



MSc Thesis Course Guide Wageningen University

- Part A: information about MSc theses at WU
- Part B: Chair group specific regulations (ENP, as part of WCSG)

Additional information specific to programmes or chair groups is provided online (via Brightspace and/or webpages).

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Table of Contents

Part A: Information about MSc theses at WU.....	4
1. General information	4
Course profile	4
Learning outcomes	4
2. Preparation of your thesis	6
People involved in your thesis.....	6
How to find a thesis (topic)	6
Learning Agreement	6
Information on WU travel policy, insurance and grants	7
3. Points of attention during the thesis.....	8
Supervision	8
Ethical behaviour and plagiarism	8
Progress evaluation	8
Meetings.....	9
4. Thesis activities.....	10
Research proposal/ planning.....	10
Carrying out the research project	10
Feedback.....	10
Thesis report.....	10
Oral presentation (Colloquium).....	11
Oral defence	11
5. Completion of your thesis	12
Assessment of the thesis	12
Delay and possibility to resit	13
Feedback on your thesis.....	13
Part B: Chair Group specific regulations.....	14
WCSG Thesis Café	14
Guidelines for supervision	14
Facilities	14
Guidelines for writing a research proposal	14
Guidelines for the progress evaluation	16
Fieldwork	16
Guidelines for writing a thesis report.....	17
Guidelines for data management.....	17
Thesis colloquia and oral defence	18
Assessment	18

Publishing the report	18
Checklist for organising a thesis	19
Appendices	20
Appendix I: Summary of ‘The Wageningen Code of Conduct for Scientific Practice’	20
Appendix II: Downloads.....	23
Appendix III: Thesis process at WCSG	24
Appendix IV: Thesis report outline	25

Part A: Information about MSc theses at WU

1. General information

This course guide describes the procedures for the MSc thesis supervision and writing process for all chair groups of Wageningen University. This course guide applies to both compulsory and extra theses. It is meant for staff and students. It includes information about the goal of the thesis, the necessary procedures before starting and during the thesis, as well as the assessment procedure.

A separate course guide applies to the *Research Practice*. This is a thesis-like project with additional learning outcomes and related assessment criteria that – depending on the programme and individual arrangements made with the Examining Board – may be done instead of an internship.

Course profile

The MSc thesis enables the student to put their acquired knowledge and skills into practice by individually and independently conducting a research project within the scope of their programme.

Language: English

Credits: 30 - 39 EC (compulsory theses) or 24 - 33 EC (extra theses)*

Period: The start date of your thesis is determined in consultation with your thesis supervisor

* Most study programmes require a minimum of 36 credits for the compulsory thesis; see the Study Handbook for more information. As a guideline, a full-time thesis of 36 credits (EC) equals 24 weeks of 42 hours/week or 26 weeks of 40 hours/ week).

You may choose to include an extra thesis as part of the electives in your study programme. The extra thesis has a minimum size of 24 EC: 16 weeks of 42 hours/week or 17 weeks of 40 hours/week. Only in consultation with the thesis coordinator (of the chair group) and your study adviser, can you extend the length of your (compulsory) thesis to a maximum of 39 credits.

Specific requirements (e.g. mandatory courses) for each MSc thesis can be found in the online Study Handbook. Please check with your study adviser for any programme specific requirements. Finally, you should be officially registered as a Wageningen University MSc student.

Learning outcomes

After the successful completion of your MSc thesis, you are expected to be able to *independently* carry out the following aspects of a research project:

1. Develop a research plan, including: a description of the research topic in relation to the wider scientific context; an identification of the knowledge gap; formulation of research questions and/or a hypothesis, aims and objectives; an explanation of how you intend to conduct the research (e.g. in terms of a design for the project, data-collection and -analysis methods, research tools).
2. Collect, select and process data, using the design for the project, methods and tools described in the research plan.
3. Analyse and synthesise the data in order to answer the research questions and/or test the hypothesis.
4. Formulate answers to the research questions that are supported by the research outcomes; pay attention to potential limitations; critically discuss the outcomes in relation to the wider scientific and societal context.
5. Report on the research, both in writing and in oral presentation.

6. Work in compliance with academic codes of conduct and with proper management of time and resources.
7. Make use of input and feedback for executing the research project and provide feedback to others.

2. Preparation of your thesis

The supervision of your thesis is the responsibility of a Wageningen University chair group. Your study programme determines which chair groups are entitled to supervise your thesis project. Consult the description of your MSc programme in the Study Handbook and contact your study adviser to find out more about the chair group(s) allowed to supervise your thesis. If you find a thesis topic that does not meet these criteria, but which, in your opinion, is extremely relevant for your programme, you should contact your study adviser and ask for approval from the Examining Board.

People involved in your thesis

- The *thesis coordinator* is the contact person within the chair group. You can find thesis coordinators of each of the chair groups in the online Study Handbook of Wageningen University. The thesis coordinator appoints a supervisor and an examiner from the chair group.
- The *supervisor* is a staff member of the chair group and responsible for the supervision of your thesis. Especially in lab theses, the daily supervision often is delegated to a PhD student. Supervisors from external organisations cannot have a formal role and cannot be involved in the grading.
- The *examiner* will be the chair holder or another staff member appointed by the Examining Board. The examiner is responsible for the final grading.

