

SCI 117: History and Philosophy of Science

A survey of the philosophical, political, economic and social underpinnings of science since ancient times. The major focus of the course is on the period since the sixteenth century and on the conceptual framework within which scientists in each age have had to work. Three lecture hours per week. Gen. Ed. Competencies Met: Global and Historic Awareness and Scientific Reasoning and Discovery.

Course Student Learning Outcomes

- 1. Describe science as a method for knowing about the world, and distinguish between speculation, hypotheses, and theories.
- 2. Evaluate scientific discoveries and views of science within the context of historical time periods, cultural developments, and political climates.
- 3. Explain what is meant by "paradigm" and "paradigm shift" in the context of science and scientific revolutions.
- 4. Summarize the contributions to science made by "non-scientists" and scientists throughout history.

5. Explain the development of scientific inquiry and discoveries as collaborative and cumulative efforts. **Credits:** 3

Program: Science