HISTORY OF SCIENCE 623 / HISTORY 323

Studies in Early Modern Science

Fall 2013
4:35–5:25 pm Th
984 Memorial Library

Florence Hsia
229 Bradley Memorial
1:00–3:00 pm W & by appt.
262-3971
fchsia@wisc.edu

Robin Rider
990 Memorial Library
1:00–2:00 pm Th & by appt.
262-2809
rrider@library.wisc.edu

COURSE REQUIREMENTS

Fulfill requirements for History of Science/History 323, and attend an additional "weekly" seminar. You'll be asked to take turns presenting the materials assigned for HS 623 (the number of presentations will depend on the number of seminar participants). A typed summary/critique (1 page in length) should accompany each of your presentations. Please make copies for all seminar participants.

In lieu of the graded assignments for HS 323, you should complete 15–20 pages of prose writing in connection with this course, e.g.: a research paper, based on primary sources in early modern European science; a critical discussion of some historiographical issue in the secondary literature; two or more book reviews (situate the book with respect to existing scholarship and critique the author's use of source material); or a bibliographic survey in preparation for a prelim field. Please meet with us as early as you can in the semester to discuss how you propose to fulfill the writing requirement.

You should be prepared to present a prospectus and preliminary bibliography to the seminar on **December 5**. We will discuss written work-in-progress on **December 12**; please email your draft to all seminar participants by **Tuesday, December 10**. All of your written work is due **Thursday, December 19, by 5:00 pm**. Grading will be based on class participation (~25%), presentations (~25%), and the written work (50%).

SCHEDULE OF READINGS AND MEETINGS

All readings marked with asterisks can be accessed online via MadCat.

Sept 5 (Th) **introductions**

Sept 12 **historiographical perspectives (I)**
Margaret J. Osler, "The canonical imperative," in *Rethinking the scientific revolution*, ed. Osler (Cambridge, 2000), 1–22
Steven Shapin, *The scientific revolution* (Chicago, 1996), introduction + 2 substantive reviews

Sept 19 **historiographical perspectives (II)**
*Renzo Baldasso, "The role of visual representation in the Scientific Revolution: a historiographic inquiry," *Centaurus* 48.2 (2006): 69–88

Sept 26 **paradigms**
*Robert S. Westman, "The Melanchthon circle, Rheticus, and the Wittenberg interpretation of the Copernican theory," *Isis* 66.2 (1975): 164–93; reprinted in *The scientific enterprise in early modern Europe*, ed. by Peter Dear (Chicago, 1997)
*Robert S. Westman, "Two cultures or one? A second look at Kuhn's *The Copernican revolution*," *Isis* 85.1 (1994): 79–115

Oct 3 **representation**
*Sachiko Kusukawa, *Picturing the book of nature* (2012), chaps. 10–11 (199–248, 285–90)

Oct 10 **patronage**
*Richard S. Westfall, "Science and patronage," *Isis* 76.1 (1985): 11–30; reprinted in *The scientific enterprise in early modern Europe*, ed. by Peter Dear (Chicago, 1997)
*Mario Biagioli, "Galileo's system of patronage," *History of science* 28 (1990): 1–62
*Michael H. Shank, "Essay review: *Galileo, courtier: the practice of science in the culture of absolutism*, by Mario Biagioli," *Journal for the history of astronomy* 25 (1994): 236–42

Oct 17 no meeting

Oct 24 **religion**
*Gary A. Abraham, "Misunderstanding the Merton thesis: a boundary dispute between history and sociology," *Isis* 74.3 (1983): 368–87; abridged in *Puritanism and the rise of modern science: the Merton thesis*, ed. I. Bernard Cohen, New Brunswick: Rutgers University Press, 1990, 233-45
*John L. Heilbron, "Science in the church," *Science in context* 3.1 (1989): 9–28

Oct 31 **facts**
Lorraine Daston, "The language of strange facts in early modern science," in *Inscribing science: scientific texts and the materiality of communication*, ed. Timothy Lenoir, Stanford: Stanford University Press, 1998, 20–38 plus notes
*Steven Shapin, "Pump and circumstance: Robert Boyle's literary technology," *Social studies of science* 14.4 (1984): 481-520

Nov 7 **genres**
*Frans De Bruyn, "The classical silva and the generic development of scientific writing in seventeenth-century England," *New literary history* 32.2 (2001): 347–73
*Ann Blair, "Humanist methods in natural philosophy: the commonplace book," *Journal of the history of ideas* 53.4 (1992): 541–51

Nov 14 **communities**
*Simon Schaffer, "Newton on the beach: the information order of *Principia Mathematica*," *History of science* 47.3 (2009): 243–76
*Steven J. Harris, "Long-distance corporations, big sciences, and the geography of knowledge," *Configurations* 6.2 (1998): 269–304
Monika Mommertz, "The invisible economy of science – a new approach to the history of gender and astronomy at the eighteenth-century Berlin Academy of Sciences," in *Men, women, and the birthing of modern science*, ed. by Judith P. Zinsser, DeKalb: Northern Illinois University Press, 2005, 159–78

Nov 21 no meeting

Nov 28 (Th) **Thanksgiving recess**

Dec 5 presentations of prospectus and preliminary bibliography; please email your draft to all seminar participants by December 10 (Tu)

Dec 12 discussion of drafts

Dec 19 (Th) **All written work is due by 5:00 pm**