

*MNSES9100 Spring 2013 (27<sup>th</sup>–31<sup>st</sup> May)*

**TIMETABLE + READING LIST**

*Starred items \*are primary syllabus material (pensum); \*\* are papers that will be discussed during class and students are particularly recommended to read beforehand. The other entries are suggestions for further reading for those who want to research the lecture topic further, e.g., in connection with writing essays. The essay seminar leaders will be able to recommend additional reading for essay writing material*

Monday 27<sup>th</sup> Morning

Ole Johan Dahls Hus, Aud Simula

0915-1000    **Introduction and History of Philosophy of Science** (*Deborah Oughton*)

1015-1200    **Demarcation of Science from other Disciplines: Popper and Falsification**  
(*Deborah Oughton*)

1200-1315    **Lunch**

*Reading*

\*\*Popper, K. “Conjectures and refutations” in Klemke et al (eds.) *Introductory Readings in the Philosophy of Science* (Prometheus 1998).

<http://cla.calpoly.edu/~fotoole/321.1/popper.html>

\*Ziman, J. *What is Science*

\*Chalmers, A. *What is this thing called science?* (3rd. edition, Open University Press 1999): Intro., ch. 1, (2), (3), 4, 5, (6) 7 (bracketed chapters less central).

Monday 27<sup>th</sup> Afternoon

Ole Johan Dahls Hus, Aud Simula

1315-1600    **Research Paradigms and the Social Construction of Science: Kuhn, Knorr-Cetina** (*Beate Elvebakk*)

1415-1500    **Group Discussion**

\*Chalmers op. cit.: ch. 8, 9, 11.

\*Kuhn, T. *The Structure of Scientific Revolutions*, 2<sup>nd</sup> edition (University of Chicago Press), Postscript (pp.174-210)

\*Knorr, K.D.: “Tinkering Towards Success: Prelude to a Theory of Scientific Practice”. In *Theory and Society* Vol 8 (1979), pp. 347-376

Tuesday 28<sup>th</sup> Morning

Kristian Nygaards Hus: Store Aud

0915-1200    **Science and Pseudoscience** (*Deborah Oughton*)

1015-1100    **Group Discussion**

\*\*Feyerabend, P. "How to defend society against science" in Klemke et al op. cit.

<http://cla.calpoly.edu/~fotoole/321.1/feyer.html>

\*Chalmers op. cit.: ch. 10, 11

\*Kitcher, P. „Believing where we cannot prove“ in Klemke et al (eds.) *Introductory Readings in the Philosophy of Science* (Prometheus 1998).

\*Thagard, P.R. „Why astrology is a pseudoscience“ in Klemke et al (eds.) *Introductory Readings in the Philosophy of Science* (Prometheus 1998).

<http://watarts.uwaterloo.ca/~pthagard/Articles/astrology.pdf>

1200-1315    **Lunch**

Tuesday 28<sup>th</sup> Afternoon

Ole Johan Dahls Hus, Aud Simula

1315-1600    **Science in education and in society in an international perspective: Is there a crisis?** (*Svein Sjöberg*)

\*Sjöberg and Schreiner (2010). The ROSE project (The Relevance of Science Education): Overview and Key findings.

[http://folk.uio.no/sveinsj/ROSE-overview\\_Sjoberg\\_Schreiner\\_2010.pdf](http://folk.uio.no/sveinsj/ROSE-overview_Sjoberg_Schreiner_2010.pdf)

Sjöberg (2002). Science and Technology in Education: Current Challenges and Possible Solutions in Innovations in Science and Technology Education, Paris, UNESCO

[http://folk.uio.no/sveinsj/STE\\_paper\\_Sjoberg\\_UNESCO2.htm](http://folk.uio.no/sveinsj/STE_paper_Sjoberg_UNESCO2.htm)

Wednesday 29<sup>th</sup> Morning

Kristian Nygaards Hus: Store Aud

0915-1100    **Research Ethics III: Ethical Theories** (*Espen Gamlund*)

Topics: Ethics and ethical theories, examples from Biotechnology

1115-1200    **Group Discussion**

\*Beauchamp, T. and Childress. *Principles of Biomedical Ethics*. Fifth Edition. 2001. Chapters 1, 2, 8 & 9

1200-1300    **Lunch**

Wednesday 29<sup>th</sup> Afternoon

Vilhelm Bjercknes Hus, Aud 5

1315-1500    **Environmental Ethics and Animal Rights** (*Espen Gamlund*)

Topics: Animal rights; Ecology and the history of the environmental movement; "Valuing" the environment: anthropocentrism, biocentrism, ecocentrism.

\*Singer, Peter. Animal Liberation, In: *Environmental Philosophy* (Zimmerman et.al.) 1993, 22-32

See also: <http://www.utilitarian.net/singer/by/1979----.htm>

\*Elliot, R. Environmental Ethics, in: *A Companion to Ethics* (Singer, P. ed) 1992, 284-510 (Blackwell)

Regan, Tom. Animal Rights. In: *Environmental Philosophy* (Zimmerman et.al.), 1993, 33-48.

See also: <http://www.webster.edu/~corbetre/philosophy/animals/regan-text.html>

Naess, A. The deep ecological movement: Some philosophical aspects. *Philosophical Inquiry*, 1986, 10-31

1515-1600 **Advice on Essay Writing** (*Deborah Oughton*)

Thursday 30<sup>th</sup> Morning

Kristian Nygaards Hus: Store Aud

0915-1200 **Research Ethics I: Scientific Misconduct** (*Deborah Oughton*)

1015-1100 **Group Discussion**

Topics: Duties towards other scientists and research subjects (animals, humans); fraud and misconduct in science.

Case studies: Research subjects – Stanley Milgram; Fraud Accusations – Jon Sudbø, David Baltimore (USA)

\*Peach, L. An introduction to ethical theory, in: *Research Ethics: Cases and Materials* (Penslar, R.L) Indiana University Press, 1995, 13-26

\*Shrader-Frechette, K. Introduction to research ethics, in *Ethics of Scientific Research* (K. Shrader-Frechette), Rowman and Little 1994,.

#### Additional Reading

Helen Longino. Gender and racial biases in scientific research, in *Ethics of Scientific Research* (K. Shrader-Frechette), Rowman and Little 1994, 139-151.

#### Case Studies

Milgram: Blass, T. 2002. The man who shocked the world. *Psychology Today*

<http://www.psychologytoday.com/articles/200203/the-man-who-shocked-the-world>

Baltimore: <http://www.boston.com/globe/search/stories/nobel/1996/1996b.html>

Thursday 30<sup>th</sup> Afternoon

Kristian Nygaards Hus: Store Aud

1315-1600 **The Modern University** (*Beate Elvebakk*)

The role of universities in society; funding, political control of research; patents and intellectual property rights

\*\*Ziman, 2009. Is Science losing its objectivity? Nature

\*Schwartz, S. (2006) Value, Ethics and Teaching. In: "*Values and Ethics: Managing Challenges and Realities in Higher Education*", IMHE /OECD: Paris

1415-1500    **Group discussions**

Friday 31<sup>st</sup> Morning

Kristian Nygaards Hus: Store Aud

0915-1200    **Ethical Guidelines, Publication and the Vancouver Convention** (*Deborah Oughton*)

\*\* The National Committees for Research Ethics in Norway; Guidelines for research ethics in science and technology (2008) <http://www.etikkom.no/In-English/Publications/>

This gives a link to the English version. They are available in Norwegian, and Guidelines are also available from the same site for Research ethics in the social sciences, law and the humanities (2006)

\*\*"Vancouver Convention" Uniform Requirements for Manuscripts (URM) [www.icmje.org](http://www.icmje.org)  
See particularly Section II. Ethical Considerations in the Conduct and Reporting of Research

1015-1100    **Group Discussions: Publication**

1200-1315    **Lunch**

Friday 31<sup>st</sup> Afternoon

Kristian Nygaards Hus: Store Aud

1315-1500    **Research Ethics II, Risky Business: Statistics and Uncertainty** (*Deborah Oughton*)

Topics: Risky technologies, Risk Assessment and management, probability, statistics and bias.

Oughton and Strand: Risk and Uncertainty As a Research Ethics Challenge

<http://www.etikkom.no/no/Aktuelt/Aktuelt/Nyheter/2009/Ny-rapport-Risk-and-Uncertainty/>