

# MSc Thesis Course Guide, Cultural Geography Group (GEO) version 24.08.2023

Study load: 36 ECTS

Course code: GEO-80436

# **Table of Contents**

1.	General information	3
	Course profile	3
	Learning outcomes	3
	People involved in your thesis	4
	Contact information	5
2.	Thesis preparation	6
	Finding a thesis topic	6
	Determine your supervisor and signing Learning Agreement	6
3.	Thesis activities	8
	Research proposal	8
	Proposal presentation and peer feedback session	8
	Progress evaluation	8
	Carrying out the research project	9
	Thesis report	9
	Oral presentation (final colloquium)	10
	Oral defence	10
4.	Completion of your thesis	11
	Assessment of the thesis	11
	Delay and possibility to resit	12
5.	Points of attention during the thesis	14
	Well-being	14
	Supervision	14
	Feedback	14
	Thesis rings	14
	Ethical behaviour and plagiarism	15
	Information on WU travel policy, insurance and grants	16
Арр	pendices	18
	Appendix I: Checklist students for organising a thesis	18
	Appendix II: MSc Thesis Timeline	19
	Appendix III: OSIRIS Timeline	22
	Appendix IV: Intellectual property statement for student	23
	Appendix V: Data management plan	24
	Appendix VI: Downloads	24
	Appendix VII: Information on student guidance and social safety	24
	Appendix VIII: Netherlands Code of Conduct for Research Integrity	25

# 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 checklist and general overview of the timeline of a MSc thesis can be found in Appendix I and II.

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: 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:

- 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.

# 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 the main and administrative supervisor
  responsible for guiding the thesis project. They are an employee of your chair group. They are
  often an academic WU staff member, but they can also be an experienced PhD candidate or a
  post-doc. 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.
- A second supervisor. If the daily supervisor is a PhD candidate, the second supervisor of the MSc student is usually the supervisor of that PhD candidate. There can also be content-related reasons to appoint a second or third supervisor or advisor.
- The *examiner* will be the chair holder or another staff member appointed by the Examining Board. The examiner is responsible for the final grading.

Actors in the assessment (the main and administrative supervisor assigns the assessors and examiner in Osiris):

- Assessor 1 is responsible for evaluating the thesis project. This is an academic WU staff member<sup>1</sup>.
   They are preferably involved in supervision as they assess the student's performance. Hence, assessor 1 will often be the daily supervisor (provided that they match the definition of academic WU staff member).
- Assessor 2 is responsible for an independent assessment of parts of the thesis project (at least the report). Assessor 2 is often the examiner, but not necessarily. This role has the same requirements as Assessor 1.
- Examiner (often Assessor 2), who is responsible for evaluating the thesis project and coordinating grades throughout the chair group. They are appointed by the Examining Board, and they are listed as examiner in the Study Handbook under the MSc thesis course code. Requirements: a PhD degree or other demonstrable experience with the MSc thesis subject<sup>2</sup>. Only examiners listed for the courses in the course catalogue can decide and finalize the grade in Osiris.

<sup>&</sup>lt;sup>1</sup> From the EER for the academic year 2023/2024 onwards, the definition of 'academic WU staff member' is: Staff member with a PhD degree or an equivalent research profile, working under the responsibility of a chair holder at Wageningen University. The equivalency of the research profile is at the discretion of the examiner of the course under consideration.

<sup>&</sup>lt;sup>2</sup> Rules and Regulations of the Examining Boards, Article 8

# **Contact information**

# **MTO Thesis Coordination**

### **Chih-Chen Trista Lin**

Contact for:

- General information Email: <a href="mailto:chihchentrista.lin@wur.nl">chihchentrista.lin@wur.nl</a>
- Supervisor allocation thesis Office location: Gaia B325

- Thesis topic exploration

# **MLP Thesis Coordination**

# **Martijn Duineveld**

Contact for:

- General information Email: <u>martijn.duineveld@wur.nl</u>

- Supervisor allocation thesis Office location: Gaia B301

- Thesis topic exploration

### **Additional Staff**

## Maria de Wit

Contact for:

Proposal presentations
 Thesis rings
 Email: <u>maria.dewit@wur.nl</u>
 Office location: Gaia B301

Brightspace

### Astrid van de Kuilen

Contact for:

- Colloquium Email: <u>astrid.vandekuilen@wur.nl</u>

Office location: Gaia B327

# **Cheryl van Adrichem**

Contact for:

Research topics brochure Email: <a href="mailto:cheryl.vanadrichem@wur.nl">cheryl.vanadrichem@wur.nl</a>

- Thesis café Office location: Gaia B301

# 2. Thesis preparation

This section describes the initial preparation before starting your thesis project in general terms. See Appendix I for a checklist for organising your thesis, Appendix II for a timeline of the thesis and Appendix III for the administrative process of your thesis in OSIRIS.

