Placement Manual for Research Projects in the MSc Ecology programme, VU University Amsterdam
Academic year 2017-2018

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Abbreviations:
E&E  Ecology and Evolution
DES  Department of Ecological Sciences
UvA  University of Amsterdam
IBED Institute for Biodiversity and Ecological Dynamics
TER  Teaching and Examination Regulations
FALW Faculty of Earth and Life Sciences
Contents

1. Introduction 3
   General information 3
   Aims of the master's placement 3
   Conditions for admission 3
   Credits and duration 4
   Course codes 4

2. People involved 5
   Student 5
   Placement coordinator 5
   VU supervisor 5
   On-site supervisor 5
   Second assessor 5
   Master Coordinator 6
   Examination Board 6

3. Procedures 7
   Finding a research placement 7
   Placement abroad 7
   Quality requirements 8
   Overview of placement process 8
   Initial Project Proposal 9
   Research proposal 9
   GO/NO GO evaluation 9
   Courtesy privileges 10
   Ethical aspects 10
   Travelling and accommodation expenses 10
   Safety 11
   Liability 11

4. Completion 12
   Assessment procedure 12
   Administrative procedure 13
   Guidelines for writing the report 13
   Oral presentation 15
   Data Archive 16
   Plagiarism and fraud 16
   Evaluation 16
   Complaints and appeals 16
   Forms 16

Appendices
1 Format for Initial Project Proposal 17
2 Format for Research Proposal 19
3 Placements abroad extra form 21
4 Go/No Go form (Interim assessment) 22
5 Guidelines Assessment for Supervisors 23
6 Rubrics for Attitude, Execution, Report and Presentation 25
7 Assessment of Presentations 30
8 Checklist for students 31
1. INTRODUCTION

General information
The student placement is an important part of the Master’s programme and involves many different aspects, such as, theoretical preparation, practical execution of research, literature survey, writing a report, oral presentation, and participation in the scientific activities of a research department. It is the ultimate proof of your quality as a scientific researcher.

This placement manual describes the process of completing the research project from the beginning (the admission) through the actual execution with its supervision to the final stage (assessment and grading) in consecutive order. The various stages of the process will be supported by forms which are supplied in the Appendices. This Placement Manual is based upon the general Student Internship (Placement) and Research Project Regulations 2015 of the Faculty of Earth and Life Sciences. (https://vunet.login.vu.nl/_layouts/SharePoint.Tridion.WebParts/download.aspx?cid=tcm%3a164-446967-16)

All student placements and research projects of students taking a Master’s programme in the School of Health and Life Sciences, take place under the final responsibility of the Faculty of Earth and Life Sciences.

This placement manual covers both internal and external student placements and research projects of the masters’ programme MSc Ecology ‘Ecology and Evolution’. A project is described as ‘internal’ when it is organized by a research department associated with the Faculty Science. ‘External’ is used to refer to all other projects which may take place in universities, research institutes, etc. outside VU University, including projects undertaken at IBED at the University of Amsterdam (UvA).

It is strongly recommended to read these guidelines and the ‘FALW Student Placement (Internship) and Research Project Regulations’ carefully in order to avoid unpleasant surprises during the progress of the placement.

Aims of the master’s placement
The following learning goals are central the MSc placement:

- The student learns to independently conduct scientific research.
- The student learns to independently find scientific information and to evaluate this for the benefit of his or her own research question.
- The student learns to formulate a research question, to choose, to implement and to evaluate the (appropriate) research method, and to present the obtained results in a scientific report.
- The student learns to apply scientific methods and knowledge, to answer research questions and to generate evidence-based knowledge.
- The student learns to cooperate with researchers of various disciplines.
- The student learns to write a scientific report of the research at the level of peer-reviewed academic journals.
- The student learns to orally present the research and to discuss the findings with a scientific audience.
- The student obtains a good impression of a field for a potential future career.

Conditions for admission
A student can only be admitted to the research project if he/she is enrolled in the master’s programme Ecology; and has gained at least 18 EC in coursework from the programme. In order to show whether these conditions are met with, the student must hand in an overview of the results of the master courses together with the Initial Project Proposal with the signature of all those involved (Appendix 1).
Credits and duration of placements
The minimum study load of a placement is 30 EC (21 weeks), the maximum is 48 EC (33.6 weeks). The exact study value of each research project depends on the rest of the study programme, and should be discussed and confirmed with the Master coordinator (Joris Koene).

In most situations the following will apply:
- Research project 1 is 33 EC points
- Research project 2 is either 39 EC points (if an extra optional course is followed in year 2) or 45 EC points

One credit point (EC) is equivalent to 28 hours and one week to 40 hours. The EC value of an placement will be used by assessors to judge the amount and quality of work. That is a 48 EC placement will be expected to reflect more work than a 30 EC placement.

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Course Codes
AM_1100    Research Project Ecology and Evolution I
AM_1114    Research Project Ecology and Evolution II
2. PEOPLE INVOLVED

Student
It is the student’s responsibility to find a placement and a VU supervisor, and communicate these to the placement coordinator. Once the placement has begun, it is the responsibility of the student to request the VU supervisor for a Go/No Go evaluation within six weeks after the start of the placement (Appendix 3). It is the student’s responsibility to contact the VU supervisor and master coordinator at decisive moments (e.g. changes in research plan, problems with supervision, analysis, etc.).

Placement coordinator
The placement coordinator ensures that the placements are of the appropriate level and scope (i.e. neither too elementary nor too ambitious) and evaluates the quality of on-site/daily supervision. The placement coordinator may support students in their search for a placement. He/she approves the placement on behalf of the Examination Board and is responsible for approving the choice of VU supervisor and for selecting and making arrangements with the second assessor. James Weedon is the placement coordinator for Ecology and Evolution.

VU supervisor
The VU supervisor has a PhD degree, holds a position in higher education or research at VU University and is appointed as examiner by the Examination Board. The VU supervisor has the final responsibility for the supervision of the student during the entire project and is appointed by the Examination Board, upon nomination by the placement coordinator. The VU supervisor will be in contact with the student during decisive moments. It is the student’s responsibility to contact the VU supervisor at these moments (e.g. changes in research plan, problems with supervision, analysis, etc.). At the start of the placement the VU supervisor discusses the research question, the methodology and the expected outcome of the research proposal with the student and on-site supervisor, if applicable. At the latest six weeks after the start of the placement the VU supervisor provides the interim Go/No go evaluation upon request of the student. At the end of the internship, the VU supervisor comments on draft versions of the report (two full draft versions at most). The VU supervisor assesses the final report, as well as the oral presentation attitude and practical work of the student. The VU supervisor can be expected to spend up to 20 hours to support and advise the student during a placement (Note: these hours include not only contact moments, but also reading time, preparation, time for assessment etcetera).

On-site supervisor
In all placements the responsible on-site supervisor of the student will be a member of staff from the institute offering the placement with relevant knowledge of the placement subject and preferably holding a PhD and a position in higher education or research. The on-site supervisor provides guidance for at least one hour per week. However, it is not necessary to ration these contact hours evenly during the period of placement. At the start and at the end of the placement students usually need more time, while the part in between generally requires less supervision. The on-site supervisor advises the VU supervisor on the assessment of the placement, especially about the attitude and execution. In cases where the VU supervisor also acts as the on-site supervisor both functions merge into one and the same person.

