Overview

Astronomy is the study of the universe in which we live. The celestial bodies, including Earth, will be studied to improve our understanding of the origins, evolution, composition as well as the motion of these celestial bodies including: stars, planets, asteroids, comets, and meteors. Astronomers look at the universe and see a vast system of objects waiting to be discovered and understood.

Learning Objectives:

- Recognize scientific and quantitative methods used by astronomers, and apply these methods in lecture classes to develop critical thinking skills within the area of the natural sciences and Astronomy in particular.
- Recognize scientific and quantitative methods used by astronomers, and apply these methods in the laboratory portion to develop empirical and quantitative skills within the area of the natural sciences and Astronomy in particular.
- Recognize approaches used by astronomers to communicate findings and interpretation, and apply these approaches in the laboratory portion of the course to develop communication skills within the area of the natural sciences and Astronomy in particular.
- Develop teamwork skills in the laboratory portion of the course, to be able to work effectively with others and support a shared purpose or goal.
- Identify and recognize scientific theories dealing with the creation of our solar system.
- Demonstrate knowledge of the major issues and problems facing astronomy today; e.g., how many “planets” revolve around our sun?
- Demonstrate knowledge of the interdependence of science and technology and the effects on our modern culture. Today’s astronomical instruments and techniques are expanding our views of the earth and its place in the universe.

Grading Policies:

- Lab Reports 40%
- Quizzes 35%
- Final Exam 25%
- Core Course Assessment Pre-Test 5%
- Core Course Assessment Post-Test 1.25%

At the end of the semester only one lab report grade may be dropped. Quizzes will be in blackboard. They will be available for one week. They will open at 12:01 am on Tuesdays and will close on the following week on Monday at 11:59 pm. There will be no extensions. The quizzes will usually consist of 10 multiple choice or true/false questions and will cover materials from the laboratory of that day. There will be a 10 minute time limit on

Materials

- Laboratory Handouts
- Scientific Calculator
- Pencil

Schedule

Aug.29-Sept.2 – Syllabus & Pretest
Sept.5- No Classes (Labor Day)
Sept.6-12-Graphing
Sept.13-19- Seasons (Planetarium)
Sept.20-26- Moon Phases and Topography
Sept.27-Oct.3- Edipses
Oct.4-10- Units, Measurements, Angular Size
Oct.11-17- Ray Tracing
Oct.18-24- Atomic Spectra
Oct.25-31- Telescopes (Planetarium)
Nov.1-7- Parallax
Nov.8-14- Solar System
Nov.15-21- Celestial Globe
Nov.22-27- No Classes (Thanksgiving)
Nov.28-Dec.4- Lab Finals
quizzes. At the end of the semester only one quiz grade may be dropped. The departmental final exam will contain both questions on theory and a practical laboratory in which the individual student will utilize a piece of laboratory equipment or items supplied from a laboratory experiment to answer questions.

Completion of the laboratory class is required to pass the course. If you fail the laboratory (grade of less than 60 of 100), you will receive a failing grade for the entire course regardless of your lecture grade.

Requirements

Attendance: Attendance is mandatory.

Unless otherwise approved by the laboratory instructor and Laboratory Supervisor, upon a 3rd absence (whether excused or unexcused), the student will receive an “F” for the entire course not just the laboratory portion. You may not receive laboratory credit by attending or transferring to another laboratory session without the approval of both the laboratory instructor and the Laboratory Supervisor which are handled on a case by case basis. A student who knows that they will miss a laboratory should make arrangements with the laboratory instructor prior to missing the laboratory; otherwise, a student who has missed a laboratory should contact their laboratory instructor immediately. There are no make-up quizzes. A student, by making appropriate arrangement through the laboratory instructor and Laboratory Supervisor, may make-up a laboratory but only by attending one of the other lab sections during the same week in which the laboratory was missed.

Course Drops:

You will not be dropped by the instructor. According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.

Student Questions/Concerns:

May be directed to the Laboratory Supervisor: Hector Leal, Office SCIE 3.140, Office Tel.: (956) 665-2185; or Office PHYS 1.118, Tel: (956) 665-3521; Email address hector.leal@utrgv.edu

Students with Disabilities:

If you have a documented disability (physical, psychological, learning, or other disability which affects your academic performance) and would like to receive academic accommodations, please inform your instructor and contact Student Accessibility Services to schedule an appointment to initiate services. It is recommended that you schedule an appointment with Student Accessibility Services before classes start. However, accommodations can be provided at any time. Brownsville Campus: Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at accessibility@utrgv.edu. Edinburg Campus
Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at accessibility@utrgv.edu.

**Mandatory Course Evaluation:**

Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades.

**Scholastic Integrity:**

As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism, and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

**Sexual Harassment, Discrimination, and Violence:**

In accordance with UT System regulations, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect in an environment free from sexual misconduct and discrimination.