How to find a thesis (topic)

There are differences between chair groups with regard to how theses should be found and arranged. In general, you can take the following steps:

- Attend a thesis information meeting, organised by your MSc programme or the chair group. In a few programmes, you need to participate in a thesis allocation procedure.
- Contact your study adviser to discuss the options for thesis subjects.
- Visit the Wageningen University websites of chair groups that are entitled to supervise an MSc thesis within (the specialisation of) your study programme.
- Find thesis subjects via the thesis database at WU-website (this database is still under construction).
- Make an appointment with the thesis coordinator of the chair group and discuss which thesis subject(s) you are interested in. Names of thesis coordinators can be found in the online Study Handbook.

The thesis subject should preferably match the overall research field of your programme. You must discuss both the topic and timing with your study adviser and the thesis coordinator of the chair group in a timely manner, especially if your thesis includes an experiment or field work abroad: this can sometimes take several months to arrange.

Learning Agreement

Before the thesis starts, you and your supervisor have to discuss and agree on the content of your thesis. The *Learning Agreement* (see overview of downloads in Appendix II) contains a description of the thesis topic, the agreements on supervision, planning, data management plan, evaluation moments, and (if applicable) risk assessment. You and your supervisor must discuss and sign the Learning Agreement. The Learning Agreement will be archived in OSIRIS.

Discuss possible confidentiality issues with your supervisor. In principle, your MSc thesis is not considered confidential, however, if part of your results is used in a larger research project, contract research or research that is subject to patenting, then confidentiality agreements may apply. You

should be informed by the thesis supervisor prior to starting if your thesis is part of a contract research programme or a patent procedure.

Discuss time, format and transfer of results and data with your supervisor as well (these are part of the data management plan) and include arrangements in the Learning Agreement. If the chair group use a specific format for a data management plan, this is included in the chair group specific regulations in this course guide (Part B).

Information on WU travel policy, insurance and grants

Travel policy for students

Are you planning to travel abroad or, as an international student, are you temporarily travelling back home in the context of your studies at Wageningen University & Research? Find out in good time whether this trip concerns a **risky area** (source: Dutch Ministry of Foreign Affairs). If so, you will have to receive permission. If this is relevant to you, you should submit a **travel request** together with your thesis coordinator.

You will need to complete a form that also functions as a checklist to ensure that you are well-prepared for your trip. This checklist includes precautions to be taken – both mandatory and otherwise – such as travelling together with a student who is already familiar with the area, (additional WU) insurance, safety training, registration in Kompas (Foreign Affairs), and recommended vaccinations. You can find the form on the website mentioned below.

For actual information on travel policy WU, check the website:

<https://www.wur.nl/en/Education-Programmes/Current-Students/Travel-policy-for-students.htm>

Travel Insurance

Students participating in internships and/or conducting thesis work abroad as part of their study programme at the University are covered by the collective travel insurance of Wageningen University & Research. You do not need to pay to make use of this collective travel insurance. More information you can find here (heading Collective Travel Insurance):

<https://www.wur.nl/en/Education-Programmes/Current-Students/Insurance.htm>

Grants

There are some possibilities to apply for grants if your thesis, internship or research practice takes place in a foreign country, but most times the chance to receive a grant is small. For information about grants, see the following websites:

- <https://www.wur.nl/en/Education-Programmes/Study-Abroad-and-Exchange-Students/Outgoing-from-Wageningen-University.htm>
- <http://www.beursopener.nl/content/index.asp> (unfortunately in Dutch only)
- <https://www.wur.nl/en/Education-Programmes/master/Study-grants.htm>
- <https://www.wur.nl/en/Education-Programmes/Current-Students/Travel-Funding.htm>

3. Points of attention during the thesis

Supervision

Each chair group organises the appointment of supervisors differently. Contact the thesis coordinator of the respective chair group to check their specific procedure.

The first (main) supervisor is always a staff member of the responsible chair group, but sometimes, a second or even a third chair group may be involved in the supervision of an MSc thesis. In general, students are entitled to have regular meetings (e.g. every two or three weeks) with the primary supervisor. The actual frequency of meetings may vary depending on the nature of the thesis project. In order to make the meetings effective, the student needs to prepare for them, for example by preparing documents for the meeting (e.g. a chapter of the thesis or a list of discussion points) and by sending the document to the supervisor well in advance of the meeting. The supervisor, in turn, is expected to read the documents sent to them and to discuss them with the student during the meeting. As the thesis project is a learning experience, students are encouraged to act independently when resolving problems or in difficult situations. However, in cases of urgency, the supervisor should be available for feedback and support in between the regular meetings. Agreements on how to deal in such situations should be included in the Learning Agreement.

Ethical behaviour and plagiarism

Attention to scientific integrity is an important aspect of your academic education, including the various aspects that are relevant for an academic researcher. You always have to be aware of the fact that you could get into an ethical dilemma and you should be prepared if you run into such a situation. We refer to the Wageningen Code of Conduct for Scientific Practice (see Appendix I).

The main aspects described in this code concern:

- **Scrupulousness:** Scientific activities are performed scrupulously, unaffected by mounting pressure to achieve.
- **Reliability:** Science's reputation of reliability is confirmed and enhanced through the conduct of every scientific practitioner. A scientific practitioner is reliable in the performance of their research and in the reporting, and in the transferring of knowledge, through teaching and publication.
- **Verifiability:** Presented information is verifiable. Whenever research results are publicised, it is made clear what the data and the conclusions are based on, where they were derived from and how they can be verified.
- **Impartiality:** In their scientific activities, the scientific practitioner needs no other interest than the scientific interest. In this respect, they are always prepared to account for their actions.

A summary of the Wageningen Code of Conduct for Scientific Practice is given in Appendix I.

