PHYS 175: Introduction to the Universe (Winter 2013)

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   Office: Physics 241
   Office Hours: Right after class or Thursday 2:30 – 4:00 or email me

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Lectures: Tues/Thurs 8:30 – 9:50 am, Room: Physics 150, starting January 8th


Other Materials: Lecture slides, problem sets & solutions, reading assignments, course announcements, etc., will be posted on UW LEARN

Course Structure:
1. Reading assignments and quizzes: Relatively straightforward background facts and concepts
2. Lectures, problem sets, midterm test & final exam: Deeper concepts and calculations
3. Complementary to PHYS 175L: Theoretical vs. observational

Course Grading:
1. 20%: Weekly quizzes (based on reading assignments)
2. 20%: Approximately biweekly problem sets (based on lectures)
3. 20%: Midterm test (after Parts 1 & 2—Solar System & Stars)
4. 40%: Final exam

Course Outline:
0. Introduction (1 lecture)
1. Solar System (5 lectures)
   a. Thales to Ptolemy
   b. Copernicus, Kepler & Galileo
   c. Newton
2. Stars (7 lectures)
   a. What is a star?
   b. Exotic stars
   c. Black holes
3. Cosmology (9 lectures)
   a. What was the Big Bang?
   b. What is the universe made of?
   c. Other unsolved mysteries
The Fine Print

Work Expected:
1. Attend lectures and take appropriate notes. You are responsible for everything presented.
2. Keep up with the reading assignments.
3. Complete and submit the quizzes and problem sets on time.
4. Sit the midterm test and final exam.

No exceptions will generally be made for students who submit quizzes or problem sets late, or who are absent from the midterm test or final exam. The weekly work-load for the course should be 3 hours of lectures, about 2-3 hours of reading, and about 2-3 hours of other work (quizzes and problem sets). Students should also check the UW LEARN course website regularly for course announcements.

Notes on Quizzes:
1. Register for MasteringAstronomy using the registration package that comes with the textbook.
2. The weekly quizzes are to be done on your own.

Notes on Problem Sets:
1. Collaboration and/or discussion with other students are allowed on the problem sets, but they must nonetheless be written up individually—copies are not acceptable. If you are working with others please indicate this on your work.
2. The problem sets are to be submitted in class, then will be graded and handed back in class. Uncollected problem sets will generally be kept for 1-2 months after the end of the course, but no longer (tests and exams are kept for longer, as per faculty requirements).

Notes on Midterm Test and Final Exam:
1. No form of collaboration, copying, discussion or use of notes or aids other than those provided by the instructor is allowed on the midterm test or final exam.
2. Attendance at the test and exam is mandatory, and they will not generally be rescheduled, except in cases of severe illness or personal trauma. Any medical exceptions must be documented by a signed medical note from a doctor or clinic, indicating the date and severity of the illness, and will only be accepted at the instructor’s discretion. The test and exam will not be excused for minor complaints or student travel plans. Students with chronic health problems should consult with the Office of Disabilities for alternate exam arrangements.
3. For information on academic offenses and types of penalties, students should refer to UW Policy # 71, Student Academic Discipline, http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm

Note for Students with Disabilities:
The Office for Persons with Disabilities, located in Needles Hall Room 1132, collaborates with all academic departments to arrange appropriate accommodation for students with disabilities; this is done without compromising the academic integrity of the curriculum. If you require this service, please register with the OPD at the beginning of each academic term.

Drop-dates:
Students concerned about the level of the course, course requirements, or their performance should keep in mind cut-off dates for dropping courses without penalty.