Robots, Mad Scientists, and the Man in the Moon: Exploring History, Science, and Science Fiction

In this class we’ll take a fresh look at the history of modern science by seeing how its concepts were incorporated into science fiction stories, blending fact with speculation, skepticism with wonder, and social and intellectual critiques with a commitment to asking the question: what happens next? The terrain we’ll cover crosses numerous disciplines, including history, science, literature, sociology and philosophy. We’ll start with the very beginnings of the scientific revolution during the Renaissance by looking at tales about inhabitants of the moon by Johannes Kepler and others, move on to evolutionary theory and how these debates entered into the stories created by the Victorian-era writers who helped to establish modern science fiction as we now know it – our stories will range from considerations of new mathematical ideas about the fourth dimension, to imagining feminist utopias, to the morality of animal experimentation! – and then examine how ideas about an increasingly technological world of machines, robots, and computers intersected with psychological theories about the nature of the human mind and creative freedom in science fiction projects during the cold war years.

In this class you’ll be reading books, viewing movies, participating in small group and class-wide discussions, and writing short essays about the topics we’ll be exploring. You’ll be learning to read two kinds of books: the first one, The Moon and the Western Imagination, is a more advanced discussion of historical episodes than you will likely have had in high school, and will be a good introduction to college-level reading material: I’ll be helping you with strategies for how to learn to read these kinds of texts effectively, and how to write discussion papers about the history you will learn. Our second set of books are original science fiction texts, and here I’ll be helping you learn to read not only to find out what the story’s about, but how to connect the story with the wider social, political, and historical contexts in which it is embedded. We’ll be looking at how to compare different kinds of historical sources from the same period, and how to compare earlier sources with later ones. In our last section we’ll speculate about how science fiction can be used to augment the educational process, in any number of areas, from grade school through college. Our own class is an example of this, and we’ll also look at an educational experiment from MIT in the 1950s that used science fiction in engineering classes and take a look at a few more recent attempts. We’ll also bring on board via email some interesting people in real-world jobs who are knowledgeable about the history of science and science fiction, and tap them as consultants by sending them questions we devise about science fiction as an educational supplement, and considering their answers.

Our overall goals are: to learn some fascinating history and science; to become better acquainted with how scientific ideas circulate within the wider culture; to analyze the connections between science and science fiction; and to help each one of you gain skill and confidence as thinkers and writers.