You are expected to be familiar with proper citing and referencing techniques before you start writing the thesis and are advised to consult relevant information available on the WUR-website (e.g. '[Citing and referencing](#)'). Improper citing and referencing may be considered as plagiarism, which is a form of fraud. Staff are expected to screen all writings carefully for similarity with known sources; the University has made software available for this purpose. In case of suspicion of plagiarism, either of text, figures, models or data, the Examining Board will be informed. In the Rules and regulations of the Examining Board, procedures and sanctions regarding fraud are described.

Progress evaluation

The progress evaluation is a meeting between student and supervisor that takes place before you are

halfway through the project. It is up to the chair group if this meeting is scheduled right after the completion of the research proposal or later on, but should be agreed upon with the student in the Learning Agreement. In this meeting, all aspects of the thesis project at that point (i.e. research proposal, supervision, performance) are discussed. The principle of two-way feedback applies to the progress evaluation: if you have experienced any shortcomings in your supervision, then this is a good moment to discuss them and make agreements on potential improvements. In case of severe problems regarding your dedication, skills, knowledge or communication, your supervisor and the thesis examiner, may decide to terminate the thesis project. The outcome of the evaluation will be discussed with you and will be registered in OSIRIS afterwards.

The thesis assessment form and rubric can be used for the evaluation of the progress and provide a clear picture of what is going well and where improvement may be needed. If progress has not been achieved as planned due to reasons beyond your control (e.g. illness, problems in supervision), the plan for the rest of the project may need to be adjusted and new, feasible end goals defined.

Meetings

During your thesis period, you may participate in work discussions and other meetings of the chair group. Many chair groups have weekly work discussions in which research progress of all group members is discussed. Depending on the chair group, you may be asked to join the discussion group that is related to your research topic. Ask your supervisor when your chair group holds discussion sessions.

Both students and staff present their results to the other members of the chair group during colloquia. In general, students have to attend these colloquia.

Some chair groups organise literature discussions on papers that are relevant to their field, or organise seminars, during which guest researchers present their research or designs.

4. Thesis activities

This section describes the different stages of the thesis project in general terms. See Part B of the course guide for the specific requirements of your chair group.

Research proposal/ planning

At the start of the thesis, you will discuss the topic with your supervisor and read literature related to the project. After this initial orientation, you write a research proposal, which has to be discussed in depth with your supervisor(s). The research proposal should include a problem statement, research questions or a hypothesis that is supported by up-to-date literature related to the topic, an explicit and specific plan regarding how the research is to be conducted (e.g. study design, data collection and analysis methods) and a time schedule.

If drafted correctly, sections of the proposal can be used to write the final thesis report (e.g. the Introduction and Methodology sections). However, you cannot start conducting the research project before the research proposal has been approved by your supervisor(s).

When your proposal is completed, you may be asked to present your research proposal to other students and staff members in order to acquire feedback and suggestions for improvement. Discuss format and content for your presentation with your supervisor. The presentation should be given in English in order to allow international students and staff members to participate in the discussion.

Carrying out the research project

You should document your research activities, findings and sources carefully, including seemingly small details. During data collection, analysis and synthesis, you should follow the agreements made in the data management plan. In experimental research, a lab or field journal has to be kept.

You are recommended to keep in close contact with your supervisor throughout the project. Should unforeseeable circumstances occur, you will have to adapt your research proposal; any changes in planning must be discussed with and approved by your supervisor.

Feedback

Dealing with feedback and providing feedback to others is one of the learning outcomes of the thesis. While carrying out your project and attending meetings, there will be ample opportunities for you to ask for and receive feedback from staff and students, and to give feedback to others as well. The chair group will request that you participate in thesis rings or other peer-learning sessions. Using this input will help you to further develop your knowledge, skills and attitude and make the best of your project.

Thesis report

Your research should result in a comprehensive, consistent and concise thesis report. It is important to realise that the thesis is not a chronological account of the project or a summary of the lab-journal. Furthermore, as good scientific writing dictates, the results should be properly organised and data should be correctly processed, analysed and presented. In principle, an MSc thesis report should contain all the elements of a full scientific paper in your discipline (see Part B for specific criteria for your chair group).

In some cases, it may be possible to write your thesis in the format of a scientific article, which is usually much shorter than a regular thesis report. Discuss this with your supervisor. Publication of the results of your research in proceedings or a scientific article is also possible. The supervisor of the chair group will generally be co-author of any publications originating from thesis work.

You usually get one possibility to discuss a draft report with your WU supervisor before handing in

the final report. In many chair groups it is common practice to discuss chapters separately in the final stage of the project.

Oral presentation (Colloquium)

Once your research has been completed, you are required to present your thesis and your major findings to other students and staff members of the chair group. Chair groups usually have a fixed schedule for these presentations. Appointments for a date, and the publication of the announcement should be made well in advance. You may discuss the structure and content of your presentation with your supervisor in advance so they can offer feedback and advice. The presentation must be in English so international staff and students can participate in the discussion.

Oral defence

The final oral defence is a discussion with your supervisor, the examiner and, in some cases, a supervisor from outside the chair group not involved in the grading of the thesis. The discussion focuses on the content of the thesis, in which your knowledge, understanding, insights, as well as creativity and scientific attitude are evaluated. You are expected to be able to place your results and conclusions in the wider context of the field of science. The oral defence will be scheduled ten working days after you have submitted your reports to the supervisor and examiner. You must make an appointment for the oral defence.