# Finding 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 (e.g. the annual thesis café) or your MSc programme.
- Visit GEO's Wageningen University webpage '<u>Thesis with the Cultural Geography Group</u>' (<u>wur.eu/geothesis</u>) and read the GEO Research Topic Brochure
- Contact your MSc programme study advisor.
- Find thesis subjects via the thesis database at WU-website (currently this is the TIP database: tip.wur.nl which is not fully up-to-date but can inspire you; an alternative is under construction).

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.

# **Determine your supervisor and signing Learning Agreement**

Before you can formally start with the thesis at GEO, you are required to contact GEO's thesis coordinator to determine your supervisor. Once your supervisor is confirmed by GEO's thesis coordinator, you will 1) have to email Maria de Wit to give you access to the Thesis and Internship Cultural Geography Brightspace and 2) start your own OSIRIS Case. For further instructions on the procedure of starting your own OSIRIS Case, please visit <a href="https://wur.eu/tir-start">https://wur.eu/tir-start</a>.

Subsequently, you and your supervisor have to make more detailed agreements related to your learning process during the thesis. These agreements are written down in the Learning Agreement. To have an overview of the various topics covered in the learning agreement you can consult the <a href="https://checklistlearning.com/checkl

One of the aspects covered in the learning agreement is intellectual property rights. The text of the statement you have to sign can be found in Appendix IV: Intellectual property statement for student. Related to that, discuss potential 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.

It is your responsibility to manage data according to GEO's data management plan (See Appendix V).

Discuss time, format and transfer of results and 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.

# 3. Thesis activities

This section describes the different stages of the thesis project in general terms. See Appendix I of the course guide for an important checklist, Appendix II for a timeline of the thesis and Appendix III for an overview of administrative steps in OSIRIS. For further instructions on the procedure in OSIRIS, please visit the WUR Support website.

# **Research proposal**

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).

# Proposal presentation and peer feedback session

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. Discuss format and content of your presentation with your supervisor. All presentations/feedback sessions are offline, on campus unless governmental restrictions (e.g., due to COVID-19) or significant personal circumstances prevent this.

You will present your research proposal to other students and staff members around eight weeks after the start of your thesis research. Each presentation must be 5-7 minutes in length. The presentation should be given in English in order to allow all students and staff members to give feedback and participate in discussions.

The proposal presentation(s) are followed up by a peer feedback session in which you get the chance to give feedback on each other's presentations/proposals. Feedback given during the feedback sessions will help you to further develop your knowledge, skills and attitude and make the best of your project. You will participate in the feedback session of at least two other students. Given and received feedback will be noted down in the Student Proposal Presentation Feedback Form that is available on Brightspace. These forms will eventually have to be uploaded to OSIRIS as supplementary documents to show examples of feedback you have given and received during your thesis.

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. Additional research proposal presentations can be arranged by the supervisors and students, with the assistance of the thesis coordination team. All dates are announced on Brightspace. 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. Inform Maria de Wit in time to reserve a slot for the upcoming proposal presentations.

#### **Progress evaluation**

The progress evaluation is a meeting between the student and the supervisor that takes place in the

8<sup>th</sup> week or within two months after the start of your thesis research. 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. The thesis assessment 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 your supervisor considers that your progress is such that successful completion of the project is unlikely, you should be given the opportunity to improve. Your supervisor should clearly indicate what improvements are required and within which timeframe. If the lack of progress is the result of a mismatch between your supervisor and your, a switch of supervisor should be considered.

If, after the set timeframe for approvement(s), your supervisor considers your progress as being still not enough to successfully complete your thesis, the supervisor should involve an examiner (foureyes principle). Together, they could consider termination of the project with a 'no-go' decision. A no-go decision must be taken by the examiner. It must be well explained to you, and the explanation should be recorded in Osiris. The supervisor should ensure that this 'no-go' decisions is taken before half way the nominal duration of the thesis project, to prevent further delay for the student. Your supervisor must inform the study advisor to create a safety net for the student outside the chair group and facilitate a 'warm handover'. Note that the student may disagree with the no-go decision and submit an appeal to Examination Appeals Board (CBE)<sup>3</sup>.

Depending on the reason for the no-go decision, there may still be a role for the chair group in the follow-up. In consultation with the study advisor, the supervisor and the examiner, the student may, for example, be recommended to take additional education first (e.g. courses on content or skills, like academic writing). The student can also be assigned a topic that fits their knowledge and skills better. These adjustments require them to restart their thesis.

