The University of Texas at Tyler
Syllabus
Summer 2025
Introduction to Astronomy
Physics 1303

Instructor: Dr. Randy Back
Classroom: N/A
Class Time: N/A
Office: RBN 4047
Phone: (903) 565-5797
Email: rback@uttyler.edu
Office Hours: By appointment. Please contact me anytime you have questions.
Course Topics: This course is a survey course that will cover the solar system, the life cycle of stars, cosmology, the big bang, dark matter and dark energy. This course satisfies 3 hours of LPS or STEM component of the core.

Text: The textbook is *Cosmic Perspective-With Modified MasteringAstronomy* by Bennett 9th edition.

ISBN 13: 9780135720875

Prerequisite: None

Homework (HW) : Homework will be done on https://mlm.pearson.com/northamerica/masteringphysics/ . The course ID is back60585. Homework is one of the most important parts of this class.

Tests: There will be a **midterm** and a **final** for this class. The tests will be online on the homework website.

Projects: You will submit two videos' during the semester on an astronomy topic of your choice. The video will be at most 5 minutes long and the topic must be from a chapter in the book that we are **not** covering. There will be a discussion page on Canvas where you will submit the video. The first video will be due by midnight on July 23. The second video will be due by midnight on August 8. In the video you will explain the topic you've chosen as if you were talking to someone who had no knowledge of Astronomy.

Make-up: No late work will be accepted. If you have an excused absence you must make up the work before the due date.

Grading: The components of your final grade are given below

Final – 35 %
Midterm- 35 %
Homework – 20%
Projects – 10%

Your final letter grade will be given based on the following percentages: A (90%-100%), B (80%-89%), C (70%-79%), D (60%-69%),F (<60%).

Disability Statement: "If you have a disability, including a learning disability, for which you request disability support services/accommodation(s), please contact Ida MacDonald in the Disability Support Services office so that the appropriate arrangements may be made. In accordance with federal law, a student requesting disability support services/accommodation(s) must provide appropriate documentation of his/her disability to the Disability Support Services counselor. In order to assure approved services the first week of class, diagnostic, prognostic, and prescriptive information should be received 30 days prior to the beginning of the semester services are requested. For more information, call or visit the Student Services Center located in the University Center, Room 282. The telephone number is 566-7079 (TDD 565-5579)." Additional information may also be obtained at the following UT Tyler Web address: http://www.uttyler.edu/disabilityservices.

Social Security Statement: It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number.

Note Regarding Student Absence due to Religious Observance: Students who anticipate being absent from class due to a religious observance are requested to inform the instructor by the second class meeting of such absences.

Grade Replacement

If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the registrar by the Census date. Failure to file an intent to use grade forgiveness will result in both the original and repeated grade being used to calculate your overall grade point average. A student will receive grade forgiveness (grade replacement) for only three (undergraduate student) or two (graduate student) course repeats during his/her career at UT Tyler. (2006-08 Catalog, p.35)

Student Academic Conduct

In this course students are encouraged to work in groups when doing homework and preparing for quizzes and tests. However, during quizzes and examinations a code of honor will apply under which students are to work alone and neither give help to others nor receive help from any sources. Cheating will not be tolerated.

Concealed Campus Carry

We respect the right and privacy of students who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at http://www.uttyler.edu/about/campus-carry/index.php.

A more complete description of University policies is listed at the following website:
http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf
The Census day is July 10
Last Day to withdraw from a course is July 29

Course Objectives/Student Learning Outcomes

1. The student should be able to discuss the formation of the solar system and the observations that led to our current understanding of the formation of the solar system.
2. The student should be able to discuss the life cycle of a Star.
3. The student should be able to describe the evidence for the Big Bang.
4. The student should be able to explain the significance of dark matter and dark energy.

Departmental statement on cell phones and electronic devices.

Cell phones, smart watches, and any similar electronic devices must be turned off and put away during exams. If they observed out in a visually accessible place (*i.e.* between legs, on the floor, *etc.*), it will be assumed that they are being used to cheat; your exam will be taken away, you will receive a zero score (0 points) for the test, and you will be referred to the Office of Judicial Affairs.

General Course Information

1. You are responsible for all the material in the chapters we cover.

2. Science builds on itself. It is very important that you do not fall behind on the material.
3. It might be necessary to reread sections of the book if you don't understand something. If you do not understand the material in the book you will not understand the material on the tests.
4. It is very important that you spend time reading the material and doing the homework.
5. **I strongly encourage you to ask questions.**

Schedule

Monday 7/7 Watch Chapter 1 video lecture and read Chapter 1

Tuesday 7/8 Homework for Chapter 1 due by Midnight

Wednesday 7/9 Watch Chapter 2 video lecture and read Chapter 2

Thursday 7/10 Homework for Chapter 2 due by Midnight

Friday 7/11 Watch Chapter 3 video lecture and read Chapter 3

Monday 7/14 Homework for Chapter 3 due by Midnight

Tuesday 7/15 Watch Chapter 4 video lecture and read Chapter 4

Wednesday 7/16 Homework for Chapter 4 due by Midnight

Thursday 7/17 Watch Chapter 5 video lecture and read Chapter 5

Friday 7/18 Homework for Chapter 5 due by Midnight

Monday 7/21 Watch Chapter 7 video lecture and read Chapter 7

Tuesday 7/22 Homework for Chapter 7 due by Midnight

Wednesday 7/23 Watch Chapter 8 video lecture, and read Chapter 8, Project 1 due by midnight

Thursday 7/24 Homