

History 594A: Renaissance Humanism and Science

The University of Massachusetts at Amherst

Prof. Brian W. Ogilvie

Fall Semester 1997

Monday, 2:30–5:30 PM, Herter 444

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Hours: MW 10:30-12 and by appointment.

This syllabus is also available online at the following URL:

<<http://www-unix.oit.umass.edu/~ogilvie/courses/594A/index.html> >

Updates to the syllabus, handouts, and assignments will be posted to this web page.

Brief description of course

The humanities and the sciences are often seen as opposing ways of approaching knowledge. This course focuses on their intense interrelationships during the Renaissance, before these “two cultures” had separated. The first part of the course addresses the character of Renaissance humanism, humanism's impact on education, and humanist philology. The second part of the course focuses on humanism in particular aspects of early modern science. The third part examines humanism and the sciences in a more global context, examining humanist attitudes toward the nature of knowledge, and the anti-humanist strain in seventeenth-century scientific thought.

Readings will consist about equally of selected primary sources and recent scholarly studies. As a writing seminar, the course will be geared to the production of a substantial (20-25 pp.) research paper, and students will have the opportunity to pursue independent research on a topic of interest to them.

Description and schedule of assignments

Because this course is aimed at the production of a research paper, there are few other formal written requirements. Students will be required to submit the following written assignments:

1. Preliminary bibliography.
2. Historiographic essay: a 4-5 page summary of the historiography of the research topic.
3. An outline of the paper.
4. Penultimate draft of the paper: a version of the paper for group discussion.

In addition, students will be expected to discuss their work frequently in office hours with the instructor. They are also encouraged to discuss their research among themselves.

Policy on late assignments

Late assignments will be penalized one-half letter grade for each day they are late. The only exception will be in cases where the late paper has been arranged with the instructor at least two days before the deadline or when the paper is late due to circumstances beyond the student's control. *Inability to find or use a printer will **not** be accepted as an excuse.*

Policy on academic honesty

Plagiarism is grounds for failure in the course. Plagiarism consists of either (a) copying the exact words of another work without both enclosing them in quotation marks and providing a reference, or (b) using information or ideas from another work without providing credit, in notes, to the source of the information or ideas. Submission of a paper copied from another work, or which contains fictitious or falsified notes, will result in automatic failure of the course. Please refer to the student manual for the University's full policy on academic honesty.

Books for course

These books are on order through the Textbook Annex. They will also be on reserve in DuBois Library.

- Anthony Brundage, *Going to the sources: A guide to historical research and writing*, 2nd ed. (Wheeling, IL: Harlan Davidson, 1997).
- Allen G. Debus, *Man and nature in the Renaissance* (Cambridge: Cambridge University Press, 1978).
- Brian P. Copenhaver and Charles B. Schmitt, *Renaissance philosophy* (Oxford: Oxford University Press, 1992).
- Nauert, Charles G., Jr. *Humanism and the culture of Renaissance Europe* (Cambridge: Cambridge University Press, 1995).
- William Strunk, Jr., and E. B. White, *The elements of style*, 3rd ed. (New York: Macmillan; London: Collier Macmillan, 1979) (suggested).
- Kate L. Turabian, *A manual for writers of term papers, theses, and dissertations*, 6th ed. (Chicago: University of Chicago Press, 1996) (suggested).

Other course readings will be placed on reserve. Because I arrived on campus too late to arrange copyright permissions for xeroxing, there is no course packet for the course; you may make your own photocopies if you wish.

A note on the readings

Because this course is oriented toward a substantial research paper, I have tried to keep the common readings short. They are aimed at (1) providing essential background information on Renaissance humanism, philosophy, and natural science, and (2) illustrating, with concrete historical sources, some of the phenomena about which we are talking. As we approach the end of the semester, there will be few readings in primary sources, since you will be engaging your own research materials.

It is expected that you will be doing substantially more reading in the areas on which you are writing your research paper.

