

***Second Discussion Paper*** (Due Monday, November 12):

Write a five-page essay on one of the following topics.

1. What were the central features of Aristotle's natural philosophy? Pay special attention to those parts of his philosophy that were most relevant to providing a foundation for the ancient Aristotelian/Ptolemaic view of cosmology, such as Aristotle's theory of matter and his way of explaining free fall. What are some of the more serious problems with Aristotle's natural philosophy, in your opinion?
2. Explain the basic components of Ptolemy's model of the planetary system and then contrast that system with both the Copernican and Tychonic systems. What were the major strengths and weaknesses of each system? Finally, explain how Kepler's model differed from all three.
3. What is the thesis of the underdetermination of theory choice by empirical evidence? What are the major arguments for this thesis? What might be its major problems? Illustrate your answer by reference to the debate among the Ptolemaic, Copernican, and Tychonic systems, and give one additional example from among the several examples that we discussed in class.
4. Briefly survey the major discoveries that Galileo made with the telescope in 1609 and 1610, and then explain how each of these discoveries provided evidence in favor of the Copernican, heliocentric model of the planetary system.
5. Assume that you are living in Florence in 1615, that you are a highly-educated, middle class citizen who has read all of Galileo's new works. Assume that you are also a pious Catholic. What position would you have defended in the debate over the Copernican system?
6. Explain Galileo's view of the proper relationship between science and theology. Do you agree or disagree with that view? Explain your reasoning. If you wish, illustrate your own position with an example drawn from more recent science.
7. In Meditation Three and Meditation Five, Descartes gives us rational arguments purporting to prove God's existence. Sketch one or the other of these arguments. Do you think that these arguments are persuasive? On your view, what role ought such rational arguments play in matters of faith? Should faith be grounded, instead, in a personal experience of the divine? Should it be grounded in tradition?
8. Descartes thinks that the essence of mind is thought, in all of its many forms. He thinks that extension is the essence of body. For Descartes, therefore, the human person is essentially a thinking being. Take away the mind, and the body is just an automaton, a kind of zombie. Do you think that this is an adequate view of human personhood?

9. Many people are drawn to Descartes' rationalism because they take comfort from a philosophy that promises a foundation in certainty, not just for logic and mathematics, but for the sciences, as well. Many people are made uneasy by Hume's empiricism because they feel insecure in a world where there can be no certainty about "matters of fact." These reactions are matters of the heart as well as the mind. In your opinion, when we turn to philosophy as a guide to life, do we need to find the kind of foundation that Descartes sought, or can we flourish in a world not built on certain foundations?