5. Completion of your thesis

Assessment of the thesis

For the Wageningen University assessment, supervisors/examiners use the Wageningen University Thesis Assessment Form (see Appendix II). The average grade for each category (performance, thesis project report, oral presentation (colloquium), oral defence) should be at least 5.5 for a pass.

The assessment strategy below shows the relation between the learning outcomes and the different parts of the assessment.

		Assessment categories			
		Performance	Research Report	Oral presentation	Oral defence
Weights	Description				
	% of grade	40%	50%	5%	5%
Learning outcomes	1 Develop a research plan, including: a description of the research topic in relation to the wider scientific context; an identification of the knowledge gap; formulation of research questions and/or a hypothesis, aims and objectives; an explanation of how you intend to conduct the research (e.g. in terms of a design for the project, data-collection and -analysis methods, research tools).	x	x		x
	2 Collect, select and process data, using the design for the project, methods and tools described in the research plan.	x	x		x
	3 Analyse and synthesise the data in order to answer the research questions and/or test the hypothesis.	x	x	x	x
	4 Formulate answers to the research questions that are supported by the research outcomes; pay attention to potential limitations; critically discuss the outcomes in relation to the wider scientific and societal context.	x	x	x	x
	5 Report on the research, both in writing and in oral presentation.	x	x	x	
	6 Work in compliance with academic codes of conduct, and with proper management of time and resources.	x	x		
	7 Make use of input and feedback for executing the research project and provide feedback to others.	x			
Assessors	Supervisor	x	x	x	x
	Examiner*		x	x	x

* The examiner will determine the final grading after a discussion with the supervisor/second assessor.

A rubric is used for feedback and grading (see Appendix II). After the examination, you will receive the reasoning behind your thesis grade, including specific feedback on all assessment categories. The final grade is administered in OSIRIS.

Delay and possibility to resit

The start and end date of your thesis are recorded in the Learning Agreement. There are a number of potential causes for delay in your thesis project: force majeure, functional disabilities or an insufficient result for your thesis.

In case of force majeure (circumstances beyond one's control) you can discuss an adjustment to your time schedule with your supervisor. Your supervisor can register an adjusted end date in OSIRIS.

In case of functional disabilities or other valid reasons for delay that are known beforehand, those should be mentioned at the start of the course. Your supervisor will only extend the regular duration of the project based on the advice of a student dean.

If you do not manage to complete a satisfactory final report before the end date recorded in the learning agreement, you may ask your supervisor for an extension of two months. Supervisors will extend the end date if they expect that you will be able to hand in a satisfactory report within these extra months. If you are not able to hand in a satisfactory report within two extra months, your WU supervisor and examiner can decide that you should start a new thesis. This new thesis does not necessarily need to have the same supervisor, chair group or be on the same subject. If you do start a new thesis, this is still considered as a resit.

If you and your WU supervisor disagree on your being able to pass the course in two extra months, and you do not get up to two months extension for finishing your thesis, you are able to send an appeal to the Examination Appeals Board. But ask your study adviser for advice first in this case; usually there are other possibilities to solve the issue.

Feedback on your thesis

Following the assessment, Wageningen University will send you a link to an online evaluation questionnaire. Please complete this, even if your thesis project is finished. The results of the questionnaires help us to improve the quality of the thesis supervision and organisation, and to identify potential (or actual) problems. The evaluation is anonymous.

Part B: Chair Group specific regulations

Additional regulations and guidelines are applicable.

WCSG Thesis Café

The Wageningen Center for Sustainability Governance (WCSG) Thesis Café is a monthly meeting for ENP/FNP/LAW/PAP students, to discuss and exchange experiences related to your thesis with peers. For more information, registration and the link to access, please see the Brightspace page of the course: <https://brightspace.wur.nl/d2l/home/17165>

Guidelines for supervision

For most students thesis work is their first real encounter with academic research. From your supervisor you may expect guidance in, for instance, proposal writing, in methodology and research set-up, in theory selection, in making questionnaires and in academic writing. Thesis work however requires that students work as independently as possible. In the end, students are responsible for their own thesis work in terms of content, planning and choices made.

Some guidelines in supervision:

- Your supervisor will guide you in developing your proposal. Count on 3-4 meetings with your supervisor from start to finish.
- In general, you can expect to have a meeting with your supervisor once every two weeks, except in the period of fieldwork when this can be organised on an ad hoc basis.
- In most cases you may discuss draft texts during these meetings. Please provide these texts well in advance. Your supervisor will tell you in what form (digital or in hard copy) and at which deadlines (s)he needs your texts.
- Keep in mind that each written text should not be discussed more than 2 times with your supervisor. For example, a draft thesis chapter may be discussed 1 time with your supervisor before being included in the draft thesis for which you will receive feedback as well.

Facilities

The following facilities are available to thesis students:

- There are a limited rooms for MSc students at the university. You may instead opt to use the general computer rooms in the Leeuwenborch or other university buildings.
- Printing and copying drafts and final report: After registration as a thesis student you will receive €30 on your bank account to cover the costs for printing, copying of drafts and the production of two final thesis reports to be handed in at the end of the process.
- If you need to copy larger amounts of pages for research purposes (e.g. surveys), the chair group may be able to refund. Always contact your supervisor first.
- Post, telephone: When needed for your research, you can make use of the group's facilities on your supervisor's approval. Contact the secretary on how to deal with it.
- Literature: If you buy literature for your personal use, the group cannot refund. For ordering literature that is not available in the library, contact your supervisor.
- To a certain extent, research costs (like domestic travel costs for interviews) can be refunded by the chair group. A budget for this should be included in your proposal and needs prior approval by your supervisor.

