History of Science 5533 Fall 2006

Advanced Studies in the History of Modern Science

Professor Peter Barker

Revised 16 October 2006

Primary booklist:

I expect we will read most of:


Secondary booklist:

I expect we will read good parts of:


Work for the class:
In addition to doing the weekly readings indicated below, and participating in the seminar discussion, everyone is expected to do three things for the class:

1) Make a report on a primary source, which may be selected from the list provided or your own choice (subject to PB's approval). You should summarise the content for the benefit of a general audience, locating the source historically and indicating how an historian today might make use of it. This report may be delivered from notes, but should be accompanied by a written version (maximum 5 pages) suitable for distribution to other participants.

2) Make a presentation on a secondary source, which may be selected from the list provided or your own choice (subject to PB's approval). You should summarise the content for the benefit of a general audience, locating the source historiographically ("What kind of history is this?") and appraising the work as historical writing ("How good is it?"). This presentation may be delivered from notes, but should be accompanied by a written version (maximum 10 pages) suitable for distribution to other participants.

3) Write a ten page research paper, on a topic to be selected in consultation with PB.

Dates for reports and presentations are suggested below but may be changed on request. The deadline for the research paper is 5:00pm Friday, December 8.

Weekly schedule - draft 3

1 Aug 23


Kragh, chap 1, 2

2 Aug 30

Kragh, chap 8; Russell McCormmach, "H. A. Lorentz and the electromagnetic view of nature," *Isis* 61 (1970) 459-97

3 September 6

Kragh, chap 7; Galison (2004) chaps. 1-3

4 Sept 13

5 Sept 20


6 Sept 27


Primary source: JNB: M. Curie (1904) "Radioactive substances"

7 Oct 4


8 Oct 11

Kragh chaps. 11, 13, 14; Bird & Sherwin, pp. 9-107.

9 Oct 18

Kragh chaps. 16, 17, 18; Bird & Sherwin, pp. 111-309; Rhodes (1986) 279-624.

Primary source: LRR: Schrodinger (1945)

10 Oct 25

Primary sources: SAS: Peierls et al. (1941)
Primary source DGP: ALSOS Goudsmit

11 Nov 1


Primary sources: KLS: Oppenheimer (e.g. 1953, 1956)

12 Nov 8

Kragh chap. 21; Traweek; Pickering

Primary sources: RLD: Szilard paper
Primary sources: JAS: Bell (1964); Aspect et al. (1982)

13 Nov 15

Traweek; Pickering

Primary sources: AG: Szilard (1961)

Nov 23 Thanksgiving break

14 Nov 29 Reading day

15 Dec 6 Last class