many evaluations, students indicate that they would like more feedback. Students also express the need for well-motivated feedback and criticism in order to learn. That is why the Interim Assessment meeting is mandatory for all research projects.

Giving constructive feedback is not an easy skill to master. It is not only about what the student is doing well or wrong. More importantly, it is about explaining why something is right or wrong, and providing useful advice on how to improve. Supervisors and examiners should adjust the way they give feedback depending on the student to avoid them to take such feedback personally. Assure students that the feedback is always meant to help them in the learning process. Constructive feedback focuses on both performance and progress.

Here are five steps for giving constructive feedback:

1. State the purpose of your feedback. State what you will be talking about and why it is important.
2. Describe what you have observed and your reaction.
3. Give the individual an opportunity to respond.
4. Offer specific suggestions or solutions.
5. Summarize everything discussed.

3.4 Supervision during the practical work

During the practical work, the supervisor is responsible for safeguarding the progress, stimulating the student, offering help and fostering the student's research skills. This requires the supervisor to show active and genuine interest. The supervisor is responsible for creating a safe environment that allows the student to ask questions and make mistakes, and should encourage the student in the difficult moments. When needed, the supervisor should offer additional guidance to help the student back on track and appreciate their contribution to the (larger) research project. The student should never be working in the lab without supervision.

3.5 Supervision on the writing phase and presentation

During the last part of the project, the supervisor should focus on providing feedback on writing and presenting.

Regarding writing the report, it is important to understand that most of the students do not yet have the necessary experience to write reports relating to extensive project and this is their moment to acquire them. Together, supervisor and student should make agreements on the number of drafts to be submitted for feedback and the deadlines. The drafts can be into a number of rounds (from the outline to the final report) and the supervisor should provide feedback in all rounds.

For the final presentation to the research group, the student is advised to practice beforehand with the supervisor and receive feedback before the final presentation will take place. The feedback on the presentation (e.g., clarity of the slideshow, order of the story, talking pace, etc.) is part of the learning process of the student.

3.6 Final assessment

The examiner must complete the assessment form within 10 working days after the student has handed in the final report and has given an oral presentation. The form should be filled out in Osiris Case and should be accompanied by the Ouriginal summary and the rubrics that were used to motivate the grade. After the examiner has handed in the final assessment, the second reviewer or supervisor host will need to approve the assessment in Osiris Case.

When assessing the research project, both examiner and supervisor should keep in mind that above all, it is supposed to be a **learning experience for students**. Our aim is that students learn and obtain skills while doing (experiential learning). Therefore, our advice is to take into account both the students' 'end product' as well as the overall learning process, such as the students' speed of learning, the ability to absorb new information and their work attitude. In order make the assessment as objective as possible and to check if the student has achieved learning goals we strongly advise the examiner and supervisor to use the rubrics for research skills (60% of final grade), report (30%) and presentation (10%). All three elements have to be awarded at least a 5,5 in order for the student to pass the final examination of the project. The student should be offered one chance for re-examination of each insufficient component. Student and examiner should discuss the deadlines and requirements for the re-examination and put it in writing. Nevertheless, if a student is performing insufficiently, the supervisor and/or examiner should indicate this to the student prior to the end of the project and as soon as possible. (Check section 1.11 and 2.8). If you need help with issuing an insufficient grade, you can contact the Board of Examiners, the student's programme coordinator or the research project coordinator for advice.

For projects inside UU/UMCU, the assessment is performed by the examiner in close consultation with the daily supervisor and the second reviewer.
For projects outside UU/UMCU, the supervisor host institute grades all three components. The examiner and supervisor host institute should contact each other in order to make sure that the assessment of all components is performed according to the guidelines of the GSLS. The examiner established grades for all parts and determines the final grade.
For projects abroad:

- First, the supervisor host institute determines the grades according to the marking system (e.g., Anglo-American letter grading (F-A^{+})) of that country in consultation with the examiner.
- Next, the examiner converts the grade according to the Dutch marking system. The conversion table is available here.

If the examiners and second reviewers or supervisor host institutes marks differ by 2 or more points, the examiner should notify the Board of Examiners.

If advice is needed on grading (for example when there is doubt or something is unclear), the Assessment Support Panel is available to answer such questions. They can be reached by emailing asp@umcutrecht.nl.

In order to meet the *cum laude* requirements a student should receive an 8.5 or higher for their research project(s).

3.7 Plagiarism check: Ouriginal and/or MOSS

Utrecht University takes fraud and plagiarism very seriously and the examiner is responsible for ensuring that none of these issues take place. The plagiarism-detection software supported by Utrecht University is Ouriginal. As a general rule, all written products from Utrecht University (essays, reports and writing assignments) have to be checked for plagiarism by using this software. It indicates to what extent plagiarism is committed, and which source is used. Check the teacherguide and the UU website for more information on how to use Ouriginal.
If a student wrote computer codes as part of the research project, these should be separately checked for plagiarism with specialized software. MOSS is free and available for examiners to use.

Any act of fraud of plagiarism should be reported to the Board of Examiners. Students committing fraud or plagiarism will be punished by the sanctions described in the Education and Examination Regulations, varying from invalidation of a paper and a record in OSIRIS to permanent termination of registration to the programme. Furthermore, no *cum laude* classification can be obtained. Please do not hesitate to contact the Board of Examiners first for informal discussion on the case before taking the formal steps.

3.8 Completion of the research project

In order to complete the research project and register the grade in Osiris, the student and the examiner need to follow these instructions:

- The student sends the final report to examiner, second reviewer (or supervisor host institute, if applicable) and programme coordinator.
- Student and supervisor check together if there are any restrictions on publication (embargo). If there are, the examiner should upload the final report themselves in Ouriginal so that it can be done under embargo (check guidelines in Teachers' Guide).
- The examiner will submit the assessment digitally in Osiris Case within 10 working days after the student has handed in their report and gave their oral presentation.
- For projects inside UU/UMCU, the examiner performs the assessment in close consultation with the daily supervisor and second reviewer.
- For projects outside UU/UMCU, the examiner contacts the supervisor host institute to be informed about their grading and to make sure that the assessment of all components is performed according to the guidelines of the GSLS. Examiners are responsible for submitting the grades from both the supervisor host institute and themselves in Osiris Case.
- The student will be requested to upload their report in Osiris Case after the examiner has submitted the assessment.
- After uploading the report, the Master' s Administration Office will be notified to finalize the results.

Additional sources and contact information

Useful websites

Students' site of the Graduate School of Life Sciences
Teacher's Guide of the Graduate School of Life Sciences

Training

The GSLS PhD Course Center offers several editions every year of the course 'Supervising a Master's student'. We encourage young researchers to take this course.
Other courses and material provided by Utrecht University for teaching in higher education can be found here.

Contact

Board of Examiners
Assessment Support Panel
Programme coordinators
Research project coordinators
All other GSLS contact information is given in the Students' site and Teachers' Guide.