Guidelines for writing a research proposal

When doing social research it is important to realize that there are no fixed schemes for research

proposals reports. If you have good reasons to diverge from the suggestions below, you should do so. The outline presented here should be considered as a guideline to help you in thinking and writing, not as a fixed scheme that you can follow blindly.

Furthermore, it is good to keep in mind that the research steps that you describe in the proposal can be modified in the course of the research. A proposal provides a base for starting the research, but the research process can be changed when this turns out to be better. When diverging from the proposal, however, always communicate this with your supervisor.

Here are the main sections of a thesis proposal:

Problem description

Here you describe in a concise way the problem that is motivating your research. The purpose of the problem description is to make clear to the reader that the research is important and the research questions are relevant. Tailor the problem description to this purpose and do not include all kinds of background information that is not really needed for understanding the relevance and importance of the research aim and questions. But see to it that all the major elements of your research questions are introduced and, if necessary, explained.

Research aim / objective

The research aim is a concise and precise formulation of the contribution that your research aims to make to the solution of the problem described in the previous section. The scope of the research aim should be realistic and proportional to the size of the research project. Remember that research cannot change the world! You cannot claim that your research will directly change environmental policy or the management of certain environmental problems. Research aims can only be described in terms of 'contributing to certain solutions' by providing 'the knowledge, insights, understanding' of some relevant aspects of society.

Research questions

The research questions are the core of the proposal. These are the questions you want to give an answer to in the conclusions of your thesis report. Be modest in your objectives and subsequent research questions. Remember that you will gather and combine theoretical and empirical knowledge during your thesis work. Good research questions:

- are precise (so not too general),
- are phrased as 'what' or 'why' questions, rather than 'how to do' questions
- cannot be simply answered with 'yes' or 'no'
- are focused on the key issues of the research (so their number is limited, and they do not address issues that are only indirectly related to the research aim)
- can be answered within the proposed research (so they are not too broad, or beyond the reach of scientific research).

Scope and limitations (optional)

If you want to set restrictions to the way you will address the research questions, you may include a special section to describe them. This is the case if you will restrict the research to one region, one specific category of actors, one set of literature.

Conceptual framework

In the conceptual framework you introduce the main concepts and theories you intend to use in your research. Although it is often difficult to elaborate on this in the beginning of the research, it is important to at least give some indication of the key concepts in your research and the theories that might be of interest. Try to think of how the key concepts interrelate with each other, and how these

concepts are related to the problem statement, research aim and research questions you have formulated. Making a figure or schematic representation to indicate these linkages may be helpful. When describing your conceptual framework, give adequate references to literature.

Methods

Here you describe the methods you intend to use, which should be aligned with your research objective and the conceptual framework. Typical methods in social research are: interviews (structured, semi-structured, or open); surveys (based on a posted questionnaire or on oral interviews; qualitative or quantitative); text analysis (documents, newspapers, etc.); literature study; participant observation; focus groups (e.g. workshops); site visits etcetera.

Try to describe your methods as accurately as possible. Consult a methodology handbook if you feel uncertain about the methods.

Time schedule

The time schedule should preferably be presented as a chart, with horizontal time bars for all main research project activities (e.g. writing the proposal, doing literature research, preparing and taking interviews, processing empirical data, writing the theory chapters, writing the empirical chapters).

Try to be as detailed and accurate as possible (keeping in mind that you may need to modify the schedule in a later stage).

References

Include a provisional list of references in your proposal, comprising all the relevant titles that you have found so far. In the course of your research you can extend this bibliography, and so keep an up-to-date list of references. It is highly recommended to use a reference management software such as EndNote or Mendeley to store and organize your references.

Budget estimation (optional)

If you will manage an externally funded financial research budget, normally a budget estimation is required. Also for the research costs to be refunded by the chair group, a budget is needed in advance of the fieldwork and to be approved by your supervisor.

Provisional Table of Contents

Concluding your proposal, you should provide a provisional table of contents for your thesis. It shows which chapters are devoted to theory, methodology, results of field work and case studies (if any), analysis and discussion and conclusions (see next item).

Guidelines for the progress evaluation

The progress evaluation is a meeting between student and supervisor that takes place before you are halfway through the project (see part A). This meeting is scheduled right after the completion of the research proposal, which will be assessed by your supervisor and the examiner (a staff member, usually from ENP/WCSG, who is knowledgeable about your research topic). Your supervisor decides who should be the examiner, who will also be involved in the assessment of your thesis report and oral defence.

Fieldwork

Empirical research can be carried out in the Netherlands or abroad. Often, students will do the field work in their home country.

During fieldwork, pay attention to the following issues:

- Interviews: Oral and written interviews may be part of the research. To do effective interviews, a thorough preparation of the topic list is crucial. Always discuss this in time with your supervisor. If you do a survey, include a pre-test to check the quality of your questions. When doing oral interviews, consider to use a recorder. If you prefer not to use it, elaborate your notes immediately after the interview.
- Ask a prior (written) consent of interviewees to use their information for your thesis. Discuss and make an agreement with your interviewees on how they can be cited or quoted. Ask your supervisor for a standard prior informed consent form that you may use and adapt for your research.
- Collection and storage of data and literature: Take care to keep track of your data and literature. Make full records of the data sources. After finishing your thesis these records should be sent to your supervisor who stores it on a secure server at the university (see Guidelines in Appendix IV).
- Right from the beginning, try to get used to making proper references to literature (including page numbers to retrace quotations). Use our guidelines in avoiding plagiarism, to be downloaded from our website.
- During the fieldwork, keep in regular contact with your supervisor and inform her/him about your contact details and your progress. The supervisor will be ready to support you with comments during your research, but it is your responsibility to take the initiative in making contact.