# 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 V). 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.

# 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.

<sup>&</sup>lt;sup>3</sup> Rules and Regulations of the Examining Boards, Article 28.2

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.

Once your thesis report is (almost) finished, the supervisor will assign an examiner, which is usually the GEO chair holder or another staff member appointed by the Examining Board. The assessors will have to be documented in OSIRIS.

You will have to upload the final report to OSIRIS and send the data management files to Astrid van de Kuilen for archiving using SURFfilesender (<a href="https://filesender.surf.nl/?s=upload">https://filesender.surf.nl/?s=upload</a>). The oral defence will take place ten working days after you have submitted your report(s) to the supervisor and examiner. The final report will also have to be uploaded to Brightspace for a plagiarism check.

**Important:** It is the student's responsibility to provide the supervisor and the examiner with a PDF copy of the final MSc thesis in OSIRIS (and via email, if requested by your supervisor and the examiner) no later than 10 working days prior to the defence. Without an upload in OSIRIS, the thesis cannot be assessed.

# 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 are visible on Brightspace and the GEO calendar. You must contact Astrid van de Kuilen at least three weeks in advance to reserve a slot for the upcoming colloquium.

It is not necessary to present all the elements 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. The colloquium will take place on campus unless there are significant personal circumstances or governmental restrictions (due to COVID-19) that do not allow this.

#### **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 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 defence. Then, following a short consultation between the supervisor and examiner, (an indication of) the final grade will be announced to the student (chapter 4).

# 4. Completion of your thesis

### Assessment of the thesis

For the Wageningen University assessment, supervisors/examiners use the Wageningen University Thesis Assessment Form (Appendix VI). 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			
Weights	Description	Performance	Research Report	Oral presentation	Oral defence
-	% of grade	40%	50%	5%	5%
	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).	х	x		х
Learning outcomes	2 Collect, select and process data, using the design for the project, methods and tools described in the research plan.	х	х		х
ing ou	3 Analyse and synthesise the data in order to answer the research questions and/or test the hypothesis.	х	х	х	х
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.	х	х	х	х
	5 Report on the research, both in writing and in oral presentation.	х	x	х	
	6 Work in compliance with academic codes of conduct, and with proper management of time and resources.	х	х		
	7 Make use of input and feedback for executing the research project and provide feedback to others.	х			
sors	Supervisor (Assessor 1)	х	х	х	х
Assessors	Examiner* (Assessor 2)		x	х	х

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

A rubric is used for grading (you can view the assessment form on Brightspace or in Appendix VI). After the examination, you will receive the reasoning behind your thesis grade, including specific feedback on all assessment categories. Both assessors independently assess one or more aspects of your thesis work. Subsequently, the examiner, usually in consultation with the supervisor will determine the final grade for the different criteria. That assessment, the final grade, as well as an underpinning of the grade will be registered in OSIRIS.

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

# Delay and possibility to resit

The start and end date of your thesis are recorded in the Learning Agreement. You should complete the thesis project within the time allocated to this programme component (i.e. 6 months for a 36 EC thesis). Ensure that the research proposal is realistic and contains a contingency plan ('plan B').

Below we discuss the three acceptable reasons for a longer runtime of a thesis project. There are a three acceptable reasons for a longer runtime of an thesis project: planned longer duration of your thesis project, force majeure or an insufficient result for your thesis. Other causes for delay are *not* acceptable.

#### Planned longer duration of the thesis project

If the student plans to undertake additional activities next to the thesis, the total runtime of a thesis project can be longer than the nominally allocated time. Examples are you have a job, have planned holidays, or will do a student-assistantship. You can take this into account when registering the expected date of completion (to be filled out in the learning agreement). This situation is *not* considered as delay.

#### Delay due to force majeur

If the planned period needs to be extended due to *force majeur*, you should submit a request to the student dean. The dean is to decide whether this is a case of *force majeur*, and advises the Examining Board. The Examining Board can then decide to extend the term for the thesis. In that case, the expected date of completion will be moved forward, in accordance with the extent of the delay. 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.

### Delay due to an insufficient result

Around the expected date of completion of the thesis, the thesis is assessed, and the grade is registered in OSIRIS. In this way, all students are graded after the same amount of time, which makes the grading fair for all students.

If the assessment is insufficient, but your supervisor and you expect that you will be able to finish the project successfully within two extra months, the examiner registers the grade in OSIRIS as INCOMPL. Next, you have two months to improve the work to a sufficient level. In the case of *force majeur*, these two months can be extended under the same conditions as above (via student dean and Examining Board).

