# Course Guide

## *European Workshop Environmental Sciences and Management*

## (EUW)

### ESA 60312

### Academic year 2013/2014

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## 1. Profile of the course

The European Workshop Environmental Sciences and Management (EUW) is a restricted optional for the programs MES, MUE and MAM, but can be selected by other MSc students as well. Students apply knowledge and skills acquired in previous courses, and are also expected to broaden their knowledge and skills by executing a collaborative and interdisciplinary consultancy assignment. By doing this real life assignment students have to build bridges between various disciplines and between theory and practice. The best moment to follow the EUW is at the end of the first year of the MSc program, after the individual courses and before starting with the thesis, an individual research.

## 2. Short description of the course

A group of about 30 students of different nationalities and disciplinary backgrounds work together on an assignment commissioned by a client. The course consists of three phases. In the preparation phase, students make a project plan based on the Terms of Reference received from the client. In this period applied training in project management, data collection & interview techniques, and team work is offered. A few lectures are given that provide students with additional background information to tackle the issue. The second phase consists of two weeks of field work mainly dedicated to data collection on site. At the end of this phase the preliminary results will be presented to the client. Finally, students are expected to analyse the data, incorporate the feedback from the client and write a concise report for the client. In this final phase supporting lectures on data analysis and consultancy report writing are given, as well as feedback on the draft reports. Every student is expected to attend plenary sessions, to participate actively in group work and consultation meetings with professionals and local officials, to contribute to a consultancy report and also to several presentations. Finally, every student is expected to reflect on his/ her own activities, learning experience and the course as a whole.

## 3. Learning outcomes

After successful completion of this course students are expected to be able to:

- apply their academic knowledge and general academic skills and attitude to a project dealing with a complex problem commissioned by a client outside the university

- design solutions for an environmental issue by analysing it, using theory and methods in the field of environmental sciences and environmental management

- work as part of a multi-disciplinary and -cultural team and value the contribution of different perspectives in designing solutions for complex (environmental) problems

- develop a project management plan (including a data generation plan), execute it and adjust it if circumstances make it necessary

- reflect on aspects that are of importance for successfully executing a project, like project management, decision making in a complex situation, team roles and team building

- reflect on their own functioning and contribution to the execution of a project in terms of disciplinary knowledge, academic skills, group dynamics, intercultural setting

- communicate their findings orally or in writing to the client, in a manner that is consistent with the client's needs and level of knowledge

## 4. Group Work

As explained before, the project in this EUW is a group assignment. Several sub-groups will be formed. Each *Geo-group* (5-7 students) focuses on a specified geographical area, and contributes to the synthesis report for the client. Within every Geo-group several experts will be assigned. These experts are expected to communicate with similar experts within the other Geo-groups (see also ToR) and form *Expert-groups*. A faculty member is available to assist the groups, but it is the responsibility of the students to accomplish the tasks.

The groups are expected to split group responsibilities; some of these tasks can be assigned to a single person for the entire duration of the project, others will keep changing. Some group tasks are:

- chairperson (responsible for flow of work, scheduling and chairing meetings);
- secretary (taking minutes of meetings and organizing the materials of the group);
- treasurer (responsible for the financial affairs of the group, such as collecting bills);
- presentation coordinator (responsible for organizing presentations, i.e. taking care of distributing the work, collecting presentation material; this is not the person who gives all the presentations!);
- report coordinator (in charge of organizing and editing the written materials of the group).

Besides these tasks, the responsibilities for different analyses (expertises, see ToR) have to be divided among the group members and it has to be decided who is delegated by the group to the Management Team (MT).

Aside from geo-groups and expert groups, ad hoc groups will be made depending on the tasks that need to be fulfilled. Think for instance of a group responsible for finalizing a questionnaire, observation scheme or topic list; a group responsible for analysing data with SPSS, or finalizing (a part of) the synthesis report, the executive summary or the poster.

To support you in these group activities training in group dynamics is included in the workshop.

## 5. End products of the workshop

The products you are expected to deliver at the end of the workshop are the following:

1. All 30 participants contribute to one synthesis report in which the findings of all subgroups are included. This is the report that will be handed over to the client (max. 20 pages excl. Annexes). The Terms of Reference as it is agreed by the client should be used when writing this synthesis report.

