

## 1. Master thesis work

### 1.1. Before starting

- The master thesis work is usually done in research groups of Faculty of Biochemistry and Molecular Medicine, or in some other university or research institute. You should discuss the project with the group leader. The work can be supervised by professors and docents.
- You can start the experimental work while you have 30 op of MSc studies.
- Fill in the **Pro gradu experimental work** –form ([link](#)) and remember the starting date and supervisor's signature. Kaisa Tuominen or Jari Heikkinen will check the studies and take a copy of the form.
- Before starting the experimental part of the Pro gradu the students must present a short research proposal to the Project Co-ordinator (Prof. Lloyd Ruddock). The proposal should be submitted 2 weeks before you plan to start and must be approved BEFORE starting the work. The proposal will be checked to ensure that the research has been well planned in advance.
- The proposal is written in English by **the student**.
- The proposal, typically two pages, has free format but it should include:
  - the students name and contact information
  - start date of the project
  - supervisor(s) names and titles and the place where the work will be undertaken
  - a half to one page of background information (Why this project is important?)
  - about one page of experimental details (Purpose of the work, methods used in the work)
  - If the work is building on previously published results it is useful to include references

### 1.2. The experimental part

- The experimental part takes maximally six months and the final written thesis must be submitted for review latest **one year** after the beginning of the experimental part.
- The thesis is based on the results obtained during the first 6 months after your start date. You are allowed (if you want) to include an appendix that includes work after the 6 months, but it will not be considered by the examiners in marking the thesis.
- Exceeding the set times without good reason will result in the work being penalized.
- If there is a well justified reason for extension, this should be applied from the Project Co-ordinator. Good reasons may be for example sickness, breaking of critical equipment, being unable to obtain essential reagents or any other factors which cause delay through no fault of the student. The request of extension should be signed by student and supervisor.
- Any extension to the experimental part extends the write up period by the same amount.

### 1.3. Finishing the experimental part

- Return the **Pro gradu experimental work** –form with closing date and supervisor's signature to Kaisa Tuominen in order to receive the credits.

- Laboratory note book must be supplied to the review process, in order to able the reviewers to check experimental details and critical dates.

## 2. Writing Pro gradu thesis

- The student is responsible for writing his/her thesis and the supervisor's responsibility is to give guidance. The supervisor is not expected to undertake substantial editing or revision of a draft.
- Each figure must contain in its legend, after the proper citation: "Permission to use the figure has been obtained from the publisher or the publisher has a policy to grant such permission automatically for use in theses". **You must acquire permission for the use of copyrighted material (pictures, drawings, maps and photographs) by contacting the publisher.** Some journals allow the use of their material without permission if proper citation is used. This must then be announced on the web page of the journal. As an example, J. Biol. Chem. follows this policy ([http://www.jbc.org/site/misc/Copyright\\_Permission.xhtml](http://www.jbc.org/site/misc/Copyright_Permission.xhtml)). So, please check this to avoid unnecessarily asking for permissions. **Instructions and a template for requesting permission can be found on Oulu University library webpage: [http://libguides oulu.fi/theses/copyright\\_issues](http://libguides oulu.fi/theses/copyright_issues)**
- The thesis must be written in clear formal style that follows norms of written language. The thesis must be formatted according the [Instructions for writing Pro Grade Thesis](#). The general presentation (language and layout) is also a marking criteria of the thesis ([link to marking scheme](#)).
- Instructions for publishing in the series Acta Universities Ouluensis and Oulu University library pages also contain useful information:  
[http://www oulu.fi/sites/default/files/content/Actan\\_ohje\\_2014\\_kirjoituspohjalle\\_eng\\_1.pdf](http://www oulu.fi/sites/default/files/content/Actan_ohje_2014_kirjoituspohjalle_eng_1.pdf)  
<http://www oulu.fi/library/theses>
- To see already published Pro gradu thesis is visit library Jultika web page.
- The supervisor drafts a summary document (maximal one side of A4) to help the examiners. This should include comments on the student's performance during the project (dexterity in the lab, attendance and enthusiasm, ability to plan experiments, ability to discuss data) and on specialized aspects of the final thesis (breadth and depth of introduction, appropriateness of methodologies, significance of the results obtained etc). This summary should also include details of any problems encountered during the project which should be taken into account e.g. equipment failure, sickness etc. Two copies of this should be passed on to Kaisa Tuominen. Supervisor can send the document also by e-mail [Kaisa.Tuominen@oulu.fi](mailto:Kaisa.Tuominen@oulu.fi) .

## 3. MSc Maturity test

- If you have taken a maturity test for your Bachelor's degree and demonstrated proficiency in a selected language, an abstract of the Master's Thesis written in this language may be approved as a maturity test.
- Fill in the Maturity test of M.Sc. –form ([link](#)).

- In the abstract, the student should present and analyze the material, research methods and results of the thesis.
- The abstract should provide the following information:
  - The topic of the thesis
  - The subject-matter, material and intention of the research
  - Research methods used (if the research is of a theoretical nature and based on certain written material, the main source books should be mentioned; if the research is of an empirical nature, the methods used should be mentioned)
  - Central research results
  - Conclusions and proposals for action made on the basis of the results
  - Keywords.
- The length of the abstract should not exceed one page (font size 12, spacing 1.5).
- The maturity test will be examined by a representative of the subject in question. The test will be assessed using pass/fail grading.
- The decision regarding the approval of the test will be made by the Faculty Education Committee on the basis of the statement submitted by the examiner (teacher in major subject).
- No credits are awarded for the maturity test.

#### 4. Submitting Pro gradu thesis for review

- **You must be registered as a present student.**
- First fill in and send the maturity test to Kaisa Tuominen ([Kaisa.Tuominen@oulu.fi](mailto:Kaisa.Tuominen@oulu.fi)).
- Remind your supervisor to send the supervisor's statement to Kaisa Tuominen
- Kaisa will ask Dean of Education Peppi Karppinen to nominate the reviewers of your thesis.
- Kaisa will subsequently fill in the necessary information to WebOodi (your name, title of thesis, name of reviewers).
- Laturi ([laturi.oulu.fi](http://laturi.oulu.fi)), the submission tool, receives the basic information from WebOodi during night-time updates and you are able to do the submission on the following day. If you do not see the basic info there, then things are not ready yet (and you may contact Kaisa if you think it is necessary).
- On the [Laturi](#) pages, please watch a 5-minute video on how to do the submission.
- The thesis must be as a pdf/A type file (not the "normal" pdf) before beginning the submission. Converting Microsoft Word file to pdf/A is instructed in Laturi pages.
- During the submission two choices needs to be done:
  1. visibility of the thesis:
    - Most of our Theses contain results that will be published in articles.
    - If the work is obtainable freely in the internet, this may compromise getting results published in articles, and also may give advantage to possible competitors.
    - Although legally the student has a copyright to his/her thesis, the student and the supervisor (and often other people) jointly have the copyright to the research results.

- Therefore in most cases it is the advantage of the student to choose the “not visible in internet” option.
  - The visibility can be changed later on when eventual scientific articles have been published.
2. checking of the thesis in the [Urgund](#) plagiarism detecting system
- is highly recommended
  - proves that all students have done a honest work
  - guarantees that no other student or third party later on can misuse your material

## 5. Examining Pro gradu thesis

- Bring the supervisor’s statement and your laboratory note book to Kaisa Tuominen at the same time when your thesis is ready for submission to Laturi for review.
- Two independent examiners are appointed by the faculty and they have maximally three weeks’ time to suggest a grade.
- The thesis is graded 0-5 based on the Pro gradu Marking Criteria – scheme ([link](#)).
- The examiners must also give a written statement to justify their opinion on the grade. In addition, they are obliged to offer the student a chance to receive feedback face to face.
- The examiners have access to a statement from the supervisor of the student and the laboratory notebook to aid them in their deliberations.
- The official decision regarding the grade will be made by the Faculty Education Committee on the basis of the statements submitted by the examiners. If the examiners do not agree on the grade, the Faculty Education Committee can decide the grade or invite a third examiner. The grade and the examiners statements are made known to the student as soon as the decision is made.
- If the student is not satisfied with the given grade, they can make an appeal. This is free format and must make specific points justifying why the student believes the grade awarded is incorrect.
- The appeal is addressed to the Dean for Education who will then appoint one or two additional examiners and the final mark will be decided in the next scheduled Faculty Education Committee meeting.

## 6. Applying for MSc degree

- **You have to be registered as an attending student to University of Oulu in order to receive a diploma!**
- When your Pro gradu is accepted and you have passed all MSc studies, Kaisa will send you an email attached with forms needed to apply the MSc degree.
- Fill in following forms:
  - Application for diploma M.Sc. degree ([link](#))
    - Fill in personal information in the first box, and date, place and signature on the second page

- Kaisa Tuominen (office 25B on Mondays and Tuesdays, [kaisa.tuominen@oulu.fi](mailto:kaisa.tuominen@oulu.fi)) will advise you further
  - Address form
  - Questionnaire for employment form
  - Diploma award ceremony
- Bring these to Kaisa Tuominen
- If you are not in Oulu, scan filled forms and email them to [kaisa.tuominen@oulu.fi](mailto:kaisa.tuominen@oulu.fi). Please, list in the email which documents you have attached to the email (name of each form; see above). Doing it this way is needed for bureaucracy.
- **Original forms must also send by surface mail to Kaisa.**
- If you have got your BSc degree in other university than Oulu, **you must also send a copy of your BSc diploma!**
- The Application and appendixes have to be delivered to Anne Salovaara in the office of the Faculty of Medicine (Aapistie 5; main entrance of the “Kieppi” building) on the due date. (Note: Faculty of Medicine & Faculty of Biochemistry and Molecular Medicine have a joint service regarding degree diplomas)
- You can pick up the diploma certificates personally from the same place.
- If you want that the diploma is sent out to you, include 5 euros for postal fee while sending the original forms to Kaisa Tuominen.