After two months, the work of the student's work is assessed again (again with two independent assessors, and the examiner determining the final grade). If the result is sufficient, the grade is registered in OSIRIS. If the result is insufficient, INSUFF will be recorded in OSIRIS.

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 start a new thesis, this is considered as a resit.

# Course evaluation for 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.

# 5. Points of attention during the thesis

# Well-being

Your MSc-thesis may be challenging for you in many ways. You may need to stretch yourself to master the contents, your academic or general skills may put to the test. Furthermore, the required level of independence may be a new experience for you, and you collaboration skills may be tested in the intensive collaboration within a small team (your supervisor and possible some other people involved in your research).

Given these challenges, it is of utmost importance to monitor your well-being. Make it a topic that you discuss with your supervisor with some regularity, but also with your fellow thesis students. If you feel that you need to discuss things that go beyond what you would like to discuss with your supervisor, do not hesitate to contact your study advisor. Useful links about student guidance and social safety can be found in Appendix VII: Information on student guidance and social safety.

# Supervision

The supervision of your thesis is the responsibility of a Wageningen University chair group, in this case the Cultural Geography Group (GEO). 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.

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.

#### Feedback

Dealing with feedback and providing feedback to others is one of the learning outcomes of the thesis and listed in the grading rubric in the assessment form. 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 (see also the sections 'Proposal presentation and peer feedback session' above).

#### Thesis rings

As an addition to the peer feedback procedure explained in the previous section, GEO offers and strongly advises students to participate voluntarily in self-organised thesis rings and other peer-

learning sessions (such as 'Case clinic' and 'Mastermind'). When interested, you are encouraged to contact Maria de Wit for thesis ring opportunities or instead self-organise into small groups of four to five people. For more information, see Brightspace.

# 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 VIII).

The main aspects described in this code concern:

- Honesty means, among other things, reporting the research process accurately, taking alternative opinions and counterarguments seriously, being open about margins of uncertainty, refraining from making unfounded claims, refraining from fabricating or falsifying data or sources and refraining from presenting results more favourably or unfavourably than they actually are.
- **Scrupulousness** means, among other things, using methods that are scientific or scholarly and exercising the best possible care in designing, undertaking, reporting and disseminating research.
- Transparency means, among other things, ensuring that it is clear to others what data the research was based on, how the data were obtained, what and how results were achieved and what role was played by external stakeholders. If parts of the research or data are not to be made public, the researcher must provide a good account of why this is not possible. It must be evident, at least to peers, how the research was conducted and what the various phases of the research process were. At the very least, this means that the line of reasoning must be clear and that the steps in the research process must be verifiable.
- Independence means, among other things, not allowing the choice of method, the assessment of data, the weight attributed to alternative statements or the assessment of others' research or research proposals to be guided by non-scientific or non-scholarly considerations (e.g., those of a commercial or political nature). In this sense, independence also includes impartiality. Independence is required at all times in the design, conduct and reporting of research, although not necessarily in the choice of research topic and research question.
- Responsibility means, among other things, acknowledging the fact that a researcher does not operate in isolation and hence taking into consideration within reasonable limits the legitimate interests of human and animal test subjects, as well as those of commissioning parties, funding bodies and the environment. Responsibility also means conducting research that is scientifically and/or societally relevant.

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

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 (see Brightspace 'Plagiarism check' section). The final thesis will have to be uploaded to Brightspace for the plagiarism check. 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.

# Use of generative artificial intelligence (e.g. ChatGPT, BARD, DALL-E, Elicit)

The use of generative artificial intelligence to create ready-made content in assignments is considered fraud, so it is not allowed to copy-and-paste the output of AI.

However, you are allowed to use AI as a sparring partner, and as a feedback tool for the quality of your text (e.g. as a spell checker or grammar checker). However, the use of AI is always subject to the following rules:

- Acquiring active writing, designing and reflection skills is an important part of your thesis. The use of AI should only be in support of, not as a replacement of these skills.
- You will always be held accountable for the correctness, completeness, and coherence of all
  your texts. The correctness of the output of AI is never guaranteed. AI chatbots have been
  known to confidently assert false claims as true. You should always critically evaluate the
  output.
  - When you use AI for your work, acknowledge your use and report how it affects your products.

Your thesis report should contain an **appendix on the use of AI**. In this appendix, you state whether you used AI for your research and report, and if so, how. In case you did not use AI, this appendix can be one sentence in which you state that you did not use AI. In all the other cases you have acknowledge your use and report how it affects your assignment. The appendix should contain a list of the prompts you used, a link to the conversation (see FAQ for ChatGPT) and an explanation of how you used the output of AI (i.e. in what way did the output of AI affect your text).