2. Based on the outcomes of your study, a two page executive summary and a poster have to be made. These documents are meant to help the client communicate your findings.

3. Every Geo-group makes an action plan in the preparation phase. Several assignments will be given to help you make this action plan.

4. Every Geo-group writes a report on their findings. This "Geo-group report" (max 15 pages) will be part of the Annex of the synthesis report.

5. Every individual student writes two reflection reports: one expectation paper based on the experiences during the preparation period and one reflection paper the end, based on the field work and the finalization phase. In these reports you reflect on your participation in the EUW. You describe what you learnt from the EUW and how it contributed to your personal development.

## 6. Learning material & resources

During the course you will receive limited background information that is related to the topic as well as to the training in data collection techniques, project management and team building. You are expected to search for additional information necessary for the successful completion of the assignment independently. All documents will be posted on a SharePoint team site.

This same site will be used for internal communication. More information on the use of SharePoint team site will be given in a lecture during the first week.

The link to the SharePoint team site can be found under "course documents" on the Blackboard site for the course. The Blackboard site can be accessed via "My Blackboard" or "My Portal":

https://edu6.wur.nl

https://myportal.wur.nl

Although you may see several links in Blackboard, you will only have access to the team site for the workshop in which you are enrolled.

## 7. Study time

The course consist of 12 credits. It implies that you are expected to spend 336 hours on this course, or 8 weeks of 42 hours. A full time involvement of all participants during the whole period of the course is required. More information on the exact schedule can be found in the annex.

## 8. Assessment strategy

Your final mark is partly based on your individual performance and partly on group products. Individual performance comprises participation in plenary and group sessions (1/2) and the second reflection report (1/2). The expectation paper will not be graded but discussed in a bilateral meeting with one of the lecturers during the first week of the field work. Rubrics that will be used for the assessment can be found in the annex.

The final mark is based on the weighted marks of the following products:

-   Geo-group report (25 %)

-   Synthesis report, executive summary and poster (25 %)

-   Individual performance (50 %)

Additionally, a pass for the course will only be awarded if the mark for each product is at least 6 (= pass). Because attendance of plenary sessions and group sessions is compulsory, you may get a fail for individual participation if your attendance was too low.

## 9. General programme & activities

The course consists of three phases. The introductory part is meant to make a good start as a group, to get acquainted with the Terms of Reference and your assignment and to gain experience with some important skills. In this phase you write an action plan, do a literature and internet search and prepare your field work. In the second phase you collect data on site. The last phase is about analysing the data and finalizing the reporting.

**In the Annex you will find a detailed schedule for your workshop**. Note that it is up to you and the group to plan your activities and meet the deadlines! **To give you an idea of what you are expected to accomplish, the tasks of each part are presented.** Detailed assignments are posted on SharePoint.

*Part 1: Introduction*

<u>Tasks:</u>

- Make a good start as a group, i.e. be explicit about what you want to learn in this workshop, divide the tasks (treasurer, secretary, editor, responsibility for the themes, etc.) among the group members clearly.

- Get acquainted with the topic.

- Do a literature and internet search.

- Have a video conference / Skype meeting with the client to learn more about the ToR.

- Follow trainings to improve your knowledge on and / or skills in project management and group dynamics.

- Prepare the field work (including an interview schedule and topic list, survey questions, observation frame).

- Contact the given contact persons and search for more people to interview.

- Make appointment(s) for interviews during the field work.

- Make and present an action plan.

- Write an individual reflection (expectation) report.

*Part 2: Data collection on site*

<u>Tasks:</u>

- Meet the client to discuss the action plans and learn more about the client.

- Collect data on site via field visit, interviews, questionnaire.

- Make a start with analysing this data.

- Give a presentation of the preliminary results to the client and discuss the recommendations with stakeholders.

*Part 3: Finalizing the assignment*

<u>Tasks:</u>

- Analyse the data.

- Compare, discuss and exchange results with other groups.

- Finalize the Geo-group reports, synthesis report

- Write an executive summary and make a poster.

