Constructed Field: The Scientific Revolution

Please answer any THREE of the following five questions.

1. How does the historiography of the scientific revolution of the 16\textsuperscript{th} and 17\textsuperscript{th} century intersect with other historical discourses about the emergence of the “modern”? In addition to considering what historians have had to say about this subject, please also discuss how various actors of the time – e.g., Copernicus, Vesalius, Galileo, Bacon, Descartes, Newton – positioned themselves with respect to discussions in their day about “progress” or “ancients versus moderns.”

2. Compare and contrast the understandings of scientific change or revolution embodied in the works of Thomas Kuhn (\textit{The Structure of Scientific Revolutions}), Michel Foucault (\textit{The Order of Things}), and Steven Shapin and Simon Shaffer (\textit{Leviathan and the Air Pump}) (*or, in addition to or in place of this last work, a more recent study that in your mind embodies a path-breaking new approach to understanding science and its historical development). 

3. Characterize the broad development of natural history from the 16\textsuperscript{th} century through the 19\textsuperscript{th} century with particular attention to the different kinds of changes it experienced in this period (in terms of theories and practices alike). To what extent would it be appropriate to characterize any of these changes as revolutionary? If the notion of “revolutions” does not seem to illuminate sufficiently the story of natural history’s development, what other themes would you introduce to improve that situation (e.g., colonial relations, broader matters of geographical differences, or issues of gender)?

4. Whereas the Scientific Revolution has long been a theme of the history of science (and in fact one of the founding themes), the idea of “place” is a rather more recent contender for the historian of science’s attention. In what ways are these themes at odds with each other? In what ways might be mutually informative? Your answer should involve some discussion of the “places” that have been associated with the scientific revolution of the 17\textsuperscript{th} century (understood both geographically and in terms of material surroundings: labs, arsenals, etc.).

5. Suppose that you have been asked to give a semester long history course devoted to the theme of Scientific Revolutions. Suppose too that the students in your class will be upper-level undergraduates taking the course as an elective in a group totally not more than thirty-five students. Sketch out a week-by-week outline of the topics you will address in the course. Indicate which themes you will emphasize and why you will do so. Indicate also which books and other sorts of readings you will choose, and what sorts of written assignments and exams you will give.