# 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.

### 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:

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

# **Appendices**

# Appendix I: Checklist students 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 study programme.
- ✓ Find a thesis topic.
- ✓ Check whether the topic of your thesis is consistent with your study programme.
- ✓ Contact GEO's thesis coordinator and arrange a GEO supervisor.
- ✓ Discuss the thesis topic with the supervisor.
- ✓ Start an OSIRIS Case for the administration of your thesis.
- ✓ Obtain access to GEO's thesis and internship Brightspace by contacting Maria de Wit

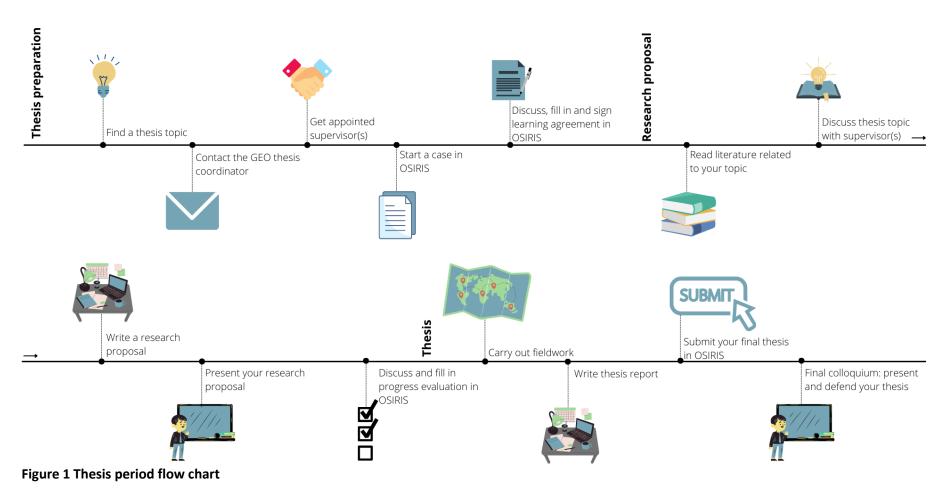
You can only proceed to the following until you have done all of the above:

- ✓ Check whether the country of research (if applicable) is a risk area or not.
- ✓ Discuss the Thesis Learning Agreement together with your supervisor.
- ✓ Submit the Thesis Learning Agreement via OSIRIS.
- ✓ 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.
- ✓ Optional: Arrange thesis ring independently or contact Maria de Wit
- ✓ Write a research proposal.
- ✓ Attend two other student's proposal presentations, provide feedback, and upload forms to OSIRIS.
- ✓ Arrange slot for proposal presentation by contacting the Maria de Wit.
- ✓ Arrange a date with your supervisor for progress evaluation.
- ✓ Confirm progress evaluation on OSIRIS after the supervisor has registered this.
- ✓ Arrange dates for the final assessment (handing in thesis report, examination) by contacting your supervisor and arrange final colloquium by contacting Astrid van de Kuilen.
- ✓ Provide the supervisor and examiner with a PDF of the final version of your thesis report by uploading it on OSIRIS⁵ (and, in case requested, via email too)
- ✓ Upload your final thesis on Brightspace for the plagiarism check.
- ✓ After the examination, send the data management files to Astrid van de Kuilen using SURFfilesender (<a href="https://filesender.surf.nl/?s=upload">https://filesender.surf.nl/?s=upload</a>)
- ✓ Complete the thesis evaluation questionnaire.

# **Appendix II: 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 or thesis project.

# **MSc Thesis Timeline**



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.

Table 1 Overview of the thesis period

Month	Step	Task(s)	Deliverable	When?		
	Phase 1: Thesis preparation					
Before the 1st 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>Start OSIRIS Case</li> <li>Gain access to GEO Brightspace by contacting Maria de Wit</li> <li>Add supervision to OSIRIS Case</li> <li>Fill in learning agreement in OSIRIS</li> </ul>	Learning agreement Submit to OSIRIS	Before the start of the thesis project.		
		Phase 2: Research proposa	l			
	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).		
2 <sup>nd</sup>	Thesis ring	Form a thesis ring with other students (voluntarily) to share feedback and experiences		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
1st 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>Fill out the peer feedback forms</li> <li>Give/receive peer feedback during the peer feedback sessions</li> <li>Provide the peer feedback form to supervisor (or make sure to do so before the thesis examination)</li> </ul>	Peer feedback forms you have filled out or received Upload the images or digital copies to OSIRIS as supplementary documents	October or March, additional dates may be arranged <sup>2</sup>		