Guidelines for writing a thesis report

As was the case with the research proposal, we expect you to have knowledge about the structure of a scientific report (if not, ask your supervisor for support). A report outline is shown below, but this outline should be considered as an example, not as a fixed format. Usually, it is good practice to start making a table of contents early in your research (as an Annex to the proposal). This table, which of course can and will be modified during the research, will help you to structure your argument. Do not wait too long with submitting drafts of the texts to your supervisor; the longer you postpone, the less helpful the supervisor's comments may be.

Reports should be written in English (in exceptional circumstances, you can ask the examination committee to write it in Dutch).

Plagiarism

Please be aware that the University and the Chair group consider plagiarism as a major offence: it may exclude you from examination / graduation. More information concerning proper referencing and plagiarism can be found on <https://www.wur.nl/en/Library/Students/Citing-and-plagiarism.htm>

Guidelines for data management

Along with handing in your report, you should also hand in your data files for storage in our research data archives. Your files, consisting of quantitative survey data, interview transcripts, audio, video files, observation notes, will be handled confidentially and will only be accessible by the chair and the data manager of the chair group. Check with your supervisor for the latest updates on data management, use of consent forms, etc.

Thesis colloquia and oral defence

The MSc thesis colloquia are scheduled every month, during which a group of students who have finalized their thesis provide a public presentation of their findings. This means that not only staff and students are invited, but also family and friends may attend the thesis colloquium. The language of the colloquium is English.

Once you have handed in the final version of the thesis to your supervisor(s) and examiner, you may hold your thesis colloquium. Your thesis (main) supervisor is responsible for scheduling the colloquium and defence and will need your personal information, name of MSc programme, thesis title, supervisor(s)/examiners and abstract for doing so.

This information will be used to send an invite around two weeks in advance. The slots are 30 minutes each: 20 min for the presentation and 10 min for Q&A from the public. The student's thesis supervisor is responsible for chairing his/her student's session. The evaluation of the colloquium is part of the thesis assessment.

The thesis oral defence will be held on the same day of the colloquium. Your supervisor(s) and the examiner will be present and will ask a number of questions pertaining to your thesis report during approx. 20 minutes, after which they will deliberate on your grade (you will be asked to leave the meeting for about 20 minutes).

Assessment

The supervisor evaluates both the thesis report as well as the process that has led to the thesis, while the examiner can only evaluate the thesis report, colloquium if attended and the oral defence. Both readers agree on a final grade. The final grade will be announced to you at the end of the defence. In the last step of the assessment your thesis grade will be registered in Osiris.

Publishing the report

You should hand in to your supervisor two hard copies of your thesis as well as an electronic version (PDF). All theses marked 7.5 or higher will be published in full text online (library catalogue). All thesis titles will be listed on our website, and be available at the Leeuwenborch Library and catalogued for use to other students and staff members. Students can choose a cover of their own preference and copy the thesis themselves.

Checklist for organising a thesis

- ✓ Check whether you are allowed to start your thesis, i.e. if you meet the mandatory knowledge requirements of the chair group and the requirements of your programme.
- ✓ Find a thesis topic (see chair group website for more information)
- ✓ Check whether the chair group and the topic of your thesis are consistent with your study programme.
- ✓ Make an appointment with thesis/internship coordinator, who will find a supervisor for you
- ✓ Write a mini-proposal to take with you to the first supervision meeting.
- ✓ Discuss the thesis topic with the supervisor
- ✓ Check whether the country of research (if applicable) is a risk area or not.
- ✓ Fill in the Wageningen University Thesis Learning Agreement and submit to your supervisor. The Learning Agreement will be archived in OSIRIS.
- ✓ Discuss the requirements for your research proposal with your supervisor (length, depth etc.).
- ✓ Discuss your data management plan with your supervisor.
- ✓ Write a research proposal.
- ✓ Ask your supervisor for approval of the research proposal (your supervisor will in turn ask the examiner to approve the research proposal).
- ✓ Arrange a date for a progress evaluation. The outcome of the evaluation will be discussed with you and will be registered in OSIRIS afterwards.
- ✓ Arrange dates for the final assessment (handing in thesis report, final colloquium, defence).
- ✓ Provide the supervisor and examiner with a final version of your thesis report.
- ✓ Provide your thesis in PDF form to the secretary, along with your data files for storage
- ✓ Complete the thesis evaluation questionnaire.

Appendices

Appendix I: Summary of 'The Wageningen Code of Conduct for Scientific Practice'

The Wageningen Code of Conduct for Scientific Practice concerns principles of good scientific teaching and research, containing the Netherlands Code of Conduct for Research Integrity. The main aspects described in this code concern: Scrupulousness, Reliability, Verifiability, Impartiality, and Independence. See also: [Netherlands Code of Conduct for Research Integrity](#)

Scrupulousness: Scientific activities are performed scrupulously, unaffected by mounting pressure to achieve.