Second assessor
The second assessor has a PhD and holds a position in higher education or research at VU University and is appointed as examiner by the Examination Board. He or she has not been involved in the placement and assesses the final report independently, without communication with the student, VU supervisor or on-site supervisor.
**Master coordinator**

The master coordinator can be contacted in case of problems which cannot be solved with the placement coordinator. The master coordinator calculates the final grade, based on the assessments of the VU supervisor and the second assessor and submits it for registration to the student secretariat.

**Examination Board**

The Examination Board appoints the VU-supervisor and the second assessor on nomination of the placement coordinator. They appoint a third assessor if necessary (see below). The examination board is informed in case of a Terminate or At Risk judgement at the Go/No Go evaluation and in case the placement is delayed for a period of longer than two months.
3. PROCEDURES

Finding a research placement
The first research project in the MSc Ecology E&E program always has to take place at the VU or UvA. However, a project carried out by a VU student at the UvA is formally considered as an external research project, requiring a VU supervisor and second VU assessor apart from the on-site UvA supervisor.

The Department of Ecological Sciences (DES) of the VU offers placements and many staff members have contacts with organisations and institutes which offer placements in the field of Ecology. All offered vacancies for placements at DES are announced on the website of the department (https://science.vu.nl/en/research/ecological-sciences/internships/index.aspx). This is a good starting point for finding a placement. Note: These vacancies are not yet assessed by the placement coordinator of the specialization. It is also always possible to approach researchers in the DES to inquire about potential projects not advertised on the website. For placement possibilities at the IBED (Institute for Biodiversity and Ecological Dynamics of the UvA), see http://ibed.uva.nl/research and contact the appropriate staff member.

The second project can only start after the first placement has been fully completed (final report submitted and oral presentation given and assessed). It is of course possible to also do the second placement at the VU or UvA – but you are also free to look to external organizations for a placement. If you want to do a project outside the VU you may look for internships at the websites of other Dutch universities or research institutes, for example: NIOO (fundamental ecological research), NIOZ (marine ecology), IMARES (fisheries and sea research), AL TerrA (applied and environmental ecology), RIVM (applied and environmental ecology), SOVON (avian ecology). Also organisations for nature conservation such as Natuurmonumenten, Staatsbosbeheer, or regional authorities (Provincie and Waterschap) may provide internships. However, special attention will have to be paid to the academic quality of the on-site supervision in these cases. This is certainly not always self-evident. Organisations for the conservation of specific species (f.e. butterflies, dolphins, tigers, primates, etc.) will generally not be qualified enough. Research projects/internships in commercial companies are not advisable, since commercial and educational interests often are too different.

In all cases: take care that you will be working on an ecological research question and that you will be able to collect enough reliable data to write a scientific report in the end. Purely monitoring or inventory projects will not be accepted. If you are unsure about the suitability of a placement, please contact the placement coordinator before you take too many steps towards making arrangements.

The choice of research placements depends on numerous motivations. Attachment to the field of research is essential to carry out the project with enthusiasm and commitment.

Important: If you get in touch with a possible provider of placement be friendly and courteously. Explain the aim of your placement, the time to spend and the final goal (a scientific report written in English). Please communicate clearly to the provider that the plan has to be approved by the VU.

Special rules for placements abroad
Projects at universities or research institutes outside the Netherlands can be accepted provided they are of sufficient academic quality and adequate on-site supervision is guaranteed. If you go abroad, it is obligatory to expand your research proposal with the additional form for placements abroad (see Appendix 3). For placements abroad many additional things have to be arranged such as visas,
housing, vaccinations, funding and fees. For questions concerning these practical issues please contact the VU International Office:
(https://vunet.login.vu.nl/organization/pages/department.aspx?cid=tcm%3a164-330442-16)
E-mail: international@vu.nl, Phone: +31 20 5989097, location: main building, central hall, OA-11, Monday, Tuesday and Wednesday from 12.00 - 14.00h.

Though foreign placements can be valuable experiences and good contributions to your CV it is important to realize that they also involve risks. They generally demand a substantial financial investment and once you have left the Netherlands things can usually not be changed anymore. It is therefore important to be critical when preparing your research project and placement.

All students travelling abroad for study purposes must register for their period abroad at the International Office (see above) well before the start. The faculty does not allow student placements or fieldwork in a country or region for which the Dutch Foreign Ministry has issued negative travel advice (code red). In cases where the Foreign Ministry has not issued negative travel advice, but has given a warning with regard to specific risks (code orange), the university operates on the assumption that the supervising staff is aware of such warnings. Strictly speaking, it could still be possible to carry out a work placement in the country in question in such circumstances, but the staff must discuss the risks with the students and serious consideration must be given to them. All students departing abroad have to agree with the crisis management policy of VU University Amsterdam before departure and take the emergency card (with VU emergency phone numbers) with them (available at International Office).

**Quality requirements**

The VU scientific masters’ placement has to meet with the following criteria:

- The student collects data or works on an existing qualitative or quantitative dataset. The amount of data as well as the quality of data meets the scientific standards.
- The placement results in a scientific report in English, which shows how the student has used the theoretical/conceptual framework and the methodological approach to answer his or her research question. If the placement organisation requests a report in Dutch, the student additionally can write a report in Dutch; however, this will not be part of the assessment.
- The student builds on previous work in the area of research, by using scientific papers published in the field of research.
- The placement organisation offers a workplace and a computer. The student participates in department meetings, workshops, etc.
- The student should be enabled to complete all constituents of the placement (reading, learning of techniques, data collection, analysis, writing, etc) within the time period agreed in advance in the proposal form (Appendix 1). When the research leads to a publication in a scientific journal the time spent writing the manuscript will not be regarded as a part of the placement duration.
- The subject of a placement should be within the domains of Ecology and/or Evolution and should meet the quality requirements for research in these fields.

**Overview of placement process**

Each research placement requires a specific set of procedures that must be followed. This is important for administrative and legal reasons. In summary they are as follows:

1. Submit an initial project proposal and receive approval from placement coordinator.
2. Begin research placement
3. (After two weeks) submit a detailed Research proposal
4. (After 6 weeks) Initiate GO/NO-GO interim assessment
5. Complete assessment tasks (written report and oral presentation)

Steps 1 to 4 are detailed in the rest of this section. Details about step 5 are given in section 5.

*Initial Project Proposal (note *new* in 2017-2018)*

The initial project proposal (IPP) is written by the student in consultation with the supervisor of the placement organization (the on-site supervisor in case of external placements and the VU-supervisor in case of internal placements). The main purpose is to establish the main topic of the research, the practical arrangements and timing, and to allow the Placements Coordinator to judge the suitability of the proposed research. This is particularly important for research projects taking place abroad or at non-research institutions. This IPP can be submitted as early as is convenient but no later than 2 weeks before the proposed starting date of the project. Since it is possible that project proposals will be disallowed due to lack of scientific quality, it is strongly recommended to submit the IPP before making expensive travel arrangements. The required format for the IPP is given in Appendix 1 of this document.

*Research Proposal*

The research proposal is written by the student in a close consultation with the supervisor of the placement organisation (the on-site supervisor in case of external placements and the VU-supervisor in case of internal placements). It is a more detailed proposal than the IPP (see above) and includes an extensive background including references to the relevant literature, clearly phrased research questions and a detailed work plan (see Appendix X for the required format). The time invested in writing the proposal is part of the internship, it will help to establish a solid background for your research and should help with the preparation of the final report. The proposal must be finished by the end of second week of the placement and submitted to the placement coordinator of the specialization who will assess the scientific quality and feasibility of the proposal. It is possible that the placement coordinator will make comments on aspects of the proposal and ask for more detail on specific points.

