

Institutions of Knowledge  
HIST 350: Topics in the History of Science  
Mondays 1.30-4.00

Darin Hayton  
Office: Hall 103  
Phone: 610.896.4976  
Office Hours: Monday/Tuesday 4.00-5.00

### **Introduction**

Who produces scientific knowledge and in what contexts? How do those contexts shape the resultant scientific and natural knowledge? Or is scientific knowledge somehow immune to external influences? In direct contrast to the myth of the lone genius struggling to uncover natural laws and to reveal how the universe works, this seminar explores the ways that different institutions have shaped the production of natural knowledge. In this approach, individuals do not discover timeless laws of nature so much as they create truths about the natural world within the economy of the institution. To understand these truths we must understand the institutions that called them into existence.

Four genera of institutions will concern us in this seminar: hospitals, universities, courts, and academies. Each of these institutions struggled to acquire the authority to make claims about the natural world. We will, on the one hand, explore how and why these institutions became authoritative. On the other hand, we will examine how historians have written about them. The goal is to appreciate the benefits of and drawbacks to different historiographic methods, while at the same time you will gain a basic understanding of their place in medieval and early-modern European culture.

### **General Course Requirement**

The class will be discussion; consequently, attendance is required. You are expected to arrive in class having done all the reading and prepared to discuss it. That means, you will need to identify and assess the author's argument, comment on how it contributes to our understanding of a particular institution, and be prepared to offer a critique. You should also try to formulate some questions or difficulties that the reading raises. For each assigned reading, you will want to find out something about the author, e.g., the person's disciplinary affiliation and other pieces of scholarship that person has written. To help you prepare for the classes, I will suggest a few questions, problems or topics to guide your reading.

### **Writing requirements**

Response papers

To help prepare for class discussions, weekly response papers should be sent to me by 4.00 pm Sunday. In general, I will distribute a short list of topics or questions to guide your reading. You

may pick one of these for your response paper or you may generate your own question or problem. In either case, your response essay should be 400-500 words. You are allowed to skip any one of these without penalty.

#### Essay review

You are to choose a monograph relevant to your final paper and write a ca. 1,500-word review of it. This essay should assess the argument, identify the historiographic approach, evaluate the sources, and identify both strengths and weaknesses in the work. This is an important exercise, for it will provide much of the foundation for your final paper.

#### Final paper

The bulk of this course is your research paper. This is to be a substantial piece of research, ca. 6,000-7,000 words, that you will work on throughout the semester. You will be expected to hand in an outline with bibliography and a draft.

#### Assessment

- Response papers — 15%, due weekly by 4.00 pm Sunday
- Essay review — 25%, due by 4.00 pm Friday, 3 March
- Final paper — 50%, due by 4.00 pm Friday, 5 May (for seniors) or 12 May (for others)
- Participation — 10%

#### Required Texts

- Timothy Miller, *The Birth of the Hospital in the Byzantine Empire*.
- Michel Foucault, *The Birth of the Clinic*.
- Charles Homer Haskins, *The Rise of Universities*.
- Mario Biagioli, *Galileo Courtier*.
- Paula Findlen, *Possessing Nature*.
- David Freedberg, *The Eye of the Lynx*.

In addition to these texts, various articles will be available through Blackboard.

#### Syllabus

16 January — Introduction

#### Hospitals

24 January — Byzantine modernity and the origins of hospitals?

T. Miller, *The Birth of the Hospital in the Byzantine Empire*

#### Hospitals

30 January — European hospitals, whom did they serve and why?

M. Rubin, *Charity and Community in Medieval Cambridge*, chaps, 2, 5 and 6

K. Park and J. Henderson, “The First Hospital among Christians”

C. Rose, “Politics and the London Royal Hospitals”

P. Gavitt, “Charity and State building in Cinquecento Florence”

## Hospitals

6 February — Clinical gaze and the creation of medical knowledge  
M. Foucault, *The Birth of the Clinic*

## Universities

13 February — Myths of origin  
C. H. Haskins, *The Rise of Universities*  
P. Grendler, *Universities of the Italian Renaissance*, chaps 1 & 5  
W. Rüegg, *A History of the University in Europe*, vol. 1, “Themes”

## Universities

20 February — Corporations of scholars  
P. Bourdieu, *The State of Nobility*, “Forms of Power and their Reproduction”  
S. Ferruolo, *The Origins of the University*, chaps 1, 2 & conclusion

## Universities

27 February — Bodies of scientific experts  
P. Kiber, “The Institutional Setting”  
M. Shank, “Academic Consulting in Fifteenth-Century Vienna”  
F. Salmon, “Technologies of Authority in the Medical Classroom”  
J. Verger, *Men of Learning in Europe at the End of the Middle Ages*, pp. 83–137  
P. Nardi, *A History of the University in Europe*, vol. 1, “Relations with Authority”

## BREAK

## Courts

13 March — Science as courtly game  
M. Biagioli, *Galileo Courtier*

## Courts

20 March — The science of display and the display of power  
P. Findlen, *Possession Nature*

## Courts

27 March — Patronage and performance

H. Watanabe-O'Kelly, *Court Culture in Dresden*, chap 4

N. Jardine, "The Places of Astronomy in Early-Modern Culture"

A. Grafton, "Humanism and Science in Rudolphine Prague: Kepler in Context"

B. Moran, "German Prince-Practitioners"

## Courts

3 April — Contours of authority

N. Elias, "Synopsis: Towards a Theory of Civilizing Process"

M. Foucault, "Truth and Power"

## Academies

10 April — Natural history as academic science

D. Freedberg, *The Eye of the Lynx*

## Academies

17 April — The Royal Society and the construction of the laboratory

M. Hunter, "The Early Royal Society and the Shape of Knowledge"

S. Shapin, *A Social History of Truth*, chap 3

S. Shapin, "The House of Experiment in Seventeenth-Century England"

P. Dear, "Totius in verba: Rhetoric and Authority in the Early Royal Society"

## Academies

24 April — Academic science as performance

P. Findlen, "Science as Career in Enlightenment Italy"

P. Findlen, "A Forgotten Newtonian"