

The Scientific revolution

Development of Modern Western Science, HIST 4615 005
(CRN: 18199)

Tuesday & Thursday 10.00am – 11.40am, Sparks Hall 301

Instructor: Nick Wilding

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Office Hours: Tuesday & Thursday, 34 Peachtree, 2146, T & R, 12pm – 1pm.

Course Description:

Between 1500 and 1700 the relationship between humans and nature underwent a profound reorientation. Part of this change came to be characterized as the Scientific Revolution. In this course, we will ask what kind of changes occurred, and why. We will analyse intellectual shifts and the social reorganisations connected with these shifts. Special attention will be paid to the case of Galileo. No prior specialization in the natural sciences is required. This course will also provide a basic introduction to the historiography and methodology of the history of science.

Course Requirements:

Much of our thinking and learning will take place in class, so attendance and participation are extremely important, counting for 20% of your grade. Let me know if you will be unable to attend any classes.

Participation (20%)

Sample Bibliography (10%)

Assigned Book Paper (20%)

Research Presentation (20%).

Final Research Paper (30%)

The final paper will use the research skills acquired during the course.

Ethical Requirements:

All students will show mutual respect at all times. Students who fail to respect each other will fail the class.

You will learn what plagiarism is and why it is a bad thing. Any student caught plagiarising will fail the course. See GSU's Policy on Academic Honesty (Section 409) for clarification.

The course syllabus provides a general plan for the course; deviations may be necessary

Schedule:

Week 1 (January 6th & 8th) Overview, Introduction
Week 2 (January 13th & 15th) Bibliographies, Catalogues, Research & Reference
Week 3 (January 20nd & 22th) Dear
Week 4 (January 27th & 29th) Shapin
Week 5 (February 3rd & 5th) Kuhn
Week 6 (February 10th & 12th) The Royal Society
Week 7 (February 17th & 19th) Schaffer
Week 8 (February 24th & 26th) *Galileo*, by Brecht (145 min)
[2nd March Full semester Midpoint – last chance to withdraw from course]
[Week 9, March 3rd & 5th Spring Break - no classes]
Week 10 (March 10th & 12th) Drake
Week 11 (March 17th & 19th) Finocchiaro
Week 12 (March 24th & 26th) Biagioli
Week 13 (March 31st & April 2nd) Saliba
Week 14 (April 7th & 9th) Cook
Week 15 (April 14th & 16th) Research Paper presentations
Week 16 (April 21st & 23rd) Research Paper presentations
April 27th – Final papers due.

Required Texts:

- ~ Shapin, Steven *The Scientific Revolution*. (Chicago, 1996) ISBN: 978-0-226-75021-7; ISBN-10: 0-226-75021-3
- ~ Dear, Peter, *Revolutionizing the Sciences: European Knowledge and Its Ambitions, 1500-1700*. (Princeton, 2001) ISBN13: 978-0-691-08860-0
- ~ Kuhn, Thomas S. *The Structure of Scientific Revolutions*. 3d edition. (Chicago, 1996) ISBN: 978-0-226-45808-3 (ISBN-10: 0-226-45808-3)
- ~ Drake, Stillman, *Galileo: A Very Short Introduction* (Oxford, 1980) ISBN 0192854569
- ~ Biagioli, Mario, *Galileo, Courtier: The Practice of Science in the Culture of Absolutism*. (Chicago, 1993) ISBN: 978-0-226-04560-3; ISBN-10: 0-226-04560-9
- ~ Finocchiaro, Maurice, *The Essential Galileo*. (Hackett, 2008) ISBN 978-0-87220-937-4
- ~ Saliba, George, *Islamic Science and the Making of the European Renaissance* (MIT, 2007) ISBN 0-262-19557-7
- ~ Cook, Harold J., *Matters of Exchange: Commerce, medicine, and Science in the Dutch Golden Age*. (Yale, 2007) ISBN 978-0-300-14321-8

<http://www.cbc.ca/ideas/features/science/index.html>

Episode 1 - Simon Schaffer

Episode 16 - Steven Shapin

http://www.bbc.co.uk/radio4/history/inourtime/inourtime_science.shtml