When the proposal is deemed to be satisfactory, the placement coordinator will confirm the appointment of the VU supervisor and appoint a second assessor. For external placements, students are encouraged to find a VU supervisor that matches their research topic, but in case of doubt the placement coordinator can assist. Note that for administrative reasons research placements at the UvA will still require a VU supervisor.

For final approval the proposal has to be signed by the on-site supervisor, the VU-supervisor and the placement coordinator. If the proposal is not approved, the internship is cancelled and the time spent on it is lost.

*Go/No Go evaluation*

Within six weeks after the start of the placement a Go/No Go evaluation is made by the VU supervisor. The aim of this interim evaluation is to decide whether the project and the student both have enough potential to continue (Go) or not (No Go). The Go/No Go evaluation is based on:
• Written material by the student, including the detailed research proposal or either the Introduction and Methods section of the report or both.
• Attitude of the student and execution of the project during the initial stage.

The Go/No Go evaluation is carried out under responsibility of the VU-supervisor in consultation with the on-site supervisor. The student has to apply for the evaluation of the placement within six weeks after the start of the placement. The VU-supervisor will ask the on-site supervisor for his or her judgement on the students’ performance for the time the student has been working on the placement. The outcome of the evaluation will be recorded on a Go/No Go form (See Appendix 4). The VU supervisor will submit the form to the placement coordinator. If it is decided that the project and/or the student does not have enough potential for a successful continuation, the outcome of the evaluation will be a ‘No Go’ and the placement will be terminated. If there are doubts about the quality or attitude of the student or the project, the form scores ‘At risk’ and a conditional Go will be formulated by the VU-supervisor in consultation with the on-site supervisor and the conditions will be evaluated after a short period of time that is agreed upon.
If it is decided that the project and the student do have enough potential for a successful continuation, the outcome of the evaluation will be a ‘Go’. This means the placement can be continued; it does not guarantee that the placement as a whole will be successful.
When the outcome of the Go/No Go evaluation is ‘At risk’, or ‘Terminate’, the Examination Board will be informed by the placement coordinator.

Additional issues

Courtesy privileges
Certain organisations require students to sign a placement agreement, a declaration of confidentiality or a courtesy privileges form. The master coordinator of MSc Ecology signs these on behalf of VU University Amsterdam.

Ethical aspects
For scientific research with plants or invertebrates (springtails, earthworms, isopods, snails), legislation concerning experimental organisms is not applicable. Nevertheless students should obey basic moral principles when dealing with living organisms. Respect for the intrinsic value of life is a self-evident attitude that every biologist should possess. Scientific research involving vertebrates may need legislation. Ask the on-site supervisor about this. Specific additional courses that have to be taken to carry out (parts of) the research project can only be considered as part of the placement time after approval of the Examination Board.

Travelling and accommodation expenses
Travelling or accommodation expenses made by a student for a student placement are not reimbursed by the faculty. For information on grants for placements abroad contact the VU International Office.
Safety
Students and supervisors are required to comply with the safety policy in force at the faculty and/or organization offering the placement. In the event that the student placement or research involves fieldwork, this is governed by the rules laid down in the faculty policy document ‘Safety during fieldwork’: (https://vunet.login.vu.nl/services/pages/practicalinformation.aspx?cid=tcm%3a165-399873-16)

Liability
• Students are expected to take no unnecessary or undue risks, provided that they have received proper instructions. When they do take unnecessary or undue risks, the damage they cause, both to themselves as well as to third parties, is primarily for their own account and risk.
• VU Amsterdam has liability insurance that covers the University’s liability for students during standard work placements, as well as the student’s own liability in relation to the organization offering the placement. The real risks associated with a student placement are therefore covered via VU Amsterdam (although it should be noted that the policy does have a high deductible).
• The liability is limited to the student’s actions insofar as they fall within the remit of the placement itself and is only valid during regular office hours (9am to 5pm). Students are strongly recommended to insure themselves for liability outside the context of their placement by taking out an additional liability insurance on their own behalf. This can take the form of standard personal liability insurance.
• The organization offering the placement is required to accept liability for any injury, accident or harm that befalls the student during, or in connection with his/her presence at the organization, or Faculty Sciences VU Amsterdam in connection with the execution of his/her duties insofar as the injury, accident or harm can be attributed to the organization offering the placement.
• The University accepts no liability whatsoever for any risks which are not covered by the above-mentioned insurance held by VU Amsterdam.
4. COMPLETION

Assessment procedure
The assessment of the placement is carried out by the VU supervisor and the second assessor. The report must be written in English. Up to two rounds of corrections of drafts by the VU supervisor are possible, of which the second one is meant only for minor final adjustments. After this the definitive version is handed in.

The final report must be submitted by the student through the following link: http://fd7.formdesk.com/vuamsterdam/Submission_Form_Final_Report.

The VU supervisor can refuse to take up the report if it does not meet the requirements as described in the ‘Guidelines for writing the report’ on the next page.

The placement coordinator is responsible for sending the final report to the second assessor. The VU supervisor (taking into account the advice of the on-site supervisor) and the second assessor review the report as soon as possible, but at the latest within the period that is set in the TER (Teaching and Examination Regulations, in Dutch OER) for determining the results of the written interim examinations (twenty working days).

In the assessment, the VU supervisor assesses four different aspects of the placement (see Appendix 5):

- the final report
- the oral presentation
- the execution of the research and
- the attitude of the student

The first three mentioned aspects will be graded between 1 and 10; on the aspect attitude the student will pass (rated as sufficient or good) or fail (rated as insufficient). The report counts for 50% of the final grade; the oral presentation for 10% and the execution of the research for 40%. The second assessor provides an assessment of the final report only.

Only if unrounded marks for each item on the assessment form given by the VU-supervisor and the second assessor are 6.0 or higher and the attitude is a ‘pass’, is the placement regarded as sufficient. The final grade is calculated from the marks given by both assessors and, together with other administrative details, is handed in digitally to the study secretariat by the master coordinator. The student and the assessors will receive an electronic copy of all assessment forms automatically. Assessment criteria are defined in Appendix 6.

In cases where when i) the difference between the mark of the VU-supervisor and the second assessor is equal to or more than 2 (on a scale 1-10) or ii) one of the assessors judges the final report as insufficient, a third assessor will be appointed by the Examination Board to assess the final report. In case a third assessor is appointed because of a large difference in grading between the two assessors, the final grade will be calculated as an average from all three results. In case the report was judged insufficient by one of the assessors, the third assessor will grade the report and if sufficient the final grade will be the average of the highest two grades. If insufficient the final judgement of the report will be insufficient and the student has failed the assessment.

When the final report is considered as insufficient the student will have to redo the placement completely; i.e. do a new study with different supervisor and assessors. When the student is late (after the agreed date) with the submission of the final report, the VU-supervisor and second assessor can decide to register a final mark based on a draft version.
**Administrative procedure**

The study secretariat registers the final grade when:

A) The three assessment forms are filled out completely (1. VU supervisor, 2. Second assessor and 3. Final assessment form) and are submitted digitally to the programme secretariat by the master coordinator.

B) The final report is uploaded digitally to the study secretariat FALW by the coordinator.