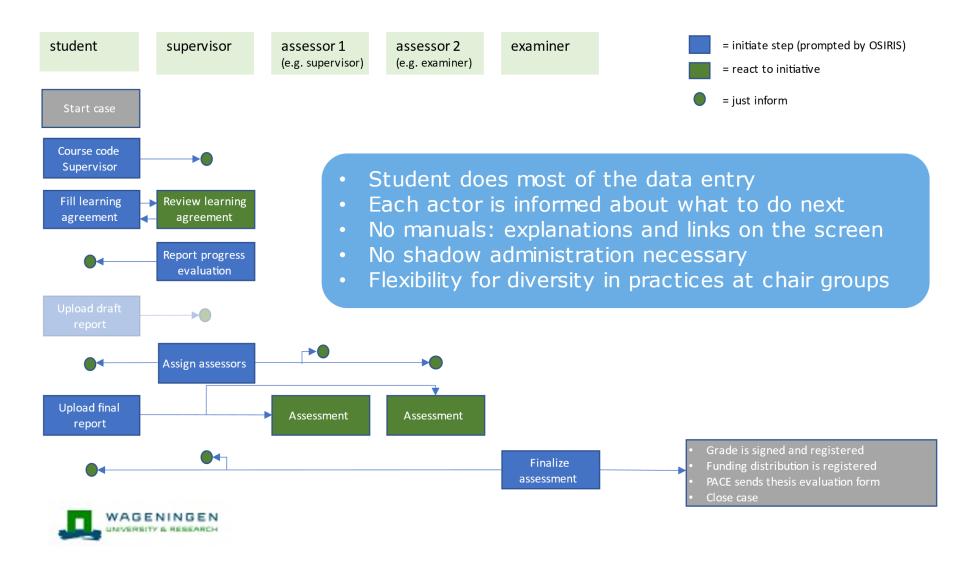
Table 1 Overview of the thesis period (cont.)

Month	Step	Task(s)	Deliverable	When?
	•	Phase 3: Thesis		
2 <sup>nd</sup>	Progress evaluation	Discuss progress evaluation with supervisor in a meeting. Confirm the progress evaluation form in OSIRIS <sup>1</sup>	Progress evaluation entered by supervisor(s) and confirmed by student via OSIRIS¹	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.
6 <sup>th</sup>	Final thesis & colloquium  After the	<ul> <li>Agree with your supervisor(s) on a date for your final assessment (colloquium) and arrange your final colloquium by contacting Astrid van de Kuilen</li> <li>Send final thesis to your examiner and supervisor(s)</li> <li>Submit final thesis to Brightspace for plagiarism check</li> <li>Send data management files to Astrid van de Kuilen using SURFfilesender</li> <li>Fill in the WUR thesis</li> </ul>	Final thesis (PDF) Submit to examiner and supervisor(s) via OSIRIS.¹ Submit to Brightspace for plagiarism check  Data Management Files Send to Astrid van de Kuilen	10 working days before your final colloquium.
	examination (colloquium)	evaluation questionnaire (send to you by e-mail)		

<sup>&</sup>lt;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 exchange feedback and suggestions for improvement.

<sup>&</sup>lt;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.

# **Appendix III: OSIRIS Timeline**



# Appendix IV: Intellectual property statement for student

In the learning agreement, one of the steps is that the student has to read and confirm the intellectual property statement belows.

#### Introduction

It is important for you as a student to understand your rights and obligations concerning intellectual property and confidentiality. Please read this declaration and accept it by selecting 'yes' at the bottom of this page. If you have any further questions about intellectual property, consult info.eship@wur.nl.

#### **Declaration**

- The student shall own the (rights to the) MSc Thesis / Research Practice. This does not
  encompass the information and materials provided by Wageningen University (and others)
  to the student. The student hereby grants Wageningen University the right to use the MSc
  Thesis / Research Practice for education and internal research purposes and the right to
  publish the MSc Thesis / Research Practice in the WUR e-depot.
- 2. Wageningen University remains entitled to and the owner of the information and materials provided to the student for the MSc Thesis / Research Practice project. The student shall keep these information and materials confidential for a period of five (5) years, starting on the date that this declaration is accepted.
- 3. The student will perform the MSc Thesis / Research Practice in accordance with the Netherlands Code of Conduct for Research Integrity.
- 4. The student will process any personal data in connection with the MSc Thesis / Research Practice in accordance with the instructions and regulations given by Wageningen University. More information can be obtained from privacy.student@wur.nl.
- 5. The student and Wageningen University can agree on an alternative ownership agreement, for example in case of a specific research assignment or in case of an internship. In that case, the other agreement shall take precedence over this declaration.

