

SOC 442: SOCIOLOGY OF SCIENCE AND TECHNOLOGY

Dr. Bahattin Akşit
Professor in the Department of Sociology

06531 Ankara, Turkey; E-mail: aksit@metu.edu.tr

Soc. 442 Spring 2003-2004: Time: Tuesday 9:40-12:30; Room: B-05.

1. First part--First Week: Introduction

In this course, science and technology will be examined in historical, social and cultural context. Relationships between Sociology of Knowledge / Culture and Sociology of Science and Technology. Increasing importance of Sociology of Science and Technology in the information age.

2. The Second part of the present reading list of the course include books introducing students to sociology of information society and sociology of knowledge, philosophy of knowledge and socio-cultural context of scientific production: the university.

Second Week:

***Urry (2000) *Sociology Beyond Societies : Mobilities for Twenty First Century*, Routledge, <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

OR

***Urry (2003) *Global Complexity*, Polity Press.

Third Week:

*** Dant (1991) *Knowledge, Ideology and Discourse: A Sociological Perspective*, Routledge.

Fourth Week:

*** Bachelard (1968/1940), *The Philosophy of No/ La Philosophie Du Non*, The Orion Press.

Fifth Week:

*** **Parsons** (1973), *The American University*, Harvard University Press.

Sixth Week:

*** **Bourdieu** (1984), *Homo Academicus*, Polity Press.

3. The Third part of the present reading list of the course include books on philosophy and sociology of technology.

Seventh Week:

*****Castells** (1996) *The Information Age: Economy, Society and Culture: The Rise of Network Society*, Blackwell.

Eighth Week:

*** **Ellul**, *The Technological Society*

Ninth Week:

*****Pitt** (2000) *Thinking about Technology: Foundations of the Philosophy of Technology*, Seven Bridges Press. <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary .

Tenth Week:

*** **Miller, Lee and Gong** (2000) (Eds.) *Silicon Valley Edge: A Habitat for Innovation and Entrepreneurship*, Stanford University Press. <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

Eleventh Week:

*** **Kim**, *Pros and Cons of International Technology Transfer: A developing country's view* other articles by Kim and **Kim and Dahlman**, *Technology Policy for Industrialization: An integrative framework and Korea's experience*, Howells, *The Globalization of Research and Technological Innovation: A new agenda?*

All of the books in the second and third parts will be assigned to the students to be read at home and to be discussed in class in the specified week. Class attendance and participation into discussions is, as it can be guessed, very essential and 100% attendance is required.

4. In the Fourth Part of the course students are expected to survey the recent literature on the sociology of science and technology including the list below and **expected to write a paper on one of the books / theorists / researchers chosen and present** it in class. This paper will be submitted to the instructor in developed paper format at the end of the term.

Adorno (Ed.) (1976), *The Positivist Dispute in German Sociology*, Heinemann.

Althusser, *Philosophy and the Spontaneous Philosophy of the Scientists*

Bachelard, *The New Scientific Spirit*

Baudrillard, *Selected Writings*

Bell, *The Coming of Postindustrial Society*

Benton, *Philosophical Foundations of the Three Sociologies*

Bernal, *Black Athena*

Bhaskar , *The Possibility of Naturalism*

Bhaskar, *A Realist Theory of Science*

Bhaskar, *Scientific Realism and Human Emancipation*

Canguilhem, *The Vital Rationalist*

Canguilhem, *The Normal and Pathological*

Cassirer, *An Essay on Man*

Cassirer, *The Philosophy of Symbolic Forms*

Collins and Pinch, *The Golem. What Everyone Should Know about Science*

Featherstone and Burrows (Eds.), *Cyberspace, Cyberpunk, Cyberbodies*

Etzkowitz, Kemelgor and Uzzi, (2000) *Athena Unbound: Advancement of Women in Science and Technology*, Cambridge University Press, <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

Feenberg (1999) *Questioning Technology*, Routledge, <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

Feyerabend, *Farewell to Reason*

Feyerabend, *Against Method*

Fleck, *Genesis and Development of a Scientific Fact*

Foucault, *The Archeology of Knowledge*

Foucault, *The Birth of Clinic*

Franca Lingua (Ed.) (2000) *Sokal Hoax: The Sham that Shook the Academy*, the Nebraska University Press. <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

Gellner, *Relativism and the Social Sciences*

Haraway, *Modest_Witness@Second_Millennium. FemaleMan }_Meets_OncoMouse }*

Haraway, *The Cyborg Manifesto*

Keat and Urry, *Social Theory as Science*

Kuhn (1970) *The Structure of Scientific Revolutions*

Lakatos, *The Methodology of Scientific Research Programmes*

Latour, *Laboratory Life: The Construction of Scientific Facts*

Latour, *Aramis, or The Love of Technology*

Latour, **Science in Action: How to follow scientists and engineers through society**

Latour, *We Have Never Been Modern*

McLaughlin (1999), *Valuing Technology: Organisations Culture & Change*, <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

Mannheim, *Ideology and Utopia*

Merton, *Science, Technology, and Society in Seventeenth Century England*

Merton, *The Sociology of Science*

Popper, *Logic of Scientific Discovery*

Poster, *Mode of Information, and* ◆ Postmodern Virtualities ◆

Saad (2000) *Development through technology transfer*, intellect books, <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

Serres (1982) *Hermes: Literature, Science and Philosophy*, The John Hopkins University Press.

Shapin and Lawrence (ed.s), *Science Incarnate: Historical Embodiments of Natural Knowledge*

Shapin, *A Social History of Truth: Civility and Science in Seventeenth Century England*

Shapin, *The Scientific Revolution*

Slaton (2001) *Reinforced Concrete and Modernization of American Building, 1900-1930*, the Johns Hopkins University. <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

Thrift (2001) (Ed.) *TimeSpace: Geographies of Temporality*, Routledge, <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

Von Burg (2000) *Triumph of Ethernet: Technological Communities and Battle for LAN Standard*, Stanford University Press.

Whitehead, *Science and the Modern Society*

Ziman (2000) *Real Science: What it is and what it means*, Cambridge university press. <http://ww2.lib.metu.edu.tr/>, e-books, Ebrary.

Attention: Course Requirements:

1.) **100% class attendance** and 2.) **Participation in discussions of reading materials** 3.) **Paper presentation in class** 4.) **Submitting revised version of presentation as a full paper** and 5.) In class or take-home **Final exam** covering readings and presentations.