I have suggested two books on writing: Turabian's *Manual* for rules on how to lay out your paper, properly cite your sources, and format your references and notes; and Strunk and White's guide to good English style.

Course schedule, with assigned readings

1. Monday, Sept. 8

- Introduction to Renaissance Humanism and the research project.

2. Monday, Sept. 15

- The *studia humanitatis* in the Renaissance.

Reading:

Nauert, *Humanism*, pp. 1-51.

Copenhaver & Schmitt, *Renaissance philosophy*, pp. 1-59.

Francesco Petrarca (Petrarch), "A disapproval of an unreasonable use of the discipline of dialectic"; "An Averroist visits Petrarch"; "Petrarch's aversion to Arab science"; and "A request to take up the fight against Averroes"; all in Ernst Cassirer et al., ed., *The Renaissance philosophy of man: Selections in translation* (Chicago: University of Chicago Press, 1948). [on reserve] (These are all quite short.)

Lorenzo Valla, "The glory of the Latin language," in *The portable Renaissance reader*, ed. James Bruce Ross and Mary Martin McLaughlin (Harmondsworth, Middlesex: Penguin Books, 1977; other eds.), pp. 131-135. [on reserve]

- Historical sources and the research paper; annotating a bibliography.

Reading:

Brundage, *Going to the sources*, pp. 16-28, 65-82.

3. Monday, Sept. 22

[Instructor in Berlin for conference.]

- Library tour: introduction to research methods. Meet in DuBois Library, main floor, at the Reference and Information Desk.

Reading:

Brundage, *Going to the sources*, pp. 29-49.

Nauert, *Humanism*, pp. 52-123 (as background reading for future discussions).

Note: Please meet with me in office hours this week to discuss your research topic. I will be holding extra office hours on Thursday and Friday from 1 to 3 for students in this course.

4. Monday, Sept. 29

- Humanism and education

Reading:

Nauert, *Humanism*, pp. 124-163.

Pier Paolo Vergerio, "De ingenuis moribus," in W. H. Woodward, *Vittorino da Feltre and other humanist educators* (New York: Bureau of Publications, Teachers College, Columbia University, 1963). [on reserve]

Johannes Sturm, "De ratione studiorum gymnasii Hieronymitani Leodii iudicium." [on reserve]

Anthony Grafton and Lisa Jardine, *From humanism to the humanities: Education and the liberal arts in fifteenth- and sixteenth-century Europe* (Cambridge, MA: Harvard University Press, 1986), ch. 1, "The school of Guarino: Ideals and practice." [on reserve]

- Historiography

Reading:

Brundage, *Going to the sources*, pp. 1-15, 50-64.

Assignment: Annotated bibliography of at least five primary sources, five monographs, and five journal articles for your research project.

5. Monday, Oct. 6

- Humanism and Peripatetic philosophy

Reading:

Nauert, *Humanism*, pp. 164-191.

Copenhaver & Schmitt, *Renaissance philosophy*, pp. 60-126.

Angelo Poliziano, "Praelectio to Aristotle's *Prior Analytics*, entitled 'Lamia.'" [on reserve]

6. Wednesday, Oct. 15 [Please note: class meets Wednesday due to the Columbus Day holiday on Monday, Oct. 13]

- The humanists and the natural philosophers

Reading:

Debus, *Man and nature*, pp. 1-15.

Leonardo da Vinci, *Notebooks*, ed. and transl. Jean Paul Richter (New York: Dover Publications, 1970), vol. 1, §§9-22. [on reserve]

Erwin Panofsky, "Artist, scientist, genius: Notes on the 'Renaissance-Dämmerung'," in *The Renaissance: Six essays* (New York: Harper Torchbooks, 1962). [on reserve]

Giannozzo Manetti, *On the dignity and excellence of man* (selection). [on reserve]

Giorgio Vasari, life of Leonardo da Vinci, in *The lives of the artists*, trans. Julia Conaway Bondanella and Peter Bondanella (Oxford: Oxford University Press, 1991), pp. 284-298. [on reserve]

Assignment: Historiographic essay (about 5 pp.) on your research subject.