The VU supervisor discusses the final assessment with the student. The VU supervisor will instruct the student how to deliver the data for data archiving. Grades will only be registered after proper archiving (see also below).

**Guidelines for the final report**

The report contains between 5,000 and 10,000 words (excluding reference list). See Appendix 6 for the assessment criteria of the report. The report consists of the following elements:

1. **Title page**
   - The title page contains:
     - A clear and instructive title of the report
     - Student name and number
     - Name of placement organisation
     - Names and addresses of the responsible VU and external supervisors
     - Name of the master programme and specialization
     - The number of EC (credits)
     - Date of publication
     - Number of words (excluding reference list and tables)

2. **Table of contents**
   - The table presents the page numbers of all main sections and subsections of the report.

3. **Abstract**
   - The abstract contains at least the context, the research question, the methodology used, it summarises the results and it ends with the answers on the research question and the conclusion. The typical length is between 250 and 350 words.

4. **Introduction**
   - The introduction describes the conceptual framework and the theoretical background of the subject, the current state of knowledge, the problem(s) involved, the information which is lacking but which is essential, the aim of the research, and clearly formulated and structured research question(s). The latter is an important point: loosely formulated questions always produce bad science! Bear in mind that the reader does not know as much about the subject as the writer does. In the end you do not want your work to be only read by people that
work on the same biological model, but by all those working on the same kind of biological problem. A good introduction should give the impression of: “Of course this has to be investigated; indeed this subject ought to be studied!” Complete your introduction with a short description of the experimental design and possibly an indication of the results that can be expected under the hypothesis. The introduction provides the reader with all information that is required to understand the research question, the project, the presented data and discussion of the results.

4. Methods and Materials
In the Methods section, the gap is closed between research questions and the collected data. Organizing this part of the manuscript requires a lot of attention. The goal of the methods section is to make the study replicable and it should thus be written in such a way that experiments can be repeated by any person. The chapter always contains a paragraph “Experimental Set-up”, describing precisely how the tests or observations were performed, how many replicates were used, how treatments were assigned to experimental units, etc. Present a logical (not necessarily strict chronological) description of the experiments and use headlines in favour of a line-up of methods used in several experiments, e.g. “Model organisms”, “Chemical analysis”, “Classification”, “Statistics”, etc. In reports that involving a lot of fieldwork, it can be useful to include a separate paragraph or section “Description of the research area”. When using equipment, the type of instrument is mentioned (e.g. “metal concentrations were measured using flame AAS (Perkin Elmer Analyst 100)). In the statistical section, the statistical tests are justified and software packages are specified. It is allowed to refer to manuals and articles in which the research techniques are described but always give a short summary.

5. Results
In the Results, the findings of the performed study are described in the same order as presented in the experimental design. Adjust section headings accordingly. Do not discuss or interpret your results in general terms, but short summarizing conclusions on the outcome of experiments may help to improve the readability of the text. Present the facts objectively and written in full sentences. Use the text component to guide the reader through your results, rather than just referring to tables or figures. Explain for each table or figure what is shown. Tables have a clear heading (above the table) which enables understanding of the table without knowing the body of the text. Symbols and abbreviations in a table are explained in the heading or in footnotes. Figures have a legend (below the figure) that is understandable without the body of the text and in which symbols are explained if necessary. Next to the axes of the figures a clear variable name is given with the unit of the variable between brackets. Limit preferably the number of lines or symbols in a figure to 3 to 5. Consult recent issues of a scientific journal in your field of research to find examples of how figures and tables are presented. Standard statistical output (f.e. SPSS, R, Excel) does not meet these requirements!

6. Discussion
The purpose of this chapter is to put the results in a broader perspective within the existing scientific literature. This is why the discussion contains many references. The discussion always starts with a short repetition of the research questions and the answers your results are giving. These answers are then evaluated in a more profound (and different) context. The similarities and differences between your own results and results from other studies should be described and explained. In a more general context you should address questions as: What have my results added to the general understanding of the problem? Do they initiate new approaches or theoretical implications? Do my results shed light on other,
related kinds of questions? What kind of follow-up research is required (simply stating that more research is needed is the worst kind of recommendation)? How can it be done? Are there recommendations for societal implementation? Do not bring down your work with an extensive discussion of details that could have been done better. Only discuss those things that really would have changed your results and conclusions and explain how. Finish off with a take-home message. What do you want the reader to remember from your work: a firm conclusion, the announcement of the next step to take, a recommendation, a management policy, a prediction, a theoretical implication, etc.

In conclusion the discussion should show whether you are capable of scientific thinking, seeing connections, putting everything in a broader perspective and looking critically at the work of others.

7. Acknowledgements
Here you can express your gratitude towards those that have contributed to or supported your work.

8. References
Only include those publications that you have thoroughly read yourself. All citations in the text are included in the reference list and vice versa. All references include the full title of the article, all authors and their initials, the year of publication, the full name of the journal, the journal volume (and issue) and the page numbers. For book chapters, apart from the author names and title of the chapter, you list the title of the book, the name of the editor, the year of publication, the publisher, the city in which it was published and the page numbers. You can choose your own formatting style, but be consistent throughout. Consult a well-known journal in your field of research. In the text you cite only the surname(s) of the author(s) and the year of publication. Use (in the text only) “et al.” if the article has more than two authors.

9. Appendices
It may sometimes be useful to present a more unprocessed version of the data next to the results. These can be done in an appendix. But keep in mind that appendices are separate, additional texts. Make them independently readable from the report.

General remarks
Avoid long-winded elucidations, try to write clearly and concisely. Avoid long bodies of text, and structure your report using headings and paragraphs. Use a logical and consistent structure within paragraphs. Keep your text readable. The strict use of the passive voice is not common anymore in most contemporary scientific journals. Hence, it is not a crime to use the active voice, and words like ‘I’, “we”, etc are not forbidden. Always use the past tense when you describe or refer to things that have happened in the past. Only use the present tense for general statements and conclusions.

Oral Presentation
At the end of the placement the student gives a presentation about his or her findings to an academic audience. This presentation is an obligatory part of the placement. This presentation will be held at VU Amsterdam. For external placements students may also give presentations at their host institution, however this does not replace the presentation at the VU Amsterdam. The presentation is assessed by the VU-supervisor and he/she may be advised by other colleagues present (on-site supervisor, VU lecturers, PhD’s). A detailed check list for assessing presentations is provided in appendix 7. If the student fails for the oral presentation he or she can request for one re-presentation. The VU-supervisor will decide on the date.
Additional issues

Data Archiving
Usually the supervisor appreciates having the original data available, but apart from that, all data produced in the Department of Ecological Science (DES, both at Systems Ecology and Animal Ecology) should be archived in order to guarantee continued access and availability of the data for future purposes. In addition, a data archive is a first necessity to answer potential queries about scientific integrity. The archive is maintained by the data manager (department secretary: ecologie.secretariaat.falw@vu.nl), who can also be contacted for questions or problems. Discuss with your VU supervisor how your data need to be accurately described and organized to file them away. Beware that data is much more than only numbers, they can include many other things like photographs, maps, sequences, graphs etc.
These archive regulations are only applicable for data produced under responsibility of a DES supervisor, data produced at other places are under responsibility of the institutes concerned. Consult your external supervisor for their policies with respect to this.

