

The Hebrew University of Jerusalem

Syllabus

The Scientific Revolution of the 17th Century - A Global Perspective - 39810

Last update 19-08-2018

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: History

Academic year: 0

Semester: 2nd Semester

Teaching Languages: English and Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Raz Chen-Morris

Coordinator Email: raz.chen-morris@mail.huji.ac.il

Coordinator Office Hours: Wednesday 10-12

Teaching Staff:

Prof Raz Chen-Morris

Course/Module description:

What kind of story can we tell of the Scientific Revolution if we regard this set of intellectual events from the vantage point of other cultural centers outside Europe? What is the relationship between the dramatic philosophical and scientific developments taking place in Europe during the 17th century and the Spanish, Dutch or English colonial projects? In what sense do such branches of knowledge as alchemy or natural history constitute an integral part of the story of the Scientific Revolutions?

Course/Module aims:

A deep understanding of the various issues in current historiography of the scientific revolution.

A critical examination of the notion of globalization and its relevance to our understanding of the 17th century in general and of the scientific revolution in particular.

Learning outcomes - On successful completion of this module, students should be able to:

To critically examine the historical pertinacity of the notion of globalization

To discuss the ways and modes of transmission of scientific practices and ideas between cultural contexts.

To re-evaluate the notion of scientific revolution in a global context.

To critically examine the center-periphery relationship in the history of science.

Attendance requirements(%):

100

Teaching arrangement and method of instruction: Discussing current research literature

Course/Module Content:

Stage-setting

The 'pre' Scientific Revolution – what does the SR owe to methods/ideas from elsewhere?

1492 and the shock of the new

Science and early modern capitalism

Networks & machines

Doing global history

Required Reading:

Basalla, George. "The spread of western science." *Science* 156, new series, no. 3775 (May 5, 1967): 611-22.

Huff, Toby E. *Intellectual curiosity and the scientific revolution: a global perspective*. Cambridge; New York: Cambridge University Press, 2011.

Chakrabarty, Dipesh. *Provincializing Europe: postcolonial thought and historical difference*. Princeton, N.J.: Princeton University Press, 2000. Introduction (3-23).

Saliba, George. *Islamic science and the making of the European Renaissance*. Cambridge, Mass.: MIT Press, 2007.

Greenblatt, Stephen Jay. *Marvelous possessions: the wonder of the New World*. Chicago: University of Chicago Press, 1991.

Portuondo, María M. *Secret science: Spanish cosmography and the new world*. Chicago: University of Chicago Press, 2009.

Brook, Timothy. *Vermeer's hat: the seventeenth century and the dawn of the global world*. New York: Bloomsbury Press, 2009.

Cook, Harold John. *Matters of exchange: commerce, medicine, and science in the Dutch Golden Age*. New Haven: Yale University Press, 2007.

Latour, Bruno. *Science in action: how to follow scientists and engineers through society*. Cambridge, Mass.: Harvard University Press, 1987.

McClellan, James E., and François Regourd. *The colonial machine: French science and overseas expansion in the old regime*. Turnhout: Brepols, 2011.

Dauids, Karel. "On machines, self-organization, and the global traveling of knowledge, circa 1500-1900." *Isis* 106, no. 4 (2015): 866-74.

Sivasundaram, Sujit. "Sciences and the global: on methods, questions, and theory." *Isis* 101, no. 1 (2010): 146-58.

Hanson, Marta, and Gianna Pomata. "Medicinal formulas and experiential knowledge in the seventeenth-century epistemic exchange between China and Europe." *Isis* 108, no. 1 (2017): 1-25

Additional Reading Material:

TBA

Course/Module evaluation:

End of year written/oral examination 0 %

Presentation 20 %

Participation in Tutorials 15 %

Project work 50 %

Assignments 0 %

Reports 15 %

Research project 0 %

Quizzes 0 %

Other 0 %

Additional information:

History Department

Hebrew University of Jerusalem, Mt. Scopus

Mt. Scopus