“Science is the belief in the ignorance of experts.” [1]

Science is not some abstract idea. It is a social institution, with research organized and conducted by people. Apart from their special training and specialized education, scientists are no different from other people. They have similar biases and prejudices, similar hopes and dreams, similar ambitions and desires. To what extent does the human element of scientific inquiry impact the products of that inquiry? Does science warrant the authority that many ascribe to it? Is science biased toward males and male concerns? Does government sponsorship of scientific research compromise science’s objectivity? How ought scientists respond to the demands and agendas of politicians? Should political concerns contribute to the direction of scientific inquiry? This concluding unit for the course surveys some of the principal philosophical replies to these questions about the social dimensions of scientific practice, supplementing the largely epistemological focus of the other course units with attention to ethical and political issues.


Unit 6 Time Advisory
This unit should take approximately 21 hours to complete.

☐ Subunit 6.1: 5 hours
☐ Subunit 6.2: 5 hours
☐ Subunit 6.3: 3 hours
☐ Subunit 6.4: 3 hours
☐ Subunit 6.5: 2 hours
☐ Subunit 6.6: 3 hours
Unit 6 Learning Outcomes
Upon completion of this unit, the student will be able to:

- Distinguish between the intellectual organization of science and the social organization of science.
- Identify the major types of scientific field.
- Compare and contrast the organization of research in each field.
- Summarize and assess feminist equity critiques of science.
- List key questions regarding the trustworthiness of scientists.
- Summarize answers to key questions regarding the trustworthiness of scientists.
- List epistemological and axiological issues related to values in science.
- Summarize claims regarding moral and epistemic values in scientific research and practice.
- Assess claims regarding moral and epistemic values in scientific research and practice.
- List intersections between scientific research and political issues.
- Summarize key claims regarding the appropriate relationship between scientific research and political issues.
- Assess key claims regarding the appropriate relationship between scientific research and political issues.