Plagiarism and fraud
A report should be written individually. Plagiarism is defined as the action of taking someone else’s work or idea and passing it off as one’s own, either intentionally or unintentionally, without an appropriate acknowledgement of the sources used or a clear indication of which part is one’s own work, and which part is the work of another. Fraud refers to any intentional false representation, deceit or concealment. If a student is found to have committed plagiarism or fraud, it will be reported to the Examination Board. The consequence of plagiarism or fraud is disqualification of the assessment of the project and the obligation to start a new placement. The Examination Board may decide to take additional measures such as exclusion from further participation in examinations.

Evaluation
The Faculty and the master coordinator want to keep account of how students experience the master’s internships in order to maintain and improve the quality of our teaching programmes. Students are requested to fill out the placement evaluation form and hand this in to the study secretariat. We also want to know how placement organisations and on-site supervisors experience the placements and whether there is room for improvement and whether they would like to take VU placement students in the future. Feedback and suggestions can be sent to the master coordinator: joris.koene@vu.nl.

Complaints and appeals
If problems occur in the course of a placement which makes external intervention advisable, the student and on-site supervisor are required to contact the placement coordinator or the master coordinator. If necessary, mediation is arranged.

Forms
All forms in the appendices can be downloaded from the website of the Department of Ecological Science > Internships at the Department:

Appendix 1 Format for Initial Project Proposal (IPP) MSc Ecology

1. Student info
   - Name:
   - Student number:
   - Full address:
   - Phone: E-mail:

2. Placement details
   - Name (title) VU supervisor:
   - Phone: E-mail:
   - Institute/Department:
   - Course code:
   - Number of credits: (Interruptions for holidays, courses, etc., do not count as part of the placement)
   - Starting date: End date:
   - Full time / part time ... % per week or .... hours per week.

3. On-site supervisor (if applicable)
   - Name (title) on-site supervisor:
   - Phone: E-mail:
   - Position:
   - Institute/Organisation:
   - Department:
   - Full address:
   - Home page department:

4. Additional agreements
   - Are there any additional agreements for the placement? (additional forms, interruptions, vaccinations, confidentiality, etc. If so, please, attach these documents)

Project details

5. Title of placement
   - The title should be informative and relevant for the research project proposed

6. Summary of the research plan
   In 300 – 500 words please cover:
   - The background to the study
   - The overall research question
   - The scientific and/or practical relevance of the topic
   - An outline of the methodological approach
   - The expected results
   - If external: brief description of the host group

11. Time schedule
   - Give a provisional time plan (i.e. the expected timing of activities such as literature search, experiments, fieldwork, analysis, writing etc). Reference to weeks is sufficient detail, there is no need for a day to day plan.

12. Placement facilities
   - Does the organisation have a working place, a computer and other facilities (lab, field station, materials, etc) available?

Further information
   - Any other relevant information concerning the placement

The undersigned agree to the conditions and agreements stated above

Signature of student
<table>
<thead>
<tr>
<th>Signature of on-site supervisor (if applicable)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature of VU supervisor</td>
<td></td>
</tr>
<tr>
<td>Signature of placement coordinator</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td></td>
</tr>
</tbody>
</table>

Please provide a VU-net overview of your results so far in the masters' programme in a separate pdf.
Appendix 2 Format for Research Proposal Placement MSc Ecology

| 1. Student info | • Name:  
• Student number:  
• Full address:  
• Phone: E-mail: |
|------------------|--------------------------------------------------|
| 2. Placement details | • Name (title) VU supervisor: E-mail:  
• Phone:  
• Institute/Department:  
• Course code:  
• Number of credits: (Interruptions for holidays, courses, etc., do not count as part of the placement)  
• Starting date: End date:  
• Full time / part time ...... % per week or ...... hours per week. |
| 3. On-site supervisor (if applicable) | • Name (title) on-site supervisor: E-mail:  
• Phone:  
• Position:  
• Institute/Organisation:  
• Department:  
• Full address:  
• Home page department: |
| 4. Additional agreements | • Are there any additional agreements for the placement? (additional forms, interruptions, vaccinations, confidentiality, etc. If so, please, attach these documents) |

The research proposal

<table>
<thead>
<tr>
<th>5. Title of placement</th>
<th>• The title should be informative and relevant for the research project proposed</th>
</tr>
</thead>
</table>
| 6. Scientific background of the research | • Conceptual framework and theoretical background (relevant existing knowledge/literature; relevant theories/concepts)  
• Description of the problem, why do we need to study this?  
• The scientific and practical relevance of the question to be solved  
• The societal relevance (if applicable)  

NB: By no means, the sizes of these cells are meant as an indication for the length of the text. In other words: be complete (see also manual)! |
| 7. Research question/aim | • Clear, well-structured and academic research questions/hypotheses  
• Sub questions (if applicable) |
<p>| 8. Research design and methods | • Description of design, measurements and analyses. What is the general method to find an answer to your research questions? |
| 9. Expected results | • What are the expected results according to your hypotheses? |</p>
<table>
<thead>
<tr>
<th>10. Competences needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do you need to learn specific techniques/research tools?</td>
</tr>
<tr>
<td>• Do you have to take specific courses to be able to carry out the research?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Time schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Give a time plan</td>
</tr>
<tr>
<td>• For example a division of the project duration into blocks of 1 or more weeks with the main activities in each block indicated.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12 Placement facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Does the organisation have a working place, a computer and other facilities (lab, field station, materials, etc.) available?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Further information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Any other relevant information concerning the placement</td>
</tr>
</tbody>
</table>

*The undersigned agree to the conditions and agreements stated above and to the enclosed preliminary research proposal*

<table>
<thead>
<tr>
<th>Signature of student</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Signature of on-site supervisor (if applicable)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Signature of VU supervisor</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Signature of placement coordinator</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date</th>
</tr>
</thead>
</table>
# Appendix 3 Placements abroad additional form

To be added to the proposal

## Supervision and research

**Work place:** Is there a place where you can work at the organization? If not, where do you work?

**On-site supervision:** Is there a supervisor at the placement and how is this arranged?

**Logistics:** How are the costs for travelling within the country (for the research) and costs for research covered?

**Research population:** Who is your research population? How large is this research population and where is your research population (which area, town, village) and how do you get there?

**Internet access:** Is there internet access for e.g. skype with your VU supervisor or a land line where you can contact your VU lecturer with?

## Your stay in the country

**Visa:** Do you need to arrange a visa and if yes, which?

**Ministry of foreign affairs:** What is the safety status of the country (according to Dutch ministry foreign affairs), please add date of consultation of the website.

**Residence:** where are you going to live? Are there any safety aspects that you have to take into account where you are going to live?

**Financial agreements:** did you discuss what they expect from you in respect to financial contributions

**Behaviour in another country (cultural but also safety):** did you discuss with your supervisors both in The Netherlands as with your on-site supervisor what the do’s and dont’s are in your guest country? Both cultural as safety (driving, travelling etcetera)?

**Dates:** When do you leave The Netherlands for your placement and when do you come back?

**Communication:** Who is your contact person in The Netherlands (e.g family)?

- **Name:**
- **Address:**
- **Phone number:**

Who is your contact person abroad?

