HS 161v: The Scientific Revolution (Spring '02)

New & Improved (Feb. 12th)

COURSE INFORMATION

Time: Tues. & Thur. 10:00–11:30
Place: Science Center 226
Professor: Steve Harris
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Office Hours: Tues. & Thur. 11:30-12:00, 1-2:00; Wed. 9:00-10:00
& by appointment

REQUIRED TEXTS:

COURSE DESCRIPTION:
In his book entitled, The Origins of Modern Science (1957), the British historian Herbert Butterfield made the striking claim that the Scientific Revolution

...outshines everything since the rise of Christianity and reduces the Renaissance and Reformation to the rank of mere episodes, mere internal displacements, within the system of medieval Christendom. Since it changed the character of men’s habitual mental operations even in the conduct of the non-material sciences, while transforming the whole diagram of the physical universe and the very texture of human life itself, it looms so large as the real origin of the modern world and of the modern mentality that our customary periodisation of European history has become an anachronism and an encumbrance [pp. 7-8].

A big claim. And like all big claims it has become the source of a great controversy: Should we really characterize the transformation of science between ca. 1500 and 1700 as “the Scientific Revolution”? Was it really ‘the one and only’ revolution in science? Or was it simply the biggest and most profound? Whether we claim that it was the or simply ‘a’ scientific revolution, what do we mean by that phrase? Did the scientists of the time—like Copernicus, Kepler, Harvey, Galileo, and Newton—see themselves as ‘revolutionaries’? Indeed, did they see themselves as “scientists”? These few questions suggest that as both a historical episode and a historiographical category, “the Scientific Revolution” has become one of the most interesting—and most hotly debated—periods in the history of science. The task of the course is two-fold: first, to introduce you to the major historical figures and events and second, to encourage you to take part in the historiographical debate concerning the notion of ‘scientific revolution’ and the nature of scientific change in the early modern period.
**ASSIGNMENTS & GRADES:***

**Six Reaction Papers (50 points each, 30% of grade):** Each reaction paper (2-3 pages) is to be written in response to assigned reading material, drawn either from the primary or secondary readings. There must be at least one reaction paper written for each of the three units of the course (see Schedule). All six reaction papers may be chosen from a list of suggested topics or developed by you in consultation with me. Please see file under REACTION PAPERS on the Course Webpage for details.

**Three Review Essays (100 points each, 30% of grade):** Whereas the reaction papers allow you to give a concise summary of the particular ideas of a single author, the essay reviews (5-6 pages) are where you synthesize the ideas of several authors and present a clear argument in support of a particular thesis. You are free either to choose essay topics from a list of essay questions (which I will circulate two weeks in advance of the due dates) or to come up with your own theses—though please clear your topic with me before you begin writing. Neither the reaction papers nor the essay reviews require original research; i.e., all may be written on the basis of assigned readings. Please see file under REVIEW ESSAYS on the Course Webpage for assignments and due dates.

**Retrospective Essay (200 points, 20% of grade):** Not a final exam, but an opportunity to reflect on the reaction papers and review essays you have already written. Not a new assignment per se, but the chance to revise and improve the writing you have already done in light of my comments on the original submissions. This essay (6-8pp.), which should contain large parts of the prose you have already written, allows you to review and re-think precisely those authors and themes that drew your attention over the course of the semester. The focus of this assignment is reflection upon, and refinement of previous work.

**Class Discussion (100 points, 10% of grade):** Thoughtful & concise oral summaries of assigned readings, the posing of good questions, critical analysis of their central theses, original and interesting insights into key historical problems, intelligent and respectful exchanges with other members of the class.

**Individual Consultations (100 points, 10% of grade):** An incentive to come speak with me about your interests in the class, the questions you may have about lecture or reading materials, ideas you have in regard to the writing assignments, etc.

***Note: If you have a documented learning disability and wish to have a reasonable accommodation made for you in this class, please contact me as your earliest convenience.