

MSc Thesis Course Guide, Cultural Geography Group (GEO) version 31.12.2021

- Part A: information about MSc theses
- Part B: checklist for MSc thesis students

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*Study load:* 36 ECTS

*Course code:* GEO-80436

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## Part A: Information about MSc theses

### 1. General information

This course guide describes the procedures for the MSc thesis supervision and writing process of the Cultural Geography Chair Group (GEO). 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 general overview of the timeline of a MSc thesis can be found in Appendix IV.

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:EnglishCredits:36 ECTS\*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 should be officially registered as a Wageningen University MSc student. 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. In any case, the student must complete an advanced course on research methods and techniques and courses in the field of tourism, society and environment and/or cultural geography before starting the thesis project. The student is also responsible for acquiring sufficient writing skills before starting the thesis project. Students ought to take responsibility for writing their thesis reports in correct English. Students in need of support to improve their writing skills are encouraged to make use of the University's Writing Lab (http://www.wur.nl/en/article/Wageningen-Writing-Lab-2.htm).

#### 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, in this case the Cultural Geography Group (GEO).

#### People involved in your thesis

- The *thesis coordinator* is the GEO contact person. The thesis coordinator appoints a supervisor from within GEO.
- The *supervisor* is a staff member of GEO who is responsible for the supervision of your thesis. The supervisor arranges an examiner prior to the date of examination of the thesis. 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)

The thesis subject should preferably match the broad research field and/or design expertise of the Cultural Geography Chair Group (GEO) offering the thesis. It should reflect the student's interests and goals and be realistic in scope, so that it can be completed with the resources available to the student. The thesis must be original work and make a substantive contribution to the understanding of a set of significant issues.

In order to select a thesis topic, you can:

- Contact GEO's thesis coordinator and discuss which thesis subject(s) you are interested in.
- Attend a thesis information meeting organised by GEO or your MSc programme.
- Visit GEO's Wageningen University webpage '<u>Thesis with the Cultural Geography Group</u>' (<u>wur.eu/geothesis</u>).
- Contact your MSc programme study advisor.

You must discuss both the topic and timing with your study adviser and GEO's thesis coordinator 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 are formally accepted as a thesis student at GEO and given access to the Thesis and Internship Cultural Geography Brightspace. You and your supervisor have to discuss and agree on the content of your thesis. The *Learning Agreement* (available on Brightspace, see also 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 GEO supervisor must discuss and sign the Learning Agreement. The Learning Agreement will then be submitted and archived in OSIRIS. You can only start working on your thesis after you ensure that the learning agreement is signed and submitted correctly.

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.

It is your responsibility to manage data according to GEO's data management plan (See Appendix III). Discuss time, format and transfer of results and data with your supervisor as well (these are part of the data management plan), especially when your research is part of a larger research project. Include additional arrangements regarding the results and data in the Learning Agreement.

#### 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 GEO supervisor and thesis coordinator.

You will need to complete a form that also functions as a checklist to ensure that you are wellprepared 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:

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

### 3. Points of attention during the thesis

#### Supervision

Your first (main) supervisor is a staff member of GEO, but a second Chair Group may be involved in the supervision of your MSc thesis as well. All scientific staff with a PhD degree or with other relevant research experience qualify for thesis supervision. A PhD student may be involved in the supervision, but not as the main supervisor. Joint supervision by staff from other institutions or from a company is possible, as long as all parties agree. All arrangements must be settled by the student prior to the start of the thesis project and must be approved by the GEO supervisor. The ultimate responsibility for supervision and examination remains with the GEO chair group.

In general, students are entitled to have regular meetings (e.g. every two or three weeks) with the GEO supervisor. The actual frequency of meetings may vary depending on the nature of the thesis project. The student will have at least four formal meetings with the supervisor. The amount of time the GEO supervisor invests in an MSc thesis is 40 hours (maximum). The time will be used for reading, commenting, meetings, assessment and general assistance.

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. We recommend the student to record each meeting by summarising the main decisions in written form and providing a copy of these to the supervisor by email in a timely fashion.

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. '<u>Citing and referencing</u>'). 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 (see Brightspace 'Plagiarism check' section). 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 in the 8<sup>th</sup> week or within two months after the start of your thesis research. It should be agreed upon 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 (available on Brightspace) 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.