7. Monday, Oct. 20

- Humanism and natural history

Reading:

Debus, *Man and nature*, pp. 34-53.

Paula Findlen, "Courting nature," in *Cultures of natural history*, ed. N. Jardine, J. Secord, and E. Spary (Cambridge: Cambridge University Press, 1996), pp. 57-74. [on reserve]

Conrad Gessner, prefatory material to *Historia animalium*; "On the Salamander." [on reserve]

Karen M. Reeds, "Renaissance Humanism and botany," *Annals of Science* 33 (1976): 519-42. [on reserve]

8. Monday, Oct. 27

- Humanism and medicine.

Reading:

Debus, *Man and nature*, pp. 54-73.

Andreas Vesalius, "The preface to *De fabrica corporis humani* [sic] 1543," trans. B. Farrington, *Proceedings of the Royal Society of Medicine* 25 (1932): 1357-1366. [on reserve]

Girolamo Mercuriale, *How to study medicine*, trans. Richard J. Durling, in "Girolamo Mercuriale's *De modo studendi*," *Osiris* 2nd. ser. 6 (1990): 181-195. [on reserve]

R. Palmer, "Medical botany in northern Italy in the Renaissance," *Journal of the Royal Society of Medicine* 78 (1985): 149-59. [on reserve]

Vivian Nutton, "'Prisci dissectionum professores': Greek texts and Renaissance

anatomists," in *The uses of Greek and Latin: Historical essays*, ed. A.C. Dionisotti, Anthony Grafton, and Jill Kraye (London: Warburg Institute, 1988). [on reserve]

9. Monday, Nov. 3

- Humanism and astronomy.

Reading:

Debus, *Man and nature*, pp. 74-100.

Regiomontanus, "Oration" on the dignity of mathematics, trans. Noel Swerdlow. [on reserve]

Nicolaus Copernicus, *On the revolutions of the heavenly spheres* (selection). [on reserve]

Robert S. Westman, "Proof, poetics, and patronage: Copernicus's preface to *De revolutionibus*," in *Reappraisals of the Scientific Revolution*, ed. David C. Lindberg and Robert S. Westman (Cambridge: Cambridge University Press, 1990). [on reserve]

Elizabeth L. Eisenstein, "Resetting the stage for the Copernican revolution," in *The printing revolution in early modern Europe*, pp. 204-225. [on reserve]

Assignment: Outline of your research paper.

10. Monday, Nov. 10

- Humanism and mathematics.

Reading:

Paul Lawrence Rose, *The Italian Renaissance of mathematics: Studies on humanists and mathematicians from Petrarch to Galileo* (Genève: Droz, 1975), ch. 2. [on reserve]

John Dee, *Mathematicall Preface to Euclid*. [on reserve]

Thomas Gechauf, preface to the first Greek and Latin edition of Archimedes. [on reserve]

11. Monday, Nov. 17

- Humanism and the challenge to Aristotle

Reading:

Debus, *Man and nature*, pp. 16-33.

Nauert, *Humanism*, pp. 192-215.

Copenhaver & Schmitt, *Renaissance philosophy*, pp. 196-284.

12. Monday, Nov. 24

- Anti-humanism and the "new philosophy" of the 17th century.

Reading:

Debus, *Man and nature*, pp. 101-141 (read quickly).

Copenhaver & Schmitt, *Renaissance philosophy*, pp. 285-328.

Francis Bacon, "The great instauration." [on reserve]

Assignment: Penultimate drafts due for group 1.

13. Monday, Dec. 1

- Discussion of penultimate drafts: group 1.

Assignment: Penultimate drafts due for group 2.

14. Monday, Dec. 8

- Discussion of penultimate drafts: group 2.

Wednesday, Dec. 17: FINAL PAPERS DUE AT NOON IN HERTER 617