- Present the results to an audience of other EUW students, lecturers and informants in Wageningen.

- Evaluate the course.

- Write a second individual reflection report.

## 10. Lecturers involved

The following lecturers are involved in the EUW

*Alette Langenhoff*, Environmental Technology;

*Astrid Hendriksen*, Environmental Policy, Mixed methods b.v.

*Bas van Vliet*, Environmental Policy;

*Hilde Toonen,* Environmental Policy;

*Karen Fortuin*, Environmental Systems Analysis: overall coordinator of the workshop

*Keete Voerman*, Mixed Methods b.v.

*Machiel Lamers*, Environmental Policy;

*Marc Spiller*, Environmental Technology;

*Sophie Rickebusch,* Environmental Systems Analysis: coordinator of the workshop in period 1.

# Annex 1: Rubric for individual performance during the EUW

| Criteria | Levels | | | | |
|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 |
| Presence/punctuality | Student is repeatedly absent and misses large parts of the course. *Automatically results in a "non completed"!* | Student is frequently late or occasionally absent without adequate justification. | Student is generally punctual and any (occasional) absence is justified. | | |
| Commitment/perserverence | Student does not appear interested in the project. | Student puts some effort into the project, but often needs to be prompted by colleagues or lecturers. Easily discouraged. | Student puts a fair amount of effort into the project. Perseveres when faced with small difficulties, but can be discouraged by larger ones. | Student puts a lot of effort into the project. Generally perseveres when faced with difficulties. | Dedicated worker who does not spare time or effort. Perserveres even when faced with large, unexpected difficulties. |
| Initiative/independance | Student neither shows initiative nor works independently (or very rarely). | Student shows little initiative, except in asking for feed-back or information. Works independently some of the time. | Student shows initiative in asking for information and occasionally takes the lead in suggesting approaches or activities. Mostly works independently when required. | Student shows initiative and often takes the lead in suggesting approaches or activities. Works independently whenever required. | |
| Contribution to discussions | Student is never heard in discussions and has difficulty contributing even when prompted or student constantly interfers in discussions without contributing to the quality of the discussion | Student contributes only when prompted. | Student contributes to discussions in smaller groups, but is rarely heard in plenary sessions. | Student contributes to discussions both in smaller groups and in plenary sessions | |
| Listening/respecting others | Student never listens to others nor takes their opinions/suggestions into account. | Student listens to others and occasionally takes their opinions into account, but does not analyse these opinions critically before integrating them. | Student always listens to others and takes their opinion into account, though he/she may respond with counter-arguments and open a constructive discussion. | Student not only listens to others but encourages them to express their opinions, though he/she may respond with counter-arguments and open a constructive discussion. | |
| Team work/helpfulness | Student always works on his/her own and makes no effort to work with the group or help other students. | Student tries to work with his/her team but easily loses patience with the group process or with individual students who need help. | Student is mostly a good team-worker but occasionally loses patience with other students who need help. | Student is an excellent team-worker and is particularly helpful and patient with other students who need help. | |
| Learning drive | Student never moves out of his/her "comfort zone" to try and learn something new. | Student occasionally tries to push his/her own limits, but may need prompting/encouragement. | Student regularly tries to learn through new experiences, without any prompting. | | |

