

Science and the Imagination

HONR 303 – 3 credit hours
Mark Hall, Professor of English
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University Honors Program
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Course Description: This course examines the relationship between science and science fiction from a historical and critical viewpoint. Through lecture and discussion, students learn how science and

science fiction influence each other. Students respond to readings through class discussion and appropriate writing. This course is designed to increase the students' understanding of the history and development of science, scientific theory, and science fiction as well as to sharpen their critical skills through the examination of science fiction novels and short stories.

Texts

Baxter, Stephen. *The Time Ships*. 1992. New York: Eos, 1996.
Card, Orson Scott. *Ender's Game*. 1985. New York: Tor Books, 1994.
Card, Orson Scott, ed. *Masterpieces: The Best Science Fiction of the 20th Century*. New York: Penguin Group, 2004.
Clarke, Arthur C. *The Collected Stories of Arthur C. Clarke*. New York: Orb Books, 2002.
Crichton, Michael. *Jurassic Park*. 1990. New York: Ballantine, 1991.
Heinlein, Robert A. *The Moon is a Harsh Mistress*. 1966. New York: Orb Books, 1997.
Lewis, C. S. *Out of the Silent Planet*. 1938. New York: Scribner, 2003.
Miller, Walter, Jr. *A Canticle for Leibowitz*. 1959. New York: Spectra, 1997.
Orwell, George R. *1984*. 1948. New York: Signet Books, 1990.
Silverberg, Robert, ed. *The Science Fiction Hall of Fame*. Vol. 1. 1971. New York: Orb Books, 2005.
Stewart, George R. *Earth Abides*. 1948. New York: Fawcett, 1986.
Warrick, Patricia S., Charles C. Waugh, and Martin H. Greenberg, eds. *Science Fiction: The Science Fiction Research Association Anthology*. New York: Longman, 1997.
Wells, H. G. *The Time Machine*. 1895. New York: Tor Classics, 1992.

Syllabus

Date	Topic
Week 1	A Brief History of Space H. G. Wells, <i>The Time Machine</i>
Week 2	The Earth and the Moon Stephen Baxter, <i>The Time Ships</i>
Week 3	The Solar System Michael Crichton, <i>Jurassic Park</i>
Week 4	Stars Robert A. Heinlein, <i>The Moon is a Harsh Mistress</i>
Week 5	Life, the Universe and Everything C.S. Lewis, <i>Out of the Silent Planet</i>

Week 6	Nuclear Physics Walter Miller, Jr., <i>A Canticle for Leibowitz</i>
Week 7	The Standard Model for Sub-Atomic Particles George R. Orwell, <i>1984</i>
Week 8	Quantum Mechanics Selected Short Stories
Week 9	From Newtonian Mechanics to Einstein's Special Relativity George R. Stewart, <i>Earth Abides</i>
Week 10	General Relativity Orson Scott Card, <i>Ender's Game</i>
Week 11	The Theory of Everything Isaac Asimov, "Nightfall"; Jerome Bixby, "It's a Good Life"; and James Blish, "Common Time"
Week 12	Negative Energies, Warp Drives, Time Travel, and Anti-Gravity Machines Ray Bradbury, "There Will Come Soft Rains"; John Campbell, "Who Goes There?"; and Arthur C. Clarke, "The Star"
Week 13	Space Exploration: SETI – ESA – NASA Lester Del Rey, "Helen O'Loy"; Harlan Ellison, "'Repent Harlequin!' Said the Ticktockman"; and Stanley Weinbaum, "A Martian Odyssey"
Week 14	Hardware, Software, and Wetware
Week 15	Review and Synthesis
Week 16	Final Examination

Grading Policy:

Critical Analysis Paper (10%)
 Science Fiction Novella (15%)
 Research Project (15%)
 Scientific Worldview Paper (15%)
 Exam 1 (Objective & Essay) (10%)
 Exam 2 (Objective & Essay) (10%)
 Film Critiques (5%)
 Final Exam (20%)

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