**Science and the Imagination**

**HONR 303 – 3 credit hours**

**Mark Hall, Professor of English**

**Andrew Lang, Professor of Mathematics**

**Oral Roberts University**

**University Honors Program**

**John Korstad, Director**

**General 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:**

Week 1 A Brief History of Space

H. G. Wells, *The Time Machine*

Week 2 The Earth and the Moon

Stephen Baxter, *The Time Ships*

Week 3 The Solar System

Michael Crichton, *Jurassic Park*

Week 4  Stars

Robert A. Heinlein, *The Moon is a Harsh Mistress*

Week 5    Life, the Universe and Everything

C.S. Lewis, *Out of the Silent Planet*

Week 6  Nuclear Physics

     Walter Miller, Jr., *A Canticle for Leibowitz*

Week 7 The Standard Model for Sub-Atomic Particles

George R. Orwell, *1984*

Week 8  Quantum Mechanics

Selected Short Stories

Week 9  From Newtonian Mechanics to Einstein’s Special Relativity

       George R. Stewart, *Earth Abides*

Week 10  General Relativity

     Orson Scott Card, *Ender’s Game*

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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