#### Costs associated with carrying out the research

All MSc thesis research should be planned in a manner such that no project finances or external funding must be required. The research should rely on existing administrative and logistic support as much as possible. If, despite all efforts, costs are unavoidable for carrying out the thesis research (e.g., travel to undertake interviews, etc.), the student must provide a financial plan in a timely manner prior to undertaking the research, and the plans must be approved by the supervisor. All costs made without the supervisor's prior agreement must be assumed by the student.

### 4. Thesis activities

This section describes the different stages of the thesis project in general terms. See Part B of the course guide for a checklist.

#### **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, theoretical framework, methodology stating how the research is to be conducted (e.g. study design, data collection and analysis methods), a work plan and 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 are asked to present your research proposal to other students and staff members in order to acquire feedback and suggestions for improvement (see the section 'Feedback and research proposal presentation' below). Discuss format and content for your presentation with your supervisor.

#### 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 any specific agreements made in the Learning Agreement and the data management plan (see Appendix III). 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 and research proposal presentation

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 your supervisor. In addition, you are required to participate in feedback and peer-learning by attending research proposal presentation sessions and final colloquia (see also the section 'Oral presentation (final colloquium) below).

You will present your research proposal to other students and staff members around eight weeks after the start of your thesis research. Your will participate in at least two other students' research proposal presentations. Each presentation must be 10 minutes in length (maximum) and allow for approximately 10 minutes for feedback from students and staff. Feedback given during the research proposal presentation sessions will help you to further develop your knowledge, skills and attitude and make the best of your project. The presentation should be given in English in order to allow all students and staff members to participate in the discussion.

GEO reserves at least two dates annually for research proposal presentations, usually one at the end of October and the other at the end of March. The dates will be announced on Brightspace and visible in the GEO calendar. Additional research proposal presentations can be arranged by the supervisors and students, with the assistance of the administrator and the thesis coordinator.

#### Voluntary participation in thesis rings

As an addition to the peer feedback procedure explained in the previous section, GEO offers guidelines for self-organised thesis rings and other peer-learning sessions (such as 'Case clinic' and 'Mastermind') for students who opt for participating in these extra peer feedback activities voluntarily. Interested students are encouraged to self-organise into small groups of four to five people. They should contact the thesis coordinator and see Brightspace for more information.

#### **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. 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.

The thesis report will cover approximately 60 to 80 pages organised in a minimum of five chapters. It should be written according to scientific standards and using the possibilities of modern text software in the layout. In some special 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 a co-author of any publications originating from thesis work.

#### **Oral presentation (final 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. GEO has a fixed schedule for these presentations. The dates will be announced on Brightspace and visible in the GEO calendar. You and your supervisor must contact GEO's administrator/secretary at least two to three weeks in advance for the publication of the announcement of your colloquium.

It is not necessary to present all the elements/parts of the thesis during the oral presentation. Focus on the main issues and the most interesting parts/findings of the research. You may discuss the structure and content of your presentation with your supervisor in advance to receive feedback and advice. The presentation must be 15 minutes in length (maximum) and allow for approximately 15 minutes for discussion. The presentation must be in English so all staff and students can participate in the discussion.

You will participate in at least one other student's final colloquium and providing feedback to the presenting student.

#### **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 who is however 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 take place ten working days after you have submitted your reports to the supervisor and examiner. Important: It is the student's responsibility to provide the supervisor and the examiner with a PDF copy of the final MSc thesis by email no later than 10 working days prior

**to the defence.** The oral defence usually takes place immediately after your final colloquium, on the same day. The overall length of the oral presentation plus examination is about 45 minutes, with approximately 30 minutes of presentation and discussion (see the section above), followed by 10-15 minutes of examination. Then, following a short consultation between the supervisor and examiner, the final grade will be announced to the student.

## 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.

		Assessm	Assessment categories		
Weights	Description	Performance	Research Report	Oral presentation	Oral defence
	% of grade	40%	50%	5%	5%
	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
Learning outcomes	2 Collect, select and process data, using the design for the project, methods and tools described in the research plan.	x	x		x
ing ou	3 Analyse and synthesise the data in order to answer the research questions and/or test the hypothesis.	e x	x	x	x
Learn	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		
	<ul><li>7 Make use of input and feedback for executing the research project and provide feedback to others.</li></ul>	x			
Assessors	Supervisor	x	x	x	x
	Examiner*		x	x	x

\* The examiner will determine the final grading after a discussion with the supervisor who acts as the second assessor.