- Scrupulousness is expressed through precision and nuance in providing scientific instruction, conducting scientific research and the publishing of results thereof.
- Every scientific practitioner demonstrates respect for the people and animals involved in scientific teaching and research.
- Accurate source references serve to ensure that credit is awarded where credit is deserved. This also applies to information gathered online.
- Authorship is acknowledged. Rules common to the scientific discipline are observed.
- Scrupulousness is not restricted to the transfer of information, but also applies to relations among scientific practitioners and with students.
- Good mentorship is essential: a student and junior staff member are in a position of dependency. The responsibilities of persons involved in teaching and research are clearly defined and observed at all times.
- A scientific practitioner avoids personal relationships that may give rise to reasonable doubt concerning the objectivity of their decisions, or that may result in any form of coercion or exploitation of a hierarchically subordinate person.
- The assessment of study performance is based on explicit criteria that have been announced in advance. Teachers are prepared to explain every assessment, while students are sufficiently aware of the matter on which they will be assessed.
- A scientific practitioner ensures that they maintain the level of expertise required to exercise their duties. They do not accept duties for which they lack the necessary expertise. If necessary, they actively indicate the limits of their competence
- Damages, as a result of errors or negligence, are repaired to the best of one's ability.
- A scientific practitioner is responsible for the quality of the educational programme in which they provide instruction, and for the scientific and societal value of the research programmes in which they participate. They act according to their own preferences only insofar as they are reconcilable with this responsibility.

Reliability: Science's reputation of reliability is confirmed and enhanced through the conduct of every scientific practitioner. A scientific practitioner is reliable in the performance of their research and in the reporting, and equally in the transfer of knowledge through teaching and publication.

- The selective omission of research results is reported and justified. The statistical methods employed are pertinent to the acquired data.
- Speculation, spurred by results of scientific research, is recognisably presented as such. This does not include conclusions on the basis of the presented results. Suggestions for follow-up research may rest on speculation, in the form of an interpretation of the acquired results.
- The system of peer review can only function on the assumption that intellectual property is recognised and respected.
- A scientific practitioner provides a complete and honest overview of their skills whenever a decision concerning their career or duties is pending.

- In transferring information in education, a selective representation of available knowledge is either avoided or justified. A clear distinction is made between transferred knowledge and personal opinion or related speculation.

Verifiability: Presented information is verifiable. Whenever research results are publicised, it is made clear what the data and the conclusions are based on, what they were derived from and how they can be verified.

- Research must be replicable in order to verify its accuracy. The choice of research question, the research set-up, the choice of method and the reference to sources studied is accurately documented.
- The quality of data collection, data input, data storage and data processing are guarded closely. All steps taken must be properly reported and their execution must be properly monitored (through lab journals, progress reports, documentation of arrangements and decisions, etc.).
- Raw research data is stored for at least five years. This data is made available to other scientific practitioners on request.
- Raw research data is archived in such a way that it can be consulted with minimal expense of time and effort.
- The source of all educational material, including oral information transfer, is stated.

Impartiality: In their scientific activities, the scientific practitioner needs no other interest than the scientific interest. In this respect, they are always prepared to account for their actions.

- Scientific practitioners give others room to take their own intellectual stance. This applies particularly in case of a hierarchical relation, like the relation between a teacher and a student, or a tutor and a PhD student.
- The choice of methods and criteria is guided solely by the goal of truth-finding, and not by external goals, such as commercial success or political influence.
- A reviewer consults their conscience as to whether they can offer an impartial assessment of a manuscript, for instance when it concerns a competing research group.
- In assessing the performance of others (e.g. peer review in education, research and manuscripts), a scientific practitioner heeds arguments of scientific substance. They refrain from assessing a manuscript if they are in any way involved in the education or research concerned.
- A scientific practitioner only defends a certain scientific viewpoint if that viewpoint is based on sufficient scientific grounds. Competing viewpoints must be mentioned and explained.
- Exclusively assigning one's own study books in education is avoided, in any case at undergraduate level.
- In its annual report, every university reports on its registration of side activities by its staff. Every university registers the side activities relevant to scientific practice. Preferably, this register is made publicly accessible.
- Every scientific practitioner allied with a university provides their institution with an up-to-date overview of their side activities for registration purposes.

Independence: Scientific practitioners operate in the context of academic liberty and independence. Insofar as restrictions of that liberty are inevitable, these are clearly stated.

- Whenever a scientific practitioner is commissioned to provide instruction or conduct research, they are allowed – once the parameters have been defined – to execute the assignment without interference from the commissioning party. The research question is of interest to science, aside from the commissioning party's particular concern. The method employed is scientifically valid. The commissioning party has no influence on the research results.
- Commissioned assignments demonstrably contribute to scientific teaching or research.

- There is no ambiguity as to the identity of the commissioning party of the scientific activity, the relation between the commissioning party and the executing party, the existence of consultancy relations or other connections, etc.
- The publication of scientific research results is guaranteed. Arrangements with external financiers always stipulate that the scientific practitioner is at liberty to publish the results within a specified, reasonable period.
- External financiers of executed projects are identified by name. For research, this means that their names are stated in the publication; for education, this means that they are referred to in the course announcement and teaching material.

