

LEARNING SCIENCE THROUGH SCIENCE FICTION

Ph 378U or Sci 355U

SYLLABUS FOR FALL 2001

9/5/02

Instructor: Donald G. Howard 725-4224 email: HOWARDD@PSU4.PDX.EDU
Office: 402 SB2 (also try lab in 417 SB2)
Regular hours: Tu, & Th 11 - 12
or by appointment (i.e., try anytime, especially Friday mornings).

You are welcomed to stop by my office and chat anytime about anything, pertaining to the course or to Physics or to whatever you are currently reading. If you have trouble finding me, leave a message on my answering service or email and we will negotiate a satisfactory time.

Class Hours 2-3:50 M & W 247 SB2

This class is offered under two options:

Ph 378U as a physics course for those who need science credits.
Sci 355U as part of the Science for the Liberal Arts cluster.

Goals for the term:

Learn how to read fiction for the science content as well as the plot and characters.
Develop critical analysis skills for the proposed scientific speculation.
Understand how science enhances projections of future societies and situations.
Develop skills in writing about science, and in critiquing the stories and videos of others.

Assignments for the Term:

Read and discuss two (assigned) novels.
Read a third novel of your choice, and write a final paper about the scientific concepts it contains.
View in-class videos and discuss the concepts involved.
Write short essays weekly on assigned topics.

Reading Materials:

Rocheworld -- Robert L. Forward
Cosm -- Gregory Benford

These books are available at: ***Looking Glass Books***
318 S.W. Taylor St.

Reading assignments:

week 1 through 4 Read ***Rocheworld***
week 5 through 7 Read ***Cosm***
week 8 through 10 Read novel of your choice for the term paper

Reference material:

As soon as you are properly registered for one of the two course numbers, you have access to the course website that has extensive background material on scientific topics.

www.webct.pdx.edu

Your ID is your odin username.

Grading:

I will presume that you are putting out your best effort on the course, completing assignments on time, and dealing with the assigned subject material. I also assume that you will be present for almost all of the class sessions, and that you will participate in discussions and class activities. If this is all true, you can expect to receive at least a B grade. An A grade will mean that you have been particularly insightful, imaginative and creative in at least a part of the work.

I hope to read a fair proportion of the things you write during the quarter, and to make comments to you on them. In order to allow me to read your work as easily as possible, I request that your papers (apart from in-class free writes) be done on a word processor, that they be spell-checked and in general proof-read as carefully as possible, and that they be neatly printed in a reasonable type face – probably 10 or 12 point.

Written work will be “graded” using the following system:

work satisfactory in content and form	check mark
work especially insightful	plus sign
work minimal or with little content	minus sign
work not about the assigned topic	zero sign

I am more interested in content and organization than I am in form. I will try to indicate errors in grammar, punctuation, spelling, etc. *I expect this to be improving steadily.* If you are having a particularly hard time doing the writing, I will be happy to direct you to places where you can receive help.

I **strongly** suggest that you keep a journal during the term. It will be particularly useful to you to make notes during your reading, since this will give you topics to bring up in class discussions, and will help you find appropriate references in the novels to use in discussing the assigned topics on the weekly essays.