

Reading Assignment 5: The Telescope and Heliocentrism

ASSIGNED READING

- Galileo. “The Sidereal Messenger.” In G. Galilei. *The Essential Galileo*. Ed. by M. A. Finocchiaro. Hackett Publishing, 2008. Chapter 4. Pages 45-70 and 83-84.
- G. Galilei and C. Scheiner. *On sunspots*. Ed. by E. Reeves and A. Van Helden. Chicago, IL, USA: University of Chicago Press, 2010. Pages 1-2 and 97-102.

DUE DATE

Please bring a typed, hard copy of your answers to class on Thursday, January 19th, 2017.

TECHNICAL REQUIREMENTS

Answer questions one, two, four, and five below. Together, your answers should not be longer than a single typed page. Remember to provide page numbers indicating which passages you are paraphrasing. For the remaining optional questions, please write down the page numbers on which the authors address the question.

QUESTIONS

1. What is Galileo attempting to illustrate when draws two circles on a wall, where one is 400 times larger than the other?
2. What evidence does Galileo offer for the claim that the moon has valleys and mountains like the Earth?
3. Explain in no more than three sentences why, according to Galileo, the moon appears more like a circle than a toothed-wheel in the sky if it does contain valleys and mountains.
4. In no more than a paragraph, summarize the reasons Galileo gives for thinking what he calls the “Medicean stars/planets” (i.e., Jupiter’s moons) do in fact revolve around Jupiter.
5. In his letter on sunspots, Galileo argues that, although sunspots are likely composed of different materials than are clouds, they behave much like clouds on Earth. Explain two ways in which sunspots are like clouds, according to Galileo.

REFERENCES

- [1] G. Galilei. *The Essential Galileo*. Ed. by M. A. Finocchiaro. Hackett Publishing, 2008.
- [2] G. Galilei and C. Scheiner. *On sunspots*. Ed. by E. Reeves and A. Van Helden. Chicago, IL, USA: University of Chicago Press, 2010.