- **Name:**
- **Address:**
- **Phone number:**

NB Apart from this you will have to register your internship at the International Office.
## Appendix 4 Go/No Go form

### Placement Process evaluation (max 6 weeks after start)

#### Student details

<table>
<thead>
<tr>
<th>Name of student:</th>
<th>Student no:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>Postal Code and Town/city:</td>
<td>Tel. or Mobile:</td>
</tr>
<tr>
<td>E-mail:</td>
<td></td>
</tr>
</tbody>
</table>

Specialization programme registered:  
- Ecology and Evolution
- Environmental Chemistry and Toxicology

#### Placement details

<table>
<thead>
<tr>
<th>Name institute/organization:</th>
<th>Address of institute/organization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td></td>
</tr>
<tr>
<td>Title of placement:</td>
<td></td>
</tr>
<tr>
<td>Name On-site supervisor:</td>
<td>Tel.: Email:</td>
</tr>
<tr>
<td>Name VU supervisor:</td>
<td>Tel.: Email:</td>
</tr>
</tbody>
</table>

#### Attitude

<table>
<thead>
<tr>
<th>Social skills and responsiveness to feedback</th>
<th>Assessment by VU-supervisor in consultation with On-site supervisor</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Motivation and scientific curiosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperation and accuracy</td>
</tr>
<tr>
<td>Ownership of project during placement</td>
</tr>
<tr>
<td>Initiative</td>
</tr>
</tbody>
</table>

#### Execution

<table>
<thead>
<tr>
<th>Work pace and planning</th>
<th>Assessment by VU-supervisor in consultation with On-site supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical research skills</td>
<td></td>
</tr>
<tr>
<td>English writing skills</td>
<td></td>
</tr>
<tr>
<td>Progress of project</td>
<td></td>
</tr>
<tr>
<td>Safety and accuracy</td>
<td></td>
</tr>
</tbody>
</table>

#### Student experience

<table>
<thead>
<tr>
<th>Supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject placement</td>
</tr>
<tr>
<td>Working place</td>
</tr>
</tbody>
</table>

#### Remarks for the remaining placement period (continue on the other side if necessary):

#### Outcome of Go/No Go evaluation (please circle):  
- Continue/  
- At Risk/  
- Terminate
Appendix 5 Guideline assessment procedure for VU-supervisor and Second assessor

VU-supervisor
Assessment of the Research Project MSc Ecology

Administrative details
Assessment of the research project is performed through ‘Formdesk’. After logging in you will be asked to fill out the assessment form. On this form you can indicate whether you are a VU supervisor or a second assessor. First a number of administrative details will be asked:

Student’s First and Family name
Student number
Student’s e-mail address
Assessment date
Specialisation:
- Ecology for students having started before September 2012
- Ecology & Evolution or Environmental Chemistry and Toxicology for all others
Course Codes:
- AM_471111 Research Project Ecology I
- AM_471112 Research Project Ecology II
- AM_1100 Research Project Ecology and Evolution I
- AM_1114 Research Project Ecology and Evolution II
- AM_1108 Research Project Environmental Chemistry and Toxicology I
- AM_1113 Research Project Environmental Chemistry and Toxicology II
Number EC: at least 30, at most 48
Your name, e-mail and affiliation

Assessment
You are asked to grade the following aspects of the student’s internship: Attitude, Execution, Report and Presentation on the basis of a number of subcategories in which the student can be assessed according to 4 levels: insufficient (I), sufficient (S), good(G) or excellent (E). The criteria for these levels are described in Appendix 5. The overall assessment for attitude is pass (rated sufficient or good) or fail (rated insufficient). The overall assessment of the other aspects are expressed as a grade between 1 and 10. In order to obtain a mark of 6 or higher, all subcategories should at least be ‘sufficient’ (i.e. S, G or E). At least for the parts concerning attitude and execution the on-site supervisor is consulted, if applicable.

Description of subcategories

**Attitude:**
Social skills and responsiveness to feedback,
Motivation and scientific curiosity,
Cooperation and accuracy,
Ownership of project during placement,
Initiative.

**Execution:**
Work pace and planning,
Practical research skills,
Academic and English writing skills
Report:  

<table>
<thead>
<tr>
<th>Report Component</th>
<th>Evaluation Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>(Scientific standard),</td>
</tr>
<tr>
<td>Introduction</td>
<td>(Problem description, context analysis, scientific background relevant theoretical concepts, research question or hypothesis),</td>
</tr>
<tr>
<td>Methods</td>
<td>(Design, choice of variables, expressing and justifying methodology, description and justification of data processing),</td>
</tr>
<tr>
<td>Results</td>
<td>(Logical and complete presentation of data),</td>
</tr>
<tr>
<td>Discussion</td>
<td>(Structure of arguments, conclusions, Link to research problem, Comparison with relevant other studies, Strengths and limitations of the study),</td>
</tr>
<tr>
<td>Scientific content</td>
<td>(General structure, Clarity of organization, Coherence in line of thought).</td>
</tr>
</tbody>
</table>

Oral presentation:  

<table>
<thead>
<tr>
<th>Oral Presentation Component</th>
<th>Evaluation Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation skills</td>
<td>(Narrative style, time management, English, lay-out of slides),</td>
</tr>
<tr>
<td>Scientific content</td>
<td>(Structure and thread of arguments, Clarity of conclusion),</td>
</tr>
<tr>
<td>Discussion</td>
<td>(Ability to hold a discussion based on the presentation).</td>
</tr>
</tbody>
</table>

Together with your assessment you are also asked to upload a copy of the final version of the report.

**Second Assessor**

**Assessment of the report of a Research Project MSc Ecology**

As a second assessor you are also asked to deliver your assessment through ‘Formdesk’. After logging in you will be asked to fill out the assessment form. On this form you can indicate whether you are a VU supervisor or a second assessor. You will need the same administrative details as the VU-supervisor (see above).

The second assessor only grades the report along the same categories and according to the same criteria as the VU-supervisor (see above and appendix 5).
Appendix 6  Criteria for assessment of the student placement MSc Ecology

<table>
<thead>
<tr>
<th>Social skills and responsiveness to feedback</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient (&lt; 6.0)</td>
<td>Sufficient (6.0 – 6.9)</td>
<td>Good (7.0 – 8.4)</td>
<td>Excellent (8.5 – 10)</td>
</tr>
<tr>
<td>Prefers to stay separate and has trouble working with colleagues. Prefers to go his/her way. Listens to advice but uses it very selectively. Reacts positively to criticism and feedback but seems unable to modify his/her behavior accordingly.</td>
<td>Works quite well together, easily becomes part of the group. Makes use of advice, feedback, and criticism as he/she progresses. Helps others when necessary and reports back with the acquired results.</td>
<td>Works well together with others. Asks for advice only when necessary and stimulates others to comment on his/her work. Knows how to incorporate comments into his/her research and behaviour. Is amicable. Regularly clarifies acquired results.</td>
<td>Works very well with others and often takes the initiative. Asks supervisor and others for feedback when necessary and is open to criticism about his/herself and his/her work. Knows how to incorporate comments into his/her research and behaviour. Is a helpful and amicable colleague, likes to assist others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Motivation and scientific curiosity</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the scientific research because it is required, cuts corners and is often doing things not related to the project. Shows little interest in carrying out the research. Time spent to research is hardly sufficient and is easily distracted from main task.</td>
<td>Is clearly interested in scientific research and sees this as an essential component for future employment. Is committed to the subject. Sees the conducting of scientific research as a necessity for finishing the study programme.</td>
<td>Works hard and sees scientific research as an essential component of his/her education. Is eager to show that he/she is committed to the field of Ecology and is a source of great enthusiasm. Shows involvement as is demonstrated by an eagerness and wants to contribute to improvements in ecological science.</td>
<td>Shows exceptional interest in scientific research. Works hard all the time. Indicates willingness to thrive on getting a publication in a reputed journal. Demonstrates a passion for increasing knowledge. Uses this knowledge and shares it. Is able to motivate the people around him/her (incl. supervisors).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cooperation and accuracy</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The student must be firmly guided by the on-site supervisor, barely sees own weak points and works without accuracy.</td>
<td>The student is cooperative and quickly learns to take a position in the department. Is capable to work accurate and in time.</td>
<td>The student can work independently, makes schemes and generally asks advice when needed. Student is accurate.</td>
<td>The student works independently and reflects on his/her own activities, work processes and skills in excellent way. Is accurate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ownership of project during placement</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The student must be firmly guided by the supervisor and barely works independently. Student cuts corners, does not feel responsible.</td>
<td>The student mostly works independently. Feels responsible for his/her own activities.</td>
<td>The student can work independently. Feels responsible for his/her own activities and is able to reflect on that. Takes action and initiative to achieve the best result.</td>
<td>The student works independently, and reflects on his/her own activities, work processes and skills in an excellent way. Takes action and initiative to overcome problems and to achieve the best results.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initiative</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student is indecisive and has difficulty to find its own way. Is reluctant to changes and does not take initiatives.</td>
<td>Student takes initiative but sometimes waits for the directions of the supervisor.</td>
<td>Student easily takes initiative to perform the research and is able to change plans when necessary. Decides what is needed to do in cooperation with the supervisor.</td>
<td>Student is autonomous and decisive and informs supervisor well. Takes initiatives and is looking for opportunities to learn and to develop.</td>
</tr>
</tbody>
</table>
### Execution (1-10)