# Annex 2: Rubric for reflection paper

| | Points | | | | |
|---|---|---|---|---|---|
| | **0** | **1** | **2** | **3** | **4** |
| Research project ("It") | Reflection on the research project is absent | Experience of the research project is merely described, with little attempt at reflection. | Experience of the research project is described clearly, with some specific examples. There is a clear attempt at reflection, but it may be superficial or only cover some of the elements requested (knowledge, contribution to the problem, interdisciplinarity, influence of values/interests). | Experience of the research project is described clearly and concisely, with specific examples. Reflection is adequate and covers most of the elements requested (knowledge, contribution to the problem, interdisciplinarity, influence of values/interests). | Experience of the research project is described clearly and concisely, with specific examples. Reflection is excellent and covers all the elements requested (knowledge, contribution to the problem, interdisciplinarity, influence of values/interests). It is clear what the student has learnt from the project and how s/he can use this in future projects. |
| Group work ("We") | Reflection on working as part of a group is absent. | Experience of working as part of a group is merely described. There is some attempt at analysis, but this stops at the evaluation stage and may be limited to the rest of the group. Specific examples are generally lacking. | Experience of working as part of a group is described clearly. There is some attempt at analysis, but this may be limited to the rest of the group. Some specific examples are given. | Experience of working as part of a group is described clearly and concisely. Personal experience of working as part of a group is analysed to gain a better understanding of self and others, but the analysis lacks depth. Reflection is illustrated by specific examples. | Experience of working as part of a group is described clearly and concisely. Personal experience of working as part of a group is analysed (evaluation of difficulties encountered, reflection about solutions which were/could have been applied) to gain a better understanding of self, others and group dynamics. Reflection is illustrated by specific examples. |
| Personal role ("I") | Student's role is unclear or lost in a lengthy, general description of the project. The text is entirely descriptive, with little or no attempt at analysis. | Student's role is merely described or a general description of the project is given. There is some attempt at analysis, but this stops at the evaluation stage. Specific examples are generally lacking. | Student's role is described clearly. There is an attempt to analyse personal experiences during the course, but this often stops at the evaluation stage and reflection is lacking. Some specific examples are given. | Student's role is described fairly concisely. Personal experiences during the course are analysed to gain a better understanding of self, but the analysis lacks depth. Reflection is illustrated by specific examples. | Student's role is described concisely. Personal experiences during the course are analysed (evaluation of difficulties encountered, reflection about solutions which were/could have been applied) to gain a better understanding of self. Reflection is illustrated by specific examples. |
| Learning goals: quality | Learning goals are impersonal (e.g. copied from the course goals), vague, unclear or non-existent. | Learning goals are fairly well-defined and personal, but are "safe", i.e. can easily be achieved just by attending the course. They do not encompass 'I', 'we' and 'it'. | Learning goals are clearly-defined and personal, though they are "safe", i.e. can easily be achieved just by attending the course. They encompass 'I', 'we' and 'it'. | Learning goals are clearly-defined, personal and ambitious, i.e. the student has to put in extra effort or move out of his/her comfort zone to achieve them. They encompass 'I', 'we' and 'it'. | |
| Learning goals: achievement | It is unclear whether the learning goals have been reached or not. | Outcome of the learning goals is mentioned but not how they were reached (or if not, why). | Outcome of the learning goals is mentioned, with some indication of how they were reached (or if not, why). | Outcome of the learning goals is mentioned, with clear indication of how they were reached (or if not, why). | Outcome of the learning goals is mentioned, with clear indication of how they were reached (or if not, why). Additionally, there is a reflection on the learning process involved and, if relevant, on ways to reinforce the knowledge/competences acquired or take them to the next level. |
| Structure | Structure is unclear and illogical. Text is rambling and disorganised with little or no attempt at paragraph construction. | Structure is unclear or illogical. Text is poorly organised with paragraphs which are too long or contain sudden changes of subject. | Structure is mostly clear and logical. Text is well organised with good paragraph construction. | Structure is clear and logical. Text is concise and well organised with excellent paragraph construction. | |
| English/clarity | English is poor, to the point where it hinders communication. | English is acceptable. The student manages to communicate effectively despite grammar/spelling mistakes. | English is good. The text is clear and reads well though there may be a few mistakes. | | |

