



Course title: Philosophy of Science

Type of course: Compulsory doctoral programme course

Year of study: 1st study year

Semester: I semester (Fall)

Number of credits allocated: ECTS: 6

Name of lecturer: Prof. dr. Hans Siggaard Jensen

Objectives of the course:

The aim of the course is to help the participants to acquire an intellectual identity through an understanding of the main problems and positions in the theory and philosophy of the human and social sciences as this is reflected in the discussions of these issues in the last half century and give the participants an understanding of the relation to the history of these science

The objective of the course should be fulfilled by giving an introduction to fundamental problems in the philosophy of the human and social sciences and to some important positions concerning the nature and methods of these sciences. The course also aims to relate such problems and discussion to issues of research design and methodology and to the function of these sciences in relation to issues of problem solving in society and in business organisations.

In discussions time and attention will be dedicated to the doctoral student research projects development. During the course students will work and develop their own research and at the end of the course will present the extended introduction and research plan of a doctoral dissertation.

At the end of the course a doctoral student is expected to be able to:

- To analyse and evaluate research in relation to the various schools of thought concerning the human and social sciences.
- Relate the topic, research problem, aim and objectives of their doctoral dissertation to such schools of thought.
- Demonstrate awareness and an understanding of scientific contribution of research.
- Develop their research by positioning themselves in the philosophical and methodological landscape and write a meaningful introduction to their doctoral dissertation on issues relating to philosophical and methodological position
- Be aware of main principles of theory building and testing.
- Select and develop the most appropriate theoretical model for a specific research.
- Be aware of basic concerning research ethics

Course content:

Two basic positions in the philosophy of science –
Popper/Kuhn - and their ramifications – introduction to
issues
Schools of thought in the Human and social Sciences -
Hermeneutics and phenomenology
Schools of thought – Structuralism and critical theory
Schools of thought – Postmodernism and social
constructivism

Overview of schools of thought – historical and today in relation to issues in the human and social
 Explanation and understanding – the variety of forms of inquiry in the human and social sciences – relations between philosophy of science, research designs and methodology - some recent discussions
 The social dimension of scientific knowledge/CUDOS – the use of research, epistemic values and forms of knowledge
 Objectivity and evidence – Evidence and methodology

Teaching methods: Teaching material will be available in digital form at the e-learning platform. There will be a format with emphasis on discussions on the basis of faculty presentations. Group work will also be given.

Assessment methods: Student performance in this course will be evaluated on the basis of a paper relating course content to the students own project and its philosophical and methodological issues and on class participation.

The assessment is based on the following

| Assignment | Due date | Value in per cent from the final grade |
|---|--|--|
| Participation in discussions and group work | Submit to e-learning system (Microsoft Word version) | 20 per cent of the final grade. |
| Paper | | 80 per cent of the final grade |

First assignment

- Class participation

- It is expected that students will participate in class discussions in meaningful ways. This requires to come to class prepared to discuss the issues involved in class readings and contribute to class discussions. This will be graded by classmates and instructor.
- This assignment is worth 20 per cent of the final grade.

Second assignment

- Paper

- It is expected that students will write a paper of max. 10 pages relating aspects of the course to issues in their project.
- This assignment is worth 80 per cent of the final grade.

Language of instruction: English

| | <i>Readings (can be found on E-Learning)</i> |
|--|---|
| | Glendinning, S. (2008). What is Phenomenology? <i>Philosophy Compass</i> 3/1, 30-50. Stanford Encyclopedia of Philosophy. (2012). Wilhelm Dilthey. Stanford Encyclopedia of Philosophy. (2012). Hans-Georg Gadamer. Stanford Encyclopedia of Philosophy. (2012). Edmund Husserl. Stanford Encyclopedia of Philosophy. (2012). Thomas Kuhn. Stanford Encyclopedia of Philosophy. (2012). Phenomenology. Stanford Encyclopedia of Philosophy. (2012). Karl Popper. Stanford Encyclopedia of Philosophy. (2012). Paul Ricoeur. Stanford Encyclopedia of Philosophy. (2012). Hermeneutics. Thompson, E., Zahavi, D. <i>Philosophical Issues: Phenomenology</i> . |
| | Stanford Encyclopedia of Philosophy. (2012). Critical Theory. Stanford Encyclopedia of Philosophy. (2015). Postmodernism. |

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| | <p>Stanford Encyclopedia of Philosophy. (2009). Richard Rorty.</p> <p>Stanford Encyclopedia of Philosophy. (2009). Naturalistic Approaches to Social Construction.</p> <p>Stanford Encyclopedia of Philosophy. (2009). Theory and Observation in Science.</p> <p>Stanford Encyclopedia of Philosophy. (2014). Giambattista Vico.</p> <p>Stanford Encyclopedia of Philosophy. (2011). Methodological Individualism.</p> <p>Phillips, J. W. Structuralism and Semiotics.</p> <p>Flyvbjerg, B. (2004). Five Misunderstandings About Case-study Research.</p> <p>Turner, S. (2007). Merton's 'Norms' in Political and Intellectual Context.</p> |
| | <p>Macfarlane, B., Cheng, M. (2008). Communism, Universalism and Disinterestedness: Re-examining Contemporary Support among Academics for Merton's Scientific Norms. <i>J Acad Ethics</i>, 6:67-78.</p> <p>Follesdal, D. Hermeneutics and the hypothetico-deductive method.</p> <p>Stanford Encyclopedia of Philosophy. (2011). Scientific Explanation.</p> <p>Stanford Encyclopedia of Philosophy. (2011). The social dimensions of scientific knowledge.</p> |
| | <p>Cartwright, N., Efstathiou, S. Evidence-based policy and its ranking schemes: So, where's ethnography?</p> <p>Cartwright, N. (2007). Evidence-based policy: Where is our theory of evidence? Centre for Philosophy of Natural and Social Science</p> <p>Contingency and Dissent in Science. Technical Report 07/07</p> <p>Stanford Encyclopedia of Philosophy. (2013). Causation and Manipulability.</p> <p>Stanford Encyclopedia of Philosophy. (2013). The Ethics of Belief.</p> <p>Stanford Encyclopedia of Philosophy. (2013). Evidence.</p> <p>Stanford Encyclopedia of Philosophy. (2014). Scientific Objectivity.</p> <p>Stanford Encyclopedia of Philosophy. (2014). Scientific Discovery.</p> <p>Cartwright, N. (with Stegenga, J.). A Theory of Evidence for Evidence-Based Policy.</p> |

Readings:

The course material will be provided in four blocks – one for each day. It is based on material from the Stanford Encyclopedia of Philosophy, which is a quality controlled site of high integrity and validity and other material and digital form.