The acceptance and execution of this declaration by selecting 'yes' in the box below, recorded in the Student Information System of Wageningen University, Osiris), shall be deemed to be an acceptance with the same validity, enforceability and admissibility as an original signature.

I, the student, have read the above declaration, I fully understood it, and I agree to it.

# Appendix V: 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 Astrid van de Kuilen for archiving using SURFfilesender (<a href="https://filesender.surf.nl/?s=upload">https://filesender.surf.nl/?s=upload</a>). 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.

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

# **Appendix VI: Downloads**

# • Learning Agreement

To have an overview of the various topics covered in the learning agreement you can consult the <u>checklist learning agreement</u>. You as a student fill in the learning agreement in OSIRIS. An overview of the entire process in OSIRIS is available in the form of a <u>presentation with screenshots</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 <a href="http://wur.eu/thesis-internship">http://wur.eu/thesis-internship</a> or find it on Brightspace.

# Appendix VII: Information on student guidance and social safety

Resources about student guidance, including the student deans, student psychologists, online training, etc. can be found <a href="here">here</a>.

Information about social safety can be found here.

# Appendix VIII: Netherlands Code of Conduct for Research Integrity

Students and staff at Wageningen University Research are bound to the <u>Netherlands Code of Conduct for Research Integrity</u> (it is part of the <u>Student Charter</u>).

# **Principles**

The main principles described in this code concern: Honesty, Scrupulousness, Transparency, Independence, Responsibility.

#### Chapter 2 of the Code of Conduct summarizes the principles as follows:

**Honesty** means, among other things, reporting the research process accurately, taking alternative opinions and counterarguments seriously, being open about margins of uncertainty, refraining from making unfounded claims, refraining from fabricating or falsifying data or sources and refraining from presenting results more favourably or unfavourably than they actually are.

**Scrupulousness** means, among other things, using methods that are scientific or scholarly and exercising the best possible care in designing, undertaking, reporting and disseminating research.

**Transparency** means, among other things, ensuring that it is clear to others what data the research was based on, how the data were obtained, what and how results were achieved and what role was played by external stakeholders. If parts of the research or data are not to be made public, the researcher must provide a good account of why this is not possible. It must be evident, at least to peers, how the research was conducted and what the various phases of the research process were. At the very least, this means that the line of reasoning must be clear and that the steps in the research process must be verifiable.

**Independence** means, among other things, not allowing the choice of method, the assessment of data, the weight attributed to alternative statements or the assessment of others' research or research proposals to be guided by non-scientific or non-scholarly considerations (e.g., those of a commercial or political nature). In this sense, independence also includes impartiality. Independence is required at all times in the design, conduct and reporting of research, although not necessarily in the choice of research topic and research question.

**Responsibility** means, among other things, acknowledging the fact that a researcher does not operate in isolation and hence taking into consideration – within reasonable limits – the legitimate interests of human and animal test subjects, as well as those of commissioning parties, funding bodies and the environment. Responsibility also means conducting research that is scientifically and/or societally relevant.

#### **Standards**

Chapter 3 of the Code of Conduct provides standards for good scientific practice on the following phases of the research process: design, conduct, reporting, assessment and peer review and communication.

Design

- Consider the interests of science and scholarship and/or society when determining the subject and structure of your research.
- Conduct research that can be of scientific, scholarly and/or societal relevance.
- Do not make unsubstantiated claims about potential results.
- Take into account the latest scientific and scholarly insights.
- Make sure that your research design can answer the research question.
- Ensure that the methods you employ are well justified.
- If the research is conducted on commission and/or funded by third parties, always specify who the commissioning party and/or funding body is.
- Be open about the role of external stakeholders and possible conflicts of interest.
- In research with external partners, make clear written agreements about research integrity and related matters such as intellectual property rights.
- As necessary, describe how the collected research data are organized and classified so that they can be verified and reused.
- As far as possible, make research findings and research data public subsequent to completion of the research. If this is not possible, establish valid reasons for their nondisclosure
- In the event of an investigation into alleged research misconduct, make all relevant research and data available for verification subject to the confidentiality safeguards established by the board of the institution.
- In highly exceptional cases, there may be compelling reasons for components of the
  research, including data, not to be disclosed to an investigation into alleged research
  misconduct. Such cases must be recorded and the consent of the board of the institution
  must be obtained prior to using the components and/or data in question in the scientific or
  scholarly research. They must also be mentioned in any results published.
- Ensure that the required permissions are obtained and that, where necessary, an ethical review is conducted.
- Accept only research assignments that can be undertaken in accordance with the standards in this Code.
- Enter into joint research with a partner not affiliated with an institution which has adopted this or a comparable Code only if there is sufficient confidence that your own part of the research can be conducted in compliance with this Code and the joint research results meet generally accepted principles of integrity in research.

