



SCI 125: Social and Ethical Issues in Science, Technology, and Health Science

This course will explore the ethical and social issues that scientists encounter during the process of scientific investigation. This course covers topics from many scientific disciplines, including biology, medicine, physics, and astronomy. Students are exposed to the interdisciplinary nature of contemporary scientific investigation and to the ethical dilemmas that can arise when scientific advances have ambiguous implications for improving the quality of life. Class sessions emphasize student discussions and use case studies and written assignments as a format for promoting critical discussions of complex topics. Participation in this course will encourage the student to develop his/her own ethical views regarding science and technology, and will foster awareness of multiple perspectives on ethical issues in the sciences and on the role of scientific integrity in research. Three lecture hours per week.

Instructional Support Fee applies. 3 credits Fall, Spring

Course Student Learning Outcomes

After successful completion of this course, students should be able to: 1. Develop ethical reasoning skills. 2. Identify instances of scientific misconduct and the appropriate consequences. 3. Demonstrate appropriate scientific record keeping and understand its importance. 4. Discuss scientific authorship and the peer review process. 5. Understand and identify conflicts of interest. 6. Discuss the use of and ethical issues surrounding humans and animals in research. 7. Engage in informed discussions about current topics in all areas of natural science (bioengineering, nuclear medicine, nanoscience, astronomy, etc.)

Credits: 3

Program: Science