

Academic Research Skills: Methodology and Research Proposal

Lecturers:

Prof. Hans Bressers, Tutors (drawn from all teachers active in the programme)

Course description:

- Course objectives

The main purpose of this course is to teach the students how to design a research project and to guide them in the process of developing one for their own master thesis research, including a relevant literature review and proper formulation.

- Subject

The subject of the course is project design and methodology choices, and also academic writing

- Content / topics

The course addresses general and conceptual design of a research project. Subjects like clarifying the research objective, constructing the research framework, elaboration of the research questions and the definition and specification of the theoretical concepts used are dealt with. Emphasised is that these elements are mutually dependent and thus the conceptual design should be an iterative process, by which eventually all aspects should be fitting in a coherent manner.

- Course learning objectives

First of all the main learning objective is that graduates get academic and research skills like independently accessing and applying additional literature, critically reflecting and discussing on issues in the domain, taking responsibility for his or her development, designing a research proposal and executing and reporting on an (applied) research project. Graduates are able to give a structured written and oral presentation in English about individual work. They also adhere to existing academic traditions, such as providing proper credits and references.

Course materials:

In this course the book "Designing a research Project" by Piet Verschuren and Hans Doorewaard is a central reference. Next to those books, articles are suggested to support writing skills. During tutor meetings also relevant literature suggestions are made on an individual basis.

Instructional working methods:

In order to get active participation of all students, after a general introduction by the main teacher, the various chapters of the book are presented to the rest of the students by the students themselves. Typically two or three students per chapter prepare PowerPoint -presentations on the contents of the chapter, in which they not only present and explain the text to the audience but also need to illustrate this with examples from real research projects. Students are encouraged to use earlier own master of bachelor thesis studies for this purpose, but if this is not suitable may also draw from other studies they find in the library of the internet. They are also asked to reflect on possible improvements to these studies (often their own) in the light of the suggestions done by the book. The students that present the same chapter cooperate on how to prevent too much repetition in their presentations, together giving attention to all items involved. Apart from interventions during the presentations and discussion, after the presentations on a chapter the teacher follows up with emphasizing some aspects, adding some to the text of the book or posing some discussion items. In the part on academic writing next to lectures also a group exercise is held during which the students can practice with the suggestions given. The tutoring takes place during both group meetings and individual meetings and contacts.

Assessment:

The assessment is on the basis of two marks. First of all the students get an individual mark by the lecturer for their presentation of one of the chapters. This counts for 1/3 of the total mark. Next the same teacher gives a mark for the later realized master thesis proposal on the basis of an assessment to what degree and with what quality all the lessons from the course on the various conceptual and technical issues of research design are put into use in the proposal. This counts for 2/3 of the mark.

Relationships with other courses:

This course related in some way to all courses of the programme, because it is about how to transfer the subject matter of the programme into relevant research. Of course the most obvious relation is with the attention that is paid in the case period to specific research techniques like survey questions or interviewing, and to the researching and reporting of the master thesis study.

Relation of course with Final Attainment Targets:

• Primary relationship

- Graduates have academic and research skills like critically reflecting on literature, designing a research proposal and executing and reporting on an (applied) research project. (7)
- Graduates are able to independently access relevant scientific literature to obtain additional knowledge and apply this to the problem at hand. (8)
- Graduates take the responsibility for the continuous development of their own knowledge and skills. (9)
- Graduates are able to give a structured written and oral presentation in English about individual or team work. They also adhere to existing academic traditions, such as providing proper credits and references. (12)

• Secondary relationship

- Graduates are able to make a relevant contribution as an individual or as a member of a multi-disciplinary team to analysing and solving complex environmental or energy problems in an organisation or region. They are able to function in an international team, with English as the language of communication. (10)

• Tertiary relationship

- Graduates are able and willing to recognise the ethical aspects related to their activities. (11)
- Graduates are able to reflect on matters and issues in the domain, are able to form an opinion and to contribute to both scientific and practitioners' discussions and e.g. to critically reflect on the role of technology in the process towards sustainable development. (13)