### Conduct

- Conduct your research accurately and with precision.
- Employ research methods that are scientific and/or scholarly.
- Make sure that the choice of research methods, data analysis, assessment of results and
  consideration of possible explanations is not determined by non-scientific or non-scholarly
  (e.g. commercial or political) interests, arguments or preferences.
- Do not fabricate data or research results and do not report fabricated material as if it were fact.
- Do justice to all research results obtained.

- Do not remove or change results without explicit and proper justification. Do not add fabricated data during the data analysis.
- Ensure that sources are verifiable.
- Describe the data collected for and/or used in your research honestly, scrupulously and as transparently as possible.
- Manage the collected data carefully and store both the raw and processed versions for a period appropriate for the discipline and methodology at issue.
- Contribute, where appropriate, towards making data findable, accessible, interoperable and reusable in accordance with the FAIR principles.
- Take into consideration the interests of any humans and animals involved, including test subjects, as well as any risks to the researchers and the environment, while always observing the relevant statutory regulations and codes of conduct.
- Keep your own level of expertise up to date.
- Take on only those tasks that fall within your area of expertise.

#### Reporting

- Do justice to everyone who contributed to the research and to obtaining and/or processing the data.
- Ensure a fair allocation and ordering of authorship, in line with the standards applicable within the discipline(s) concerned.
- All authors must have made a genuine intellectual contribution to at least one of the following elements: the design of the research, the acquisition of data, its analysis or the interpretation of findings.
- All authors must have approved the final version of the research product.
- All authors are fully responsible for the content of the research product, unless otherwise stated.
- Present sources, data and arguments in a scrupulous way.
- Be transparent about the method and working procedure followed and record them where
  relevant in research protocols, logs, lab journals or reports. The line of reasoning must be
  clear and the steps in the research process must be verifiable. This usually means that the
  research must be described in sufficient detail for it to be possible to replicate the data
  collection and its analysis.
- Be explicit about any relevant unreported data that has been collected in accordance with the research design and could support conclusions different from those reported.
- Be clear about results and conclusions, as well as their scope.
- Be explicit about uncertainties and contraindications, and do not draw unsubstantiated conclusions. Be explicit about serious alternative insights that could be relevant to the interpretation of the data and the research results.
- When making use of other people's ideas, procedures, results and text, do justice to the research involved and cite the source accurately.
- Avoid unnecessary reuse of previously published texts of which you were the author or coauthor. Be transparent about reuse by citing the original publication. Such self-citation is not necessary for reuse on a small scale or of introductory passages and descriptions of the method applied.

- Always provide references when reusing research material that can be used for metaanalysis or the analysis of pooled data.
- Avoid unnecessary references and do not make the bibliography unnecessarily long.
- Be open and complete about the role of external stakeholders, commissioning parties, funding bodies, possible conflicts of interest and relevant ancillary activities.
- As far as possible, make research findings and research data public subsequent to completion of the research. If this is not possible, establish the valid reasons for this.

#### Assessment and peer review

- Be honest and scrupulous as an assessor or peer reviewer, and explain your assessment.
- Do not use information acquired in the context of an assessment without explicit consent.
- Do not use the system of peer review to generate additional citations for no apparent reason, with the aim of increasing your own or other people's citation scores ('citation pushing').
- Refrain from making an assessment if any doubts could arise regarding your independence (for example, because of possible commercial or financial interests).
- Refrain from making an assessment outside your area of expertise, or do so only in general terms.
- Be generous in cooperating with internal and external reviews of your own research.
- Do not establish a journal that does not apply the required standards of quality to its publications, and do not cooperate with any such journal.

#### Communication

- Be honest in public communication and clear about the limitations of the research and your own expertise. Only communicate to the general public about the research results if there is sufficient certainty about them.
- Be open and honest about your role in the public debate and about the nature and status of your participation in it.
- Be open and honest about potential conflicts of interest.

# Standards that are applicable to all phases of research

- As a supervisor, principal investigator, research director or manager, provide for an open and inclusive culture in all phases of research.
- As a supervisor, principal investigator, research director or manager, refrain from any action which might encourage a researcher to disregard any of the standards in this chapter.
- Do not delay or hinder the work of other researchers in an inappropriate manner.
- Call attention to other researchers' non-compliance with the standards as well as inadequate institutional responses to non-compliance, if there is sufficient reason for doing so.
- In addressing research misconduct, make no accusation that you know or should have known to be incorrect.
- Do not make improper use of research funds.