

**EARTH AND SPACE SCIENCE (Dual Credit)**  
**PHYS 1304: Astronomy of the Solar System (Lecture) 3 Credits / PHYS 1103 Stellar**  
**Astronomy (Lab) 1 Credit**  
**Spring 2022**

**INSTRUCTOR:** Prof. Richard James  
**EMAIL:** [rjames@bradvisd.org](mailto:rjames@bradvisd.org)  
**Conference:** Period 6

**Course Description:**

Earth and Space science is a dual credit course divided into two sections. The first half of the scholastic year will consist of Earth Science, and the second half of the year will cover Solar System Astronomy. Each lecture class (3 credits) will have an accompanying lab component (1)

**Astronomy of the Solar System** will be an introduction to the study of the Solar System and planetary astronomy. A focus will be placed on the history of astronomy, and the basics of planetary astronomy and geology

**Required Materials**

**Textbooks**

Astronomy by OpenStax – [Get a free digital textbook at openstax.org. ISBN: 9781938168284](https://openstax.org/details/textbook/9781938168284)

-Blackboard  
-ASU account

Binder  
Spiral Notebook (lab notebook)  
Pen / Pencil / Colored Pencils / Ruler / Compass  
Rite in the Rain Notebook

*Field Trips:*

There are tentative field trips planned for this class, in which you will be expected to have appropriate weather appropriate attire.

*Grading:*

The lecture portion of the class will account for 70% of your total grade. Within this 70% the grading will be divided as follows

Exams: 50%  
Group Project: 50%

Lecture:

In this course you will be expected to:

- Have a knowledge of the history of astronomy.
- Have a basic understanding of orbits and gravity.
- Know the interactions between the Earth Moon and Sky
- Have a fundamental knowledge of the solar system
- Understand the sun and its cycles
- Have a basic understanding of comets, dust and space debris

### **Lab Portion**

There will be 10 labs that will count for 30% of your grade. Lab exercises may be turned in at the end of the lab period, in my mailbox, or at the beginning of the next lab meeting if more time is needed. Lab exercises that are not turned in at the end of the lab are due one week after they are assigned. Full credit will not be given to late labs. Most labs will be completed and turned in during the lab period.

<b>Lab</b>	<b>Lab Topic</b>
1	Lab Safety Review
2	The Celestial Sphere
3	Phases of the moon
4	Planetary Objects
5	Mass of Jupiter
6	Scale Sizes of the Solar System
7	Lunar Features
8	Impacts and Craters
9	Landscapes of Mars
10	Galaxies

### **ACADEMIC INTEGRITY**

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university's Statement of Academic Integrity.<sup>xiii</sup>

### **ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES**

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services,

programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website.<sup>xiv</sup> The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford  
Director of Student Disability Services Office of Student Affairs  
325-942-2047  
dallas.swafford@angelo.edu  
Houston Harte University Center, Room 112

## **INCOMPLETE GRADE POLICY**

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures<sup>xv</sup> for more information.

## **PLAGIARISM**

Plagiarism is a serious topic covered in ASU's Academic Integrity policy<sup>xvi</sup> in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the ASU Writing Center.<sup>xvii</sup>

## **TITLE IX AT ANGELO STATE UNIVERSITY**

Observance of

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for more information.

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: Incident Reporting Form<sup>xix</sup>

Face to Face: Mayer Administration Building, Room 210 Phone: 325-942-2022

Email: michelle.miller@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24- Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the Title IX website<sup>xx</sup>.

## **MODIFICATIONS TO THE SYLLABUS**

This syllabus, including grade evaluation and course schedule, is subject to modification. The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student's responsibility to look for such communications about the course daily.