A rubric is used for feedback and grading (in the assessment form available on Brightspace, see also Appendix II). After the examination, you will receive the reasoning behind your thesis grade, including specific feedback on all assessment categories. The supervisor will communicate the grade to the administration and the mark will be registered in OSIRIS. You officially conclude your MSc thesis when all administration related to the thesis, including that of data management, has been completed (see Appendix III).

#### 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 (circumstances beyond one's control), functional disabilities or an insufficient result for your thesis.

In case of force majeure, 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 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 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. 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: Checklist for MSc thesis students

#### 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.
- ✓ Contact GEO's thesis coordinator and arrange a GEO supervisor.
- ✓ Check whether the topic of your thesis is consistent with your study programme.
- ✓ Discuss the thesis topic with the supervisor.
- ✓ Obtain access to GEO's thesis and internship Brightspace.
- ✓ Check whether the country of research (if applicable) is a risk area or not.
- ✓ Discuss and sign the Wageningen University Thesis Learning Agreement together with your supervisor.
- ✓ Submit the Thesis Learning Agreement via the GEO Brightspace.
- ✓ Discuss the requirements for your research proposal with your supervisor (length, depth etc.).
- Discuss your data management with your supervisor, especially when your research is part of a larger research project.
- ✓ Write a research proposal.
- ✓ Prepare for the presentation of the research proposal.
- ✓ Arrange a date with your supervisor for progress evaluation.
- ✓ Attend at least two other students' research proposal presentations and one other student's final colloquium and provide feedback to the presenting students.
- ✓ Arrange dates for the final assessment (handing in thesis report, final colloquium, examination).
- ✓ Provide the supervisor and examiner with a PDF of the final version of your thesis report.
- ✓ After the examination, provide the data management files and a PDF of the final version of your thesis to GEO's secretarial office
- ✓ 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: <u>Netherlands Code of Conduct for Research Integrity</u>

**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 GEO Brightspace and the WUR website: <u>https://www.wur.nl/en/Education-Programmes/Student-Service-Centre/Show-ssc/Forms-Student-Service-Centre.htm</u>

#### • 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

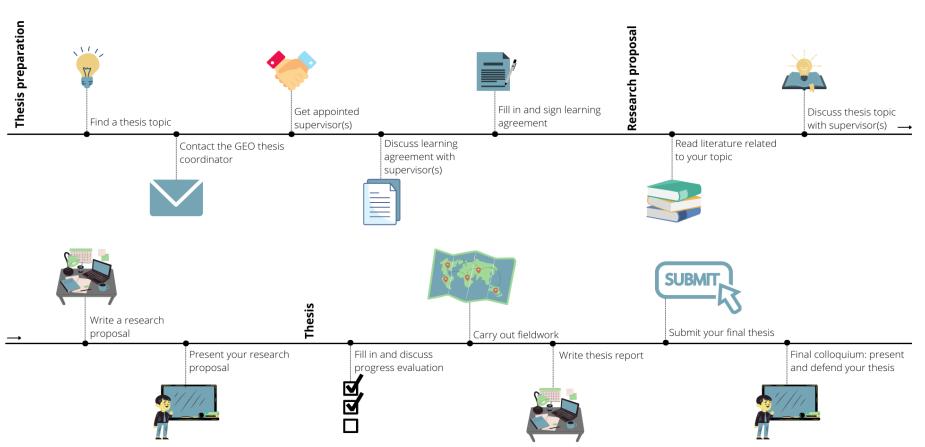
#### Appendix III: Data management plan

Following the assessment of your thesis and the registration of your grade in OSIRIS, you are required to submit the data in two files to GEO's administrator. One file should contain all the raw data (e.g., all interview transcripts compiled in one single word document), and the other file, processed data (e.g., ATLAS.ti project file, or a word document of coded transcripts plus a list of codes). If needed, seek your supervisor's advice on how to make these files. Please note that you must submit only two files. The files should be sent to the administrator using SURFfilesender (https://filesender.surf.nl/?s=upload).

You officially conclude your MSc thesis when all administration related to the thesis, including that of data management, has been completed.

#### **Appendix IV: MSc Thesis Timeline**

In this appendix you will find a general overview of the timeline of a GEO MSc thesis project. Please do keep in mind that the order in which you write certain parts of your thesis are topic-dependent and can also differ per supervisor.



