
General syllabus for the doctoral programme in the subject of:

ENVIRONMENTAL ASSESSMENT

Valid from 26 October 2017

Compare

Environmental assessment (“miljöanalys”) is the knowledge of environmental change over time and space as a result of natural variation and human influence.

Research in environmental assessment develops:

- decision support based on scientific understanding and society’s objectives for sustainable development
- methodology for assessing the state of the environment
- an understanding of causes of change
- measures that contribute to sustainable development and restoration of the environment.

Regulations for third-cycle (doctoral) education at SLU

Third-cycle (doctoral) education is regulated by the Higher Education Ordinance (SFS 1993:100) and the Ordinance for the Swedish University of Agricultural Sciences (SFS 1993:221).

In addition, SLU has regulations for the following:

- recruitment and admission, in Admission regulations for third-cycle (doctoral) education (SLUID: SLU.ua.2018.1.1.1-930)
- joint programmes leading to a double or joint degree
- supervision
- scope and content of programmes
- planning and follow-up of programmes
- procedure when a course or study programme is unsatisfactory
- examination
- degrees.

These can be found in Guidelines for third-cycle (doctoral) education (SLUID: SLU.ua.2018.1.1.1-4677).

A general syllabus must indicate the following: the main content of the programme, specific entry requirements and any other regulations required. All general syllabuses must be approved by the faculty board.

The programme is organised so that the doctoral student can meet the qualitative targets for third-cycle courses and programmes specified in the *Higher Education Ordinance's Annex 2 – Qualifications Ordinance*:

Qualitative targets according to the Qualifications Ordinance: Degree of Doctor

Outcomes

For the Degree of Doctor the third-cycle student shall

Knowledge and understanding

- *demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field, and*
- *demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular.*

Competence and skills

- *demonstrate the capacity for scholarly analysis and synthesis as well to review and assess new and complex phenomena, issues and situations autonomously and critically;*
- *demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work;*
- *demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research;*
- *demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general;*
- *demonstrate the ability to identify the need for further knowledge and*
- *demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.*

Judgement and approach

- *demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics, and*
- *demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.*

Outcomes

For a Degree of Licentiate the third-cycle student shall

Knowledge and understanding

- *demonstrate knowledge and understanding in the field of research including current specialist knowledge in a limited area of this field as well as specialised knowledge of research methodology in general and the methods of the specific field of research in particular.*

Competence and skills

- *demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake a limited piece of research and other qualified tasks within predetermined time frames in order to contribute to the formation of knowledge as well as to evaluate this work;*
- *demonstrate the ability in both national and international contexts to present and discuss research and research findings in speech and writing and in dialogue with the academic community and society in general, and*
- *demonstrate the proficiency required to participate autonomously in research and development work and to work autonomously in some other qualified capacity.*

Judgement and approach

- *demonstrate the ability to make assessments of ethical aspects of his or her own research;*
- *demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and*

1. Programme content and scope

The programme contains two main elements: research and coursework.

Research

On this programme, the student will conduct independent research work corresponding to at least 120 higher education credits (HEC) for a Degree of Doctor and at least 60 HEC for a Degree of Licentiate. The doctoral student must be the corresponding (first) author of at least two of the papers included in the thesis.

Courses

The student is required to take courses of at least 45 HEC for a doctoral degree and at least 25 HEC for a licentiate degree. This must include suitable general courses as well as elective subject courses.

2. Specific entry requirements

Those admitted must meet the following specific entry requirements.

The specific entry requirement for environmental assessments is normally knowledge of aquatic ecology, aquatic biogeochemistry, statistics or ecotoxicology.

3. Miscellaneous

Each faculty offering the third-cycle subject can choose to specify specialisations or requirements in addition to the general syllabus. These requirements must be documented in an appendix.

4. Appendixes

Appendix 1 – Faculty of Natural Resources and Agricultural Sciences, specific entry requirements

APPENDIX 1

Specific entry requirements at the Faculty of Natural Resources and Agricultural Science

Courses

According to the current guidelines for doctoral education (SLU ua 2018.1.1.1-4677), all doctoral and licentiate degrees at SLU must include credit awarding courses of philosophy of science and research ethics at PhD-level. These courses should also cover rules on cheating and plagiarism.

Starting points and definitions

Environmental assessment

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- decision support based on scientific understanding and society’s objectives for sustainable development
- methodology for assessing the state of the environment
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Departments offering this specialisation	Subject code
Aquatic Resources	NLMILJ03
Aquatic Science and Assessment	NLMILJ01
	NLMILJ02

Environmental assessment, with specialisation in environmental chemistry

Environmental chemistry (“miljö kemi”) is the study of the sources, transport, reactions, fate and effect of pollutants in the environment. The subject covers the whole span from basic understanding to methods development and applied research on synthetic organic chemicals, metals and unintentionally formed harmful substances.

Departments offering this specialisation	Subject code
Aquatic Science and Assessment	NLMIMK01