# Annex 3: Rubric for the Geo-group reports

| Criteria | Points | | | | |
|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 |
| Introduction/methodology | Introduction and methodology are missing or so incomplete that they are useless. | Introduction and methodology contain many factual errors, contradictions or omissions. Geo unit description may have been copied from the terms of reference. | Introduction and methodology are mostly complete (background information, problem statement, research questions, methods, road map for the report) and free of factual errors, contradiction or omissions. | Introduction and methodology are clear, concise and complete (background information, problem statement, research questions, methods, road map for the report) and free of factual errors, contradiction or omissions. Focus on the geo unit, without unnecessary general descriptions. | |
| Current situation | Current situation is not described or so incompletely that it is useless. | Current situation is described but some information is irrelevant and assertions are frequently not backed by data or references. Description may be unclear, incomplete, contain factual errors or contradictions. Treatment of the different topics (expert analyses) is very unequal for no apparent reason. | Current situation is described statisfactorily, the information is mostly relevant and assertions are generally backed by data or references, but there is little critical reflection on the methods and results. Description is clear, but may contain some factual errors or contradictions. Treatment of the different topics (expert analyses) is balanced or explanations are given if not. | Excellent description of current situation, including relevant information backed by data or references, with critical reflection on the methods and results. Few (if any) factual errors or contradictions. Treatment of the different topics (expert analyses) is balanced or explanations are given if not. | |
| Analysis | Data is not analysed, at most it is described. | Some attempt at analysis, but this is superficial. Statistical methods are unclear or inappropriate. Students jump to conclusions without referring to the rest of their data or literature. | A fair attempt at analysis. Themes are identified. Observations, surveys and interviews are somehow triangulated. Statistical methods are mostly clear and appropriate. Arguments are generally backed by data or literature. | A good analysis. Themes are clearly described. Observations, surveys and interviews are well triangulated. Statistical methods are clear and appropriate. Arguments are generally backed by data or literature. | An excellent analysis, with good use of data, evidence of extensive further reading and original thinking. Statistical methods are clear and appropriate. Arguments are backed by data or literature. |
| Conclusions | Conclusions are missing or so unclear/incomplete that they are useless. | Some conclusions are drawn but they are not linked to the arguments or are somewhat unclear. | Conclusions mostly are clear, answer the research questions and follow logically from the arguments. | Conclusions are clear, answer the research questions and follow logically from the arguments. | Conclusions are clear, concise and original. They answer the research questions and follow logically from the arguments. |
| Figures | No figures or unclear/irrelevant figures. | Figures are mostly relevant, but have some weak points such as missing/weak captions, problems with numbering/reference in text, missing or illegible elements (legends, axis titles, scale bars). | Figures are relevant, clear and can be understood on their own (with caption). They are correctly numbered and cited in the text. | | |
| References | References are missing or so poor that they are useless. | Some attempt at referencing, but references contain many mistakes such as citations without references (or vice-versa), incomplete references, inconsistent format, etc. | References are mostly acceptable, but contain a few mistakes such as citations without references (or vice-versa), incomplete references, inconsistent format, etc. | References are excellent, clear and faultless. | |
| Structure | Structure is unclear and illogical. Text is rambling and disorganised with little or no attempt at paragraph construction. | Structure is unclear or illogical. Text is poorly organised with paragraphs which are too long or contain sudden changes of subject. | Structure is mostly clear and logical. Text is well organised with good paragraph construction. | Structure is clear and logical. Text is concise and well organised with excellent paragraph construction. Sections have a clear structure that guide the reader through the report. | |
| English/style | English is poor, to the point where it hinders communication. | English is acceptable. The group manages to communicate effectively despite grammar/spelling mistakes. Style is not always scientific and neutral. | English is good. Text is clear and reads well though there may be a few mistakes. Style is scientific and neutral. | | |

