



# LUND UNIVERSITY

Joint Faculties of Humanities and Theology

## PhD course syllabus

| 1. Course details |                         |   |
|-------------------|-------------------------|---|
| 1.                | Course code             | NAMN006   |
| 2.                | Course title            | Research Ethics in Natural Science  |
|                   | Course title in Swedish | Forskningsetik för naturvetare  |
| 3.                | Credits                 | 2   |
| 4.                | Details of approval     | <i>Approved in accordance with the rules of procedure and delegation at the Faculties of Humanities and Theology on 20 December 2019.</i> |
| 5.                | Details of revision     |   |

| 2. General information |  |  |
|------------------------|--|--|
| 1.                     | Type of course and its place in the educational system | The course is compulsory for doctoral students at the Department of Chemistry and elective for doctoral students at other departments at the Faculty of Science. |
| 2.                     | Language of instruction                                | Swedish  |

| 3. Learning outcomes |                             |  |
|----------------------|-----------------------------|--|
|                      |                             | On completion of the course, students shall  |
| 1.                   | Knowledge and understanding | <ul style="list-style-type: none"> <li>• <i>be informed about key principles of research ethics and of problem areas of relevance to science research</i></li> <li>• <i>be informed about key issues of the theory of science and their relevance for science research</i></li> </ul>  |
| 2.                   | Competence and skills       | <ul style="list-style-type: none"> <li>• <i>be able to discuss and present issues and problem areas of the theory of science and research ethics of relevance to science research</i></li> </ul>   |
| 3.                   | Judgement and approach      | <ul style="list-style-type: none"> <li>• <i>be able to analyse their own and others' research constructively from a theory of science perspective and in a manner that benefits the continued research studies</i></li> <li>• <i>be able to analyse their own and others' research from a research ethics perspective</i></li> </ul> |

|           |  |  |
|-----------|--|--|
| <b>4.</b> | <b>Course content</b>  |  |
| 1.        | Brief description of the course and its content including details of any sub-divisions | The course consists of an introductory theory of science component and a concluding component on research ethics. The theory of science component addresses the most important scientific strategies and their applications in different disciplines with a focus on science research. The issues discussed include the relationship between observation and reality, the truth of scientific theories and scientific models of explanation. Theory of science issues of direct relevance to science research are exemplified through historical and current research. The research ethics component addresses key principles and concepts, such as authorship and research misconduct (FFP). Discussions will be based on current research on research ethics, e.g. surveys, and national and international regulations. Issues of research ethics of direct relevance to the participants' research projects will be addressed with reference to authentic examples. |

|           |  |   |
|-----------|--|---|
| <b>5.</b> | <b>Teaching and assessment</b>   |   |
| 1.        | Teaching methods employed including details of any compulsory components | The teaching consists of lectures and seminars.   |
| 2.        | Examination details  | Each course participant is to make an oral presentation (in a group) and write an individual paper of 5-10 pages on an issue of research ethics of relevance to science research. For a grade of Pass, the student must have attended all components as well as making the oral presentation and writing the independent paper. |

|           |   |                                      |
|-----------|---|--------------------------------------|
| <b>6.</b> | <b>Grades</b>                                     |                                      |
| 1.        | Grades  | The grades awarded are Fail or Pass. |
| 2.        | Grading of the complete course                    |                                      |
| 3.        | Modules and variations in grading (if applicable) |                                      |

|           |                         |  |
|-----------|-------------------------|--|
| <b>7.</b> | <b>Required reading</b> |  |
| 1.        | Reading list            | For a reading list and other study resources, please see appendix. |