<table>
<thead>
<tr>
<th></th>
<th>Insufficient (&lt; 6.0)</th>
<th>Sufficient (6.0 – 6.9)</th>
<th>Good (7.0 – 8.4)</th>
<th>Excellent (8.5 – 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work pace and planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student has difficulties to keep up with the planning. Does not signal if plans need to be adjusted and is not able to make new plans. Experiences problems because of this.</td>
<td>Student keeps up with the planning and is flexible enough to make new plans when necessary.</td>
<td>Student is a good planner and well able to combine and plan different tasks.</td>
<td>Student is well able to plan and perform work as scheduled and finds time to reflect on the work done.</td>
<td></td>
</tr>
<tr>
<td><strong>Practical research skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student works careless and cannot plan his/her work or reproduce methodological steps. The student works unorganized and must be regularly reminded of the importance of working with precision, but does take this advice to heart. Data collection may be understandable to student, but not to others.</td>
<td>The student collects the data necessary in a comprehensive way. Data processing needs some guidance and the methods are partly chosen by the supervisor.</td>
<td>The student works with precision and respect and understands why certain methods are chosen. He/she understands generally when and how to apply these methods. Data-collection and processing is well-organized.</td>
<td>The student is precise, uses direct applied research skills that have been acquired in a previous phase of his/her education and quickly learns new skills. Rarely requires an explanation about the relevance of procedures. Very well-organized.</td>
<td></td>
</tr>
<tr>
<td><strong>Scientific and English writing skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English is poor. Grammatical and punctuation errors. Paragraphs are not well written. Statistics and relevance are poorly presented. Poor lay-out. Figures and tables are missing or are inadequate.</td>
<td>The structure of the report is acceptable. Text might contain some language errors; some sentences are ambiguous. Lay-out is tidy. Figures and tables are clear. English is acceptable.</td>
<td>The structure of the report is adequate. Use of language, grammar and spelling sufficient. Lay-out is tidy. Figures, tables and references are clearly presented and in correct format. English is good.</td>
<td>The structure of the report is adequate and concise. Virtually no language or spelling errors. High level of readability. Appropriate layout. Figures, tables and references are clearly presented and in correct format. English is of excellent quality.</td>
<td></td>
</tr>
<tr>
<td>Grading</td>
<td>Insufficient (&lt; 6.0)</td>
<td>Sufficient (6.0 – 6.9)</td>
<td>Good (7.0 – 8.4)</td>
<td>Excellent (8.5 – 10)</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------</td>
<td>------------------------</td>
<td>-----------------</td>
<td>----------------------</td>
</tr>
<tr>
<td><strong>Abstract</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too wordy or too short and sometimes incomprehensible. The abstract is deficient in one or more of the following items: the context, the research question, the methodology, the results and/or conclusion. The conclusions are unclear or not supported by the data.</td>
<td>The abstract comprises the context, the research question, the methodology used, it summarises the results and it ends with the answers on the research question.</td>
<td>The abstract comprises the context, the research questions, the methodology used and it summarises the results and it ends with a conclusion that answers the research questions. Attention for the general relevance of the study.</td>
<td>The research is summarized in an excellent way, and meets criteria of a thorough scientific article. Excellent short description of methods, results, discussion and relevance of the study.</td>
<td></td>
</tr>
<tr>
<td><strong>Introduction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The relevance of the research problem and the scientific background are mentioned but the student is not capable to clarify the scientific hypothesis. The structure of the introduction is not coherent.</td>
<td>Describes the context and enfolds the corresponding scientific backgrounds to support the relevance of the research problem, but in a rather superficial manner. Student concludes with a well-defined research question.</td>
<td>The theoretical context and analysis of the problem is clearly presented. From this the research questions are developed and an experimental design is presented. Relevant literature is incorporated.</td>
<td>Thorough and creative analysis of the context and problem. Research questions and hypotheses are developed coherently and experimental design and expectations are presented concisely. References of high quality. Good placement within field of research. A great deal of depth as well as overview.</td>
<td></td>
</tr>
<tr>
<td><strong>Methods</strong></td>
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<tr>
<td>The described methods barely fit the research question. The student demonstrates a crude understanding of the chosen methodology. Variables are not well chosen. No justification of methods.</td>
<td>Justifies the methodology and understands the effect of the chosen methods on the quality of data, but the student shows minor flaws in applying this understanding to his/her own project. Student gives explanations of relevant (interim) analyses.</td>
<td>Student is capable of a critical and thorough description and justification of the methods used. Study is repeatable without much further information. Clear description of treatments and sample sizes. Proper use and justification of statistical techniques.</td>
<td>Student grasps the link between the used methodology and data quality and acknowledges any limitations herein. Student defends and supports adjustments in methodology to increase data quality. Study immediately repeatable. Proper use and justification of statistical techniques.</td>
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<tr>
<td><strong>Results</strong></td>
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<tr>
<td>The presentation of the data is imprecise or incomplete. The analyses are questionably deficient. The results paragraph is not well organized. Results shown differ from what is written in the methodology paragraph.</td>
<td>The results are complete and adequate, but cannot be used for scientific publication unless thoroughly checked and corroborated by supervisor.</td>
<td>Resulting data are well presented and can be useful as a starting-point for publication, but must be validated. Tables and figures are presented in proper layout.</td>
<td>Student shows an independently wrought complete and thorough analysis of data, with an excellent presentation thereof. Can be used for publication almost immediately.</td>
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### Discussion