# **MSc Thesis Timeline**

**Figure 1 Thesis period flow chart** 

As illustrated in the flow chart (Figure 1), the thesis period consists of three phases: (1) the thesis preparation phase, (2) the research proposal phase and, (3) the thesis phase. The accompanying steps, tasks, deliverables, and deadlines per phase can be found in Table 1. The steps can also indicate when to meet with your supervisor(s). For more details, please consult the previous chapters of this MSc thesis course guide.

Month	Step	Task(s)	Deliverable	When?
	•	Phase 1: Thesis preparation	n	
Before the $1^{\mathfrak{st}}$ month	Orientation and learning agreement	<ul> <li>Check with your study advisor if you are allowed to start your thesis and meet the GEO requirements (for MTO e.g. by completing the course GEO 30806)</li> <li>Find a thesis topic (research direction)</li> <li>Contact GEO thesis coordinator to arrange supervision</li> <li>Fill in and sign learning agreement (available on Brightspace)</li> </ul>	Learning agreement Submit to Brightspace after you and your supervisor have signed the learning agreement.	Before the start of the thesis project.
		Phase 2: Research proposa		
	Draft proposal <sup>1</sup>	<ul> <li>Discuss the structure of your research proposal with your supervisor(s)</li> <li>Write draft research proposal</li> </ul>	Draft research proposal Submit to supervisor(s) via e- mail	Approx. in 8 weeks (depends on the proposal presentation dates and your agreement with your supervisor).
	Thesis ring	• Form a thesis ring with other students (voluntarily) to share feedback and experiences		
1 <sup>st</sup> and 2 <sup>nd</sup>	Proposal presentation <sup>1</sup>	<ul> <li>Prepare for proposal presentation</li> <li>Attend other students' proposal presentations</li> <li>Give peer feedback during the proposal presentation sessions</li> <li>Keep record of two forms with the best feedback you have given (e.g. by taking a photo of the filled in forms)</li> <li>Provide supervisor the filled in tip-top forms (or make sure you do so before the thesis examination)</li> </ul>		October or March, additional dates can be arranged <sup>2</sup>

<sup>1</sup> Your research proposal is often a work-in-progress that eventually will become part of your final thesis, the items you present at the presentation might therefore not be 'final'. The aim of the presentation is to acquire feedback and suggestions for improvement.

<sup>2</sup>Please note that the arrangement of additional dates is dependent on the number of students in the process of writing their proposal, availability of supervisors, work schedules, etc.

Table 1 Overview of the thesis period (cont.)

Month	Step	Task(s)	Deliverable	When?
	1	Phase 3: Thesis	1	
2 <sup>nd</sup>	Progress evaluation	<ul> <li>Fill in the progress evaluation form (available on Brightspace)</li> <li>Discuss the progress evaluation form with your supervisor(s)</li> </ul>	Progress evaluation Submit to supervisor(s) via e- mail	In week 8, or within 2 months after the start of your thesis research.
3 <sup>rd</sup> and 4 <sup>th</sup>	Fieldwork	Carry out your thesis research	Findings Submit to supervisor(s) via e- mail	Depends on the arrangements with your supervisor(s).
5 <sup>th</sup> and 6 <sup>th</sup>	Analysis and thesis write up	Write a full draft of your thesis	Draft thesis Submit to supervisor(s) via e- mail	Depends on the arrangements with your supervisor(s) and the available colloquium dates.
	Final thesis & colloquium	<ul> <li>Agree with your supervisor(s) on a date for your final assessment (colloquium) and arrange your final colloquium by e-mailing the GEO administrator (Keen)</li> <li>Send final thesis to your examiner and supervisor(s)</li> </ul>	Final thesis (PDF) Submit to examiner and supervisor(s) via e- mail	10 working days before your final colloquium.
6 <sup>th</sup>	Attend peer's colloquia	<ul> <li>Give peer feedback during peer's colloquia</li> <li>Keep record of two forms with the best feedback that you have given (e.g. by taking a photo of the filled in forms)</li> <li>Provide supervisor your filled in tip-top forms before you own thesis examination</li> </ul>	Filled in feedback forms (digital or photocopies) Submit to supervisor(s) via e- mail	
	After the examination (colloquium)	<ul> <li>Provide the GEO administrator with data management files and the final version of your thesis</li> <li>Fill in the WUR thesis evaluation questionnaire (send to you by e-mail)</li> </ul>	Final thesis (PDF) Submit to GEO administrator via e-mail Data management files Submit to GEO's administrator via SURFfilesender	