PHYS 2100, Honors Physics

Fall 2008 MW, 11:30-12:20 HU 173A

Instructor: Dr. Larry Smith SCNCE 111 283-7520 Larry.Smith@snow.edu http://www.snow.edu/larrys

Texts: Coming of Age in the Milky Way by Timothy Ferris (required) ISBN 0-06-053595-4
Physics For Poets 5th edition by Robert H. March (required) ISBN 0-07-247217-0
Cosmos by Carl Sagan (recommended as a supplement) ISBN 0-394-71596-9

Objectives: We will gain an increased appreciation for the methods and approaches and limitations of science as well as for the wonders of nature and the universe. We will also learn how to learn and think in scientific ways. New sources of information will be explored as we hone our learning skills. Students will be able to demonstrate General Education Outcomes 1) Read effectively, constructively, and critically; 2) Write clearly, informatively, and persuasively; 3) Speak effectively in a variety of contexts; 4) Retrieve, evaluate, interpret, and deliver information through a variety of traditional and electronic media; and 7) Apply scientific reasoning to a variety of contexts.

Participation and Help: Participation in class discussions is very important. Answer and ask lots of questions. Also subscribe to the class e-mail list, LS-purple. You are encouraged to see me during my regular office hours (M-F 10:30-11:20), and at other times by appointment or by e-mail (either to me privately or to the class list). Students with medical, psychological, learning or other disabilities desiring accommodations, academic adjustments, or auxiliary aids will need to contact the Disability Resource Center, room 221 Greenwood Student Center, phone number (435) 283-7321. The Americans With Disabilities Act (ADA) Coordinator at the Disability Resource Center (DRC) determines eligibility for and authorizes the provision of appropriate services and aids.

Chapter Journals: Write a questioning, thought-provoking journal entry to the class e-mail list for each Ferris chapter before the class discussion on that chapter. They will be used as a basis for the discussion in class. (Their other purpose is to demonstrate that you've done the reading and explored the material.) Length is not the main goal; questions and insights for discussion are; however, extremely short journals can't fulfill the purpose. These journals can be relatively informal and personal. There should be a **separate** journal entry for each chapter of the Ferris book. If your journals are late we lose the benefit of them during the discussion; therefore, late (not sent before class) journals will not earn full credit. I also expect your classmates to respond to your journal entries, and vice versa.

Homework: One homework assignment will be to lead the class discussion on three of the chapters in Ferris' book. You are not expected to give an extensive presentation or lecture on them (you might not even stand up!), just to lead the discussion in an intelligent way, using the e-mail journal entries as a basis. Make sure important points aren't missed, keep us on track. Ask questions. There will also be a few other homework assignments, including some on the web on our Blackboard system.

Term Paper: Write a five to seven page (not including the title page, diagrams, bibliography, or endnotes) research paper (typed rough draft due on Nov. 5, final draft due on Nov. 19; no late papers accepted) which explores some question (topic cleared by me by Oct. 1) about the physical universe which is of interest to you. It should be typed and you should use (and cite properly) at least five sources in addition to any encyclopedias; at least one of these sources must come from the internet and one must come from a traditional paper source. This should be the best paper you have ever written. Also give a short presentation to the class about your paper during the last few days of class.

Final Exam: The final is scheduled for Tuesday, December 9, 2:30-4:30 p.m. in our classroom.

Grading:						
	Homework	10%	Mid-term Test	15%	Quizzes	5%
	Term Paper	20%	Journals	20%	Final Exam	20%
	Participation	10%				