



Course title: Philosophy of Science

Type of course: Compulsory doctoral programme course

Year of study: 1st and 2nd study year

Semester: I semester (Fall)

Number of credits allocated: ECTS: 6

Name of lecturer: Prof. dr. Hans Siggaard Jensen (Aarhus University)

Language of instruction: English

Course annotation

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.

Objectives of the course:

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Objectives of the Course:

- 1) to introduce fundamental problems in the philosophy of the human and social sciences and to some important positions concerning the nature and methods of these sciences.
- 2) 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.
- 3) to develop required skills for developing research and present the extended introduction and research plan of a doctoral dissertation.

Course learning outcomes (CLO)	Study methods	Evaluation methods
CLO1 To be able to analyse and evaluate research in relation to the various schools of thought concerning the human and social sciences.	Seminars, group work	Participation to class and providing peer review.
CLO2 Be able to formulate research problem, aim and objectives of their doctoral dissertation related to a school of thought.	Seminars and individual work	Participation to class discussions and paper submitted for final assignment
CLO3 To demonstrate an awareness and an understanding of the scientific	Seminars, individual work	Participation to class discussions

contribution of research		
CLO4 Be able to develop research by positioning in the philosophical and methodological landscape and write a meaningful introduction to their doctoral dissertation on issues relating to philosophical and methodological position	Individual work	Papers submitted for final assignment
CLO6 Be aware of research ethics	Seminars	Participation to class discussions

Course content:

Section I	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
Section II	Schools of thought – Structuralism and critical theory Schools of thought – Postmodernism and social constructivism
Section III	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
Section IV	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: Lectures, individual work and discussions. In discussions time 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.

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. All course material can be found on the e-learning platform <http://elearning.ism.lt/>

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		20 per cent of the final grade.
Paper		80 per cent of the final grade

Description of course assignments

1. 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.

2. 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.

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.

Readings:

1. Cartwright, N. (2007). Evidence-based policy: Where is our theory of evidence? Centre for Philosophy of Natural and Social Science
2. Cartwright, N. (2007). Evidence-based policy: Where is our theory of evidence? Centre for Philosophy of Natural and Social Science Contingency and Dissent in Science. Technical Report 07/07
3. Cartwright, N., & Stegenga, J. (2011). A theory of evidence for evidence-based policy.
4. Flyvbjerg, B. (2004). Five Misunderstandings About Case-study Research.
5. Follesdal, D. Hermeneutics and the hypothetico-deductive method.
6. Glendinning, S. (2008). What is phenomenology?. *Philosophy Compass*, 3(1), 30-50.
7. Macfarlane, B., Cheng, M. (2008). Communism, Universalism and Disinterestedness: Re-examining Contemporary Support among Academics for Merton's Scientific Norms. *J Acad Ethics*, 6:67-78.
8. Stanford Encyclopedia of Philosophy. <https://plato.stanford.edu/entries/scientific-discovery/>
 - a. Stanford Encyclopedia of Philosophy. (2012). Wilhelm Dilthey.
 - b. Stanford Encyclopedia of Philosophy. (2012). Hans-Georg Gadamer.
 - c. Stanford Encyclopedia of Philosophy. (2012). Edmund Husserl.
 - d. Stanford Encyclopedia of Philosophy. (2012). Thomas Kuhn.
 - e. Stanford Encyclopedia of Philosophy. (2012). Phenomenology.
 - f. Stanford Encyclopedia of Philosophy. (2012). Karl Popper.
 - g. Stanford Encyclopedia of Philosophy. (2012). Paul Ricoeur.
 - h. Stanford Encyclopedia of Philosophy. (2012). Hermeneutics.
 - i. Stanford Encyclopedia of Philosophy. (2012). Critical Theory.
 - j. Stanford Encyclopedia of Philosophy. (2015). Postmodernism.
 - k. Stanford Encyclopedia of Philosophy. (2009). Richard Rorty.
 - l. Stanford Encyclopedia of Philosophy. (2009). Naturalistic Approaches to Social Construction.
 - m. Stanford Encyclopedia of Philosophy. (2009). Theory and Observation in Science.
 - n. Stanford Encyclopedia of Philosophy. (2014). Giambattista Vico.
 - o. Stanford Encyclopedia of Philosophy. (2011). Methodological Individualism.
 - p. Stanford Encyclopedia of Philosophy. (2011). Scientific Explanation.
 - q. Stanford Encyclopedia of Philosophy. (2011). The social dimensions of scientific knowledge.
 - r. Stanford Encyclopedia of Philosophy. (2013). Causation and Manipulability.
 - s. Stanford Encyclopedia of Philosophy. (2013). The Ethics of Belief.
 - t. Stanford Encyclopedia of Philosophy. (2013). Evidence.
 - u. Stanford Encyclopedia of Philosophy. (2014). Scientific Objectivity.
 - v. Stanford Encyclopedia of Philosophy. (2014). Scientific Discovery.
9. Thompson, E., & Zahavi, D. (2007). Philosophical issues: Phenomenology.
10. Turner, S. (2007). Merton's 'Norms' in Political and Intellectual Context.