<table>
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<tr>
<td>The arguments are sometimes flawed. Insufficient correspondence to relevant literature in the field of research. The structure of the discussion is mediocre. The conclusion faintly answers the research question. No attention for the strengths of the study and often exaggerated attention for limitations of methods. No evidence of understanding.</td>
<td>The student answers the research questions, possesses sufficient knowledge of the field to discuss the results, and uses relevant literature. Student is able to draw a sound conclusion but has a limited ability to discuss the findings in a broader context. Strengths and imitations of the study are mentioned and implications for results are clarified.</td>
<td>The student answers the research questions clearly, possesses sound knowledge, employs recent literature, and deals with information in a critical manner. Is able to place the findings in a theoretical context in order to answer the research question. Student draws convincing conclusions and summarizes the work in a clear take home message.</td>
<td>The student demonstrates a deep understanding of the value of the study for the scientific field. Student presents a concise but accomplished evaluation of his/her findings in the light of the theoretical background and the state-of-the-art literature. The student suggests new hypotheses and research plans on the basis of his/her work.</td>
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### Scientific content

<table>
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<tr>
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<tbody>
<tr>
<td>The structure of the report is insufficient. Some requirements may have been met, but the report is missing coherence. The organization is unclear e.g. there are conclusions that do not clearly follow from the definition of the problem, or the results. The description of the scientific background is limited. The analysis and discussion lack important aspects and are not related to a wider background. Poor references and no univocal use of terms. The report is too short (&lt;5000) or too long (&gt;10000).</td>
<td>There is coherence in line of thought. The delineations of the problem definition, the theoretical background, the analysis, the interpretation and the discussion are presented. Methods section is adequate. A fair report that meets the standard requirements. Interpretation of the findings may be superficial at some points.</td>
<td>Sharply defined problem (using sub-questions), well defined theoretical background and methods and analyses are clear, relevant and provide new insights; interpretation and discussion are of good scientific quality and connect very well with the problem definition and analyses. Methods are clearly described. Well-chosen references. Good placement in a broad research area. A great deal of depth.</td>
<td>The research is described in an excellent way, and meets all criteria of a thorough scientific report. Excellent statistical analysis. Results are discussed critically. Figures, tables and references are of the highest quality. Original contribution, that can be of interest to scientific journals. May be submitted directly.</td>
</tr>
</tbody>
</table>

All other parts of the report, title page, table of contents, literature references, etc should meet the requirements set out in the Guide Lines of the Report on page 12 of this document.
## Assessment criteria for the oral presentation

<table>
<thead>
<tr>
<th></th>
<th>Insufficient (&lt; 6.0)</th>
<th>Sufficient (6.0 – 6.9)</th>
<th>Good (7.0 – 8.4)</th>
<th>Excellent (8.5 – 10)</th>
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<tbody>
<tr>
<td><strong>Style</strong></td>
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<tr>
<td>Difficult to understand and follow because of rhythm (too slow or too fast) and/or sound of voice. English as well as lay out of slides is poor.</td>
<td>Presentation is in time. Rhythm and tone of voice are clear. Lay-out of slides is sufficient.</td>
<td>Presentation is in time. Rhythm and tone of voice are pleasant. Lay-out of slides is good and discussion is informative.</td>
<td>Excellent presentation, informative slides, lively presented and a pleasure for the audience.</td>
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<tr>
<td><strong>Scientific content</strong></td>
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<tr>
<td>Structure is unclear and the presentation of question, results and conclusions is complete but fragmented.</td>
<td>Clear structure with question, methods, results and discussion nicely summarized and logical thread of arguments.</td>
<td>Content of presentation is well structured and content of slides is compact and logical. Conclusion is clear and convincing. Limitations of study are well presented.</td>
<td>Well structured presentation with sound arguments, conclusion and discussion. Gives direction to future research.</td>
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<tr>
<td><strong>Ability to hold a discussion based on the presentation</strong></td>
<td>Responds on questions but the answer remains unclear and not to the point.</td>
<td>Responds on questions and gives answers using arguments based on data and literature and is to the point.</td>
<td>Responds on questions and gives answers by arguments from own data and literature. The answer is to the point and shows a broad view on the subject.</td>
<td>Responds on questions in convincing way and explores the answers in broader a context and shows thorough understanding of the subject.</td>
</tr>
</tbody>
</table>
Appendix 7 Checklist for the assessment of presentations

1) Understandable: can the presentation be followed by a broad scientific audience?

2) Profoundness and theoretical context:
   - is the subject discussed in relation to general theories and themes?
   - in relation to the particular research field?

3) Problem statement:
   - are general and derived research questions clearly distinguished and formulated?
   - is there a clear line of reasoning from the theory to the research questions?

4) Methods and materials:
   - short and sufficient explanation of experimental design
   - too many, enough or too few details about procedures/equipments/machines?

5) Results and statistics:
   - are the right data presented?
   - and in the right form (tables, figures, etc.)?
   - error bars, P-levels indicated?
   - motivation and explanation of statistical techniques and methods.

6) Feedback to research questions:
   - are research questions repeated in the discussion?
   - is a clear answer given to the research questions?

7) General feedback:
   - are results and conclusions compared to what is known from the literature?
   - what is the contribution of this research to the general theory?
   - what is the general conclusion and take-home message?

8) Quality and use of visual aids:
   - are research questions clearly presented on the slides?
   - sufficient amount, size and implementation of tables, figures, text boxes, etc?
   - labelling of figures, units, etc.
   - use of supportive images, drawings, photographs, etc.
   - smooth transition from slide to slide?
   - information on slides is (not) enough/too much?

9) Command of subject:
   - ease in presentation,
   - ease in explaining difficult concepts,
   - attitude and response in discussion.

10) Presentation:
    - fluency of speech, ‘stooncole ingliesij”,
    - presence, liveliness and tempo,
    - time management and distribution between different parts of the talk.
# Appendix 8 CHECKLIST FOR STUDENTS

<table>
<thead>
<tr>
<th>Actions</th>
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<tbody>
<tr>
<td>Get acquainted with this Placement Manual.</td>
</tr>
<tr>
<td>Find a placement and an on-site supervisor.</td>
</tr>
<tr>
<td>Send the placement coordinator the Initial Project Proposal (see Appendix 1) as soon as possible, together with a recent VU net overview stating results of the Master courses followed. Only proceed with following steps once the IPP is approved.</td>
</tr>
<tr>
<td>In case of a placement abroad, hand in the extra Placement abroad form (see Appendix 3), and contact the International Office.</td>
</tr>
<tr>
<td>Begin work on your detailed Research Proposal.</td>
</tr>
<tr>
<td>Start your research placement, and within two weeks submit a detailed Research Proposal (Appendix 2) to the placement coordinator after consultation with your VU and onsite supervisor.</td>
</tr>
<tr>
<td>After approval from placement coordinator, collect signatures and submit the final Research Proposal.</td>
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<tr>
<td>After six weeks at most, evaluate the placement with the on-site supervisor and the VU supervisor, resulting in a Go or No Go for the placement (see Appendix 4).</td>
</tr>
<tr>
<td>Write a scientific report in English during the placement.</td>
</tr>
<tr>
<td>Send the VU-supervisor the report for comments on time (in accordance with previously agreed deadlines).</td>
</tr>
<tr>
<td>At the end of the placement, give an oral presentation at VU Amsterdam. The presentation is assessed by the VU supervisor.</td>
</tr>
<tr>
<td>Upload the final report digitally to the programme secretariat FALW through: <a href="http://fd7.formdesk.com/vuamsterdam/Submission_Form_Final_Report">http://fd7.formdesk.com/vuamsterdam/Submission_Form_Final_Report</a></td>
</tr>
</tbody>
</table>

31