

PACIFICA GRADUATE INSTITUTE

Mythological Studies Program
PhD III Summer 1999

Myth & Science MS 713
Instructor: Dr. Christine Downing

Office Hours: By appointment

COURSE SYLLABUS

A. Course Description

The course will explore the complex interaction between myth and science, including consideration of the presumed tension between scientific and mythic thinking, the alternative view that science (particularly evolutionary theory and cosmology) functions as a contemporary myth, and the blending represented by science fiction.

The textbook for the course, John Horgan's *The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age* was chosen to help us look at contemporary scientific theories (in the fields of quantum physics, cosmology, evolutionary biology, neuroscience, etc.) as these are understood within science, by scientists. Other readings are designed to encourage us to look at science more critically, more mythically.

Before the course begins (and ideally before you do any of the reading): write a one or two page paper articulating your own view of the relation between science and myth. Please bring this to our first class meeting.

B. Class Schedule and Readings

DAY ONE:

Mythology and Science: an overview of their relation. How science emerges out of myth and then comes to stand over against it -- but functions as the myth of our culture

Required Reading:

Frankfort, H., H. A. Frankfort, John A. Wilson and Thorkild Jacobsen. "The Emancipation of Thought from Myth." *Before Philosophy*. Baltimore: Penguin Books, 1946, pp. 237-263.

Berman, Morris. "The Disenchantment of the World." *The Reenchantment of the World*. NY: Cornell University Press, 1981, pp. 67-113.

Keller, Evelyn Fox. "Dynamic Autonomy: Objects as Subjects." *Reflections on Gender and Science*. New Haven: Yale University Press, 1985, pp. 95-114.

Supplementary Reading:

Midgley, Mary. *Science as Salvation*. 1919. NY: Routledge, 1992.

Thompson, William Irwin. *Imaginary Landscape: Making Worlds of Myth and Science*. NY: St. Martin's Press, 1989.

DAY TWO:

Cosmology and Evolutionary Biology

The stories science tells about the creation of the universe and its possible end, about the creation of our earth, and about the emergence and diversification of life.

Assigned Reading:

Horgan, John. *The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age*. Reading, MA: Addison-Wesley Publication, 1996.
chapters: 3, 4 & 5

Supplementary Reading:

Heisenberg, Werner. *Physics and Philosophy*. NY: Harper & Row, 1962.

Appleman, Philip, ed. *Darwin*. NY: Norton, 1970, pp. 279-287, 385-392, 393-401, 405-410, 411-422.

Scientific American, Special Issue: Life in the Universe. Oct. 1994

DAY THREE

Anthropology and Psychology

The stories science tells about the emergence of human life and consciousness *and* the stories humans tell about science.

Assigned Reading:

Horgan, John. *The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age*. Reading, MA: Addison-Wesley Publication, 1996.
chapters: 6, 7, 9, 10 and Epilogue

Supplementary Reading:

A short story or full-length example of science fiction

Some suggestions:

Iain Banks, *Player of Games* and *Use of Weapons*

Kim Stanley Robinson, *The Mars Trilogy*

Nancy Kress, *Beggars and Choosers*

C. Course Requirement and Evaluation:

A well-written 6-8 page paper (6 to 12 pages will be accepted) which articulates how by the end of the course you view the relation between science and myth OR one which focuses on a particular scientific theory and its mythic or anti-mythic aspects. You are also free to write on a topic of your design discussed with the instructor on campus or by e-mail (crsrvr@pacificrim.net.)

Paper should be postmarked by _____ for the E group and _____ for the G group.

Please mail your papers to:

Christine Downing
11 Discovery Way
Eastsound WA 98245.

PLEASE DO NOT SEND BY CERTIFIED OR EXPRESS MAIL OR BY ANY MEANS
WHICH REQUIRES MY SIGNATURE