SYLLABUS

The Universe and Humanity: Origin and Destiny

PTYS 170B2, Spring 2019, Section 002 12:30-1:45, Tuesday and Thursday, Room 308, Space Science Building

Instructor

Dr. Roger Yelle

Office 525 Space Sciences Building

Phone 621-6243

Email <u>yelle@lpl.arizona.edu</u>

Office Hours 1:45-2:45 Tuesday and Thursday

Teaching Assistant

Siddhartha Sirsi

Office Steward Observatory room 210

Email <u>ssirsi@email.arizona.edu</u>

Office Hours MWF 11:00-12:00

Course Objectives: This course introduces the student to a physical description of the properties our solar system and the recently discovered solar systems around other stars. The course is designed for non-science majors and presents scientific ideas in a descriptive rather than analytic manner. The course will introduce the scientific method, illustrate the application of scientific principals, and provide the basic tools necessary to make informed decisions about scientific and technological problems. Ultimately, the goal is to instill in students a deeper understanding of the forces that shape our universe, solar system, planet, and humanity. Subject matter includes the motion of the Sun, Moon, planets and stars in the night sky, a description of physical conditions on the planets, discussion of the processes responsible for physical conditions on the planets, and the relationship of humanity to the planets.

Textbook: None.

Web Site: https://d21.arizona.edu/d21/home/771797

Grades: Grades will be based on four components, weighted as follows:

30% Exams 30% Writing Assignment

25% Homework 15% Sun Journal

Final grades will be determined using a statistical method (curve) based on the overall performance of the class. The total grades, calculated using the percentages above, will be scaled so that the average grade in the class is at the B/C boundary. Grades will be posted on the web site throughout the course. Class participation will be evaluated using in class activities.

Exams.

There will be three exams. Two exams will be given during a regularly scheduled exam period. The last exam will be given during the final exam period. Each exam is worth 10% of the grade. All exams will be cumulative but focused on more recent material.

The final exam is from 12:30 AM to 1:45 PM on April 30.

Essay

A written essay on a scientific topic is required. The essay can be on topic of current interest, or a topic of special interest to the student. The essay should be between 3 and 5 pages long (single spaced) and will be graded both on content and presentation, including grammar, writing style, and clarity of presentation. Students are required to turn in a short description of the proposed essay, a first draft, and a final draft. Late essays will not be accepted. Essays will be sent to turnitin.com to be examined for plagiarism. Because the essay is a significant fraction of the final grade failure to turn it in on time will results in a very low final grade.

Homework.

Homework will be given on Thursday of each week except for those preceding an exam. No late homework will be accepted. The lowest homework grade will be dropped from the final grade.

Absences and Late Work.

Make-up exams and will be available for students who are absent either for University-approved activities that have the Deans approval (e.g., intercollegiate athletics, preprofessional conferences, etc.) or as a result of an illness for which you can provide a doctor's note. The instructor will evaluate other situations on a case-by-case basis. Late homework and essays will not be accepted.

Academic Integrity.

It is strongly recommended that all students read the University of Arizona's Code of Academic Integrity at http://dos.web.arizona.edu/uapolicies/. All students in this course are expected to abide by this code, which will be strictly enforced. Cheating will not be tolerated in any form. Direct copying from any uncited source is prohibited. Any instance of duplication in the homework or writing assignments will result in at least the loss of credit for the assignment grade. A stiffer penalty may be imposed if the situation warrants it, according to the judgment of the instructor. If a student is caught cheating on an exam, the penalty will be failure in the course.