# Annex 4: Rubric for the Synthesis reports

| Criteria | Points | | | | |
|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 |
| Executive summary | Executive summary is missing or very incomplete. | Executive summary is incomplete or unbalanced, i.e. it does not focus on the client's needs and emphasise the findings of the study and feasible recommendations. It may be academic (description of methods, jargon), rather than professional. | Executive summary is somewhat incomplete or unbalanced, i.e. it does not focus on the client's needs and emphasise the findings of the study and feasible recommendations. It may be academic (description of methods, jargon), rather than professional. | Executive summary is comprehensive but could be more concise. It is generally focussed on the client's needs and emphasises the findings of the study and the recommendations. It is generally professional (no jargon or description of methods), rather than academic. | Executive summary is comprehensive but concise. It is focussed on the client's needs and emphasises the findings of the study and the recommendations. It is professional (no jargon or description of methods), rather than academic. |
| Introduction | Introduction is missing or very incomplete. | Introduction contains many factual errors, contradictions or omissions. | Introduction is mostly complete (background information, problem statement, research questions, road map for the report) and free of factual errors, contradiction or omissions. | Introduction is clear, concise and complete (background information, problem statement, research questions, road map for the report) and free of factual errors, contradiction or omissions. | |
| Methodology | Methodology is missing or so incomplete that it is useless. | Methodology contains many factual errors, contradictions or omissions. It does not link the methods used to research aims. | Methodology is mostly complete and free of factual errors, contradiction or omissions. It links the methods used to the research aims. | Methodology is clear, concise, complete and free of factual errors, contradiction or omissions. It links the methods used to research aims and explains why these methods are appropriate. | |
| Analysis | Data is not analysed, at most it is described. | Some attempt at analysis, but this is superficial. Statistical methods are unclear or inappropriate. Students jump to conclusions without referring to the rest of their data or literature. | A fair attempt at analysis. Themes are identified. Observations, surveys and interviews are somehow triangulated. Statistical methods are mostly clear and appropriate. Arguments are generally backed by data or literature. | A good analysis. Themes are clearly described. Observations, surveys and interviews are well triangulated. Statistical methods are clear and appropriate. Arguments are generally backed by data or literature. | An excellent analysis, with good use of data, evidence of extensive further reading and original thinking. Statistical methods are clear and appropriate. Arguments are backed by data or literature. |
| Conclusions | Conclusions are missing or so unclear/incomplete that they are useless. | Some conclusions are drawn but they are not linked to the arguments or are somewhat unclear. | Conclusions mostly are clear, answer the research questions and follow logically from the arguments. | Conclusions are clear, answer the research questions and follow logically from the arguments. | Conclusions are clear, concise and original. They answer the research questions and follow logically from the arguments. |
| Recommendations | Recommendations are missing, unrealistic or bear no relation to the findings of the study. | Recommendations are quite general or vaguely formulated. They may not be applicable in the short to medium term and do not always follow logically from the findings of the study. | Recommendations are mostly clear, concrete, applicable in the short to medium term and follow logically from the findings of the study. There is some effort to draw on examples of best practice, but it may be unclear how these might be adapted to the local context. | Recommendations are clear, concrete, applicable in the short to medium term and follow logically from the findings of the study. There is evidence of original thinking: new solutions or adaptation of best practice to the local context. | |
| Figures | No figures or unclear/irrelevant figures. | Figures are mostly relevant, but have some weak points such as missing/weak captions, problems with numbering/reference in text, missing or illegible elements (legends, axis titles, scale bars). | Figures are relevant, clear and can be understood on their own (with caption). They are correctly numbered and cited in the text. | | |
| References | References are missing or so poor that they are useless. | Some attempt at referencing, but references contain many mistakes such as citations without references (or vice-versa), incomplete references, inconsistent format, etc. | References are mostly acceptable, but contain a few mistakes such as citations without references (or vice-versa), incomplete references, inconsistent format, etc. | References are excellent, clear and faultless. | |
| Structure | Structure is unclear and illogical. Text is rambling and disorganised with little or no attempt at paragraph construction. | Structure is unclear or illogical. Text is poorly organised with paragraphs which are too long or contain sudden changes of subject. | Structure is mostly clear (headings, paragraphs) and logical. Text is well organised with good paragraph construction. | Structure is clear (headings, paragraphs) and logical. Text is concise and well organised with excellent paragraph construction. | |
| English/style | English is poor, to the point where the text is difficult to understand. | English is acceptable. The group manages to communicate effectively despite grammar/spelling mistakes. Style is not always scientific and neutral. | English is good. Text is clear and reads well though there may be a few mistakes. Style is scientific and neutral. | | |
| Poster | Poster is missing. | Poster does not focus on the findings but gives too much space to introduction or methods. It is not arranged logically and contains too much text in small font. | Poster gives an overview of the study, generally focussing on the findings and highlighting the recommendations. It is arranged logically and is reasonably well illustrated, but the texts could be shorter. | Poster attractive and gives a clear overview of the study, focussing on the main findings and highlighting the recommendations. It is arranged logically and is well illustrated, with some concise texts which can be read at a distance. | |