Appendix II: Downloads

- **Wageningen University MSc Thesis Learning Agreement**

The current version of the MSc Thesis Learning Agreement is available on the WUR website:

<https://www.wur.nl/en/Education-Programmes/Student-Service-Centre/Show-ssc/Forms-Student-Service-Centre.htm>

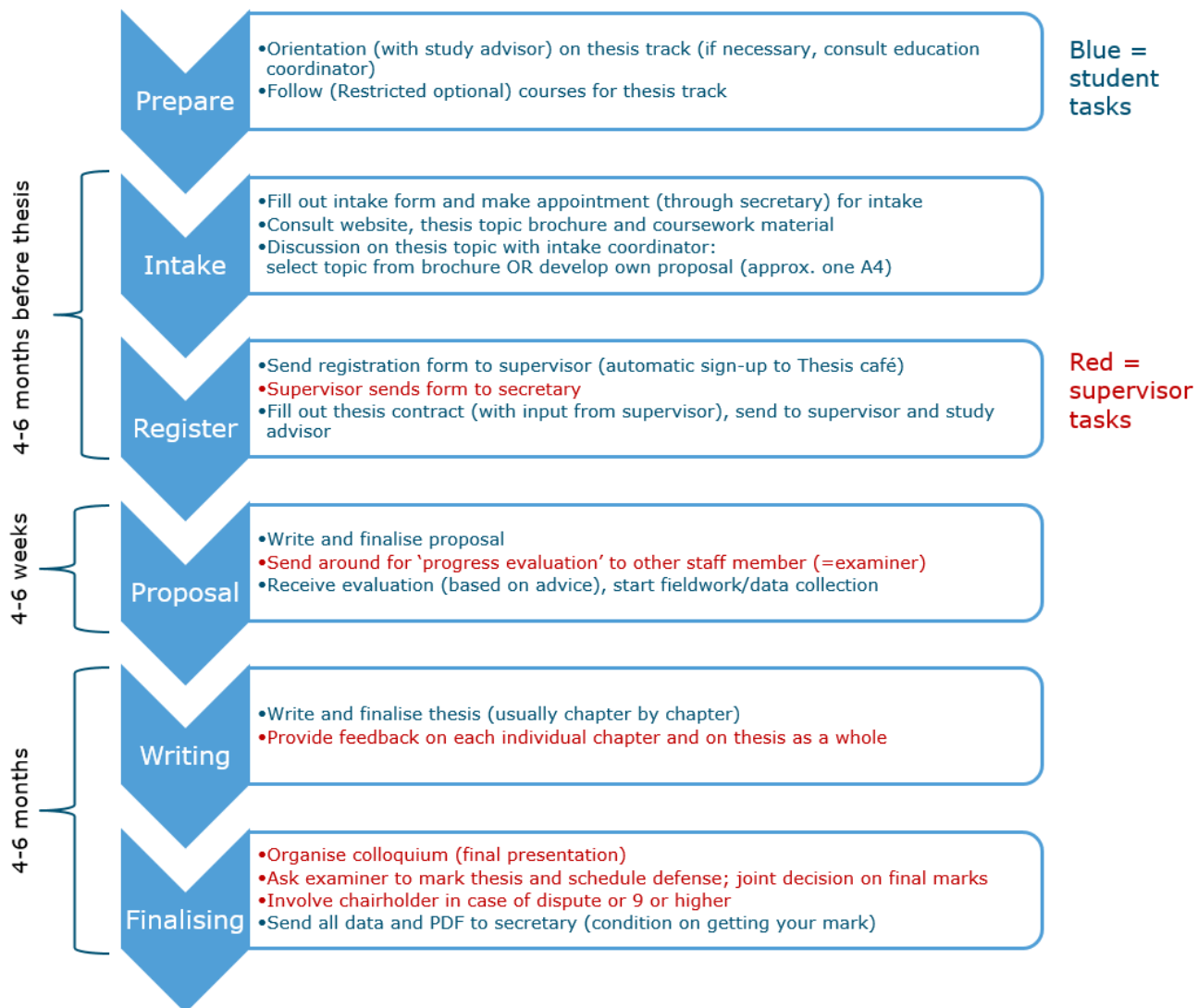
- **Assessment form and rubric**

The WU thesis assessment form and rubric will be used to grade your thesis after completion. We encourage you to look at the assessment criteria at the start of your project. You can download the most recent version of the assessment form and rubric from the Education & Student Affairs SharePoint site:

<http://wur.eu/thesis-internship>

Appendix III: Thesis process at ENP/WCSG

MSc Thesis process



Appendix IV: Thesis report outline

This outline lists the main elements of a thesis report. Please note that most of the headings in this outline are describing the contents of chapters and are not meant as suggestions for actual chapter titles.

Title page

Summary

Table of contents

Foreword, acknowledgements (optional)

Introductory chapter

This chapter can to a large extent be based on the research proposal, and should contain at least sections on problem description, research questions, and methods. Usually, this chapter ends with a section outlining the rest of the report.

Conceptual chapter

Introducing and demarcating the main concepts used, presenting and discussing the main theoretical considerations of the research, and - if applicable - developing hypotheses or another sort of conceptual frame.

Methodology chapter

Outlining the general research approach and a detailed elaboration on the specific methods used.

Empirical chapters

Presenting the empirical findings.

Discussion chapter

Comparing the findings with the theory (theories) used, evaluating the empirical results, and - if applicable - evaluating theoretical arguments against the empirical findings. Also includes a discussion of the findings, conceptual framework and methodology in light of other relevant literature.

Conclusions and recommendations chapter

This chapter does not introduce new empirical evidence or theoretical debates, but synthesises the empirical and theoretical findings of the previous chapters. The conclusions should give answers to the research questions, and these answers should be underpinned by the arguments presented in the previous chapters. Separate from the conclusions, the author can present recommendations for further research or for concrete measures to cope with the problems investigated.

References

References should be complete and consistent. Special attention should be paid to correct references in case of internet sites.

Appendices (optional)

Appendices should only be added if the information is not easily available elsewhere and is needed to fully understand the arguments of the thesis.