Readings mark with (*) are included in Curd and Cover (2012) *Philosophy of Science: the Central Issues*, 2nd edition

**Week 2: The problem of Demarcation**

*Karl Popper: “Science: Conjectures and Refutations”
*Imre Lakatos: “Science and Pseudo-Science”
*Paul Thagard: “Why Astrology is a Pseudo-Science”

**Week 3: Demarcation: some case studies**

*Michael Ruse: “Creation-Science is not Science”
*Larry Laudan: “Commentary: Science at the Bar – Causes for Concern”

**Week 4: Observation**

*Pierre Duhem: “Physical Theory and Experiment”

**Week 5: Underdetermination and Theory Choice**

*Larry Laudan “Demystifying Underdetermination”

**Week 6: Normal Science and Puzzle Solving**

Thomas Kuhn “The Nature of Normal Science” *SSR*
Thomas Kuhn “Normal Science and Puzzle Solving” *SSR*

**Week 7: Scientific Revolutions**

Thomas Kuhn “Revolutions as Changes of World View” *SSR*

**Week 8: Rationality and Theory Change**

*Thomas Kuhn: “Objectivity, Value Judgment and Theory Choice”
*Ernan McMullin: “Rationality and Paradigm Change in Science”

**Week 9: Rationality and Theory Change**

Larry Laudan: “Kuhn's Critique of Methodology”
**Week 10: Theory Change and Realism**

*Larry Laudan: A Confutation of Convergent Realism”*

**Week 11: Objectivity and Feminist Critique of Science**

*Helen Longino: “Values and Objectivity”*
*Kathleen Okruhlik: “Gender and the Biological Sciences”*

**Week 12: Scientific Realism vs Constructive Empiricism**

*Bas van Fraassen: “Arguments Concerning Scientific Realism”*
*Alan Musgrave: “Realism versus Constructive Empiricism”*

**Week 13: Scientific Realism and Entity Realism**

*Ian Hacking: “Experimentation and Scientific Realism”*
*David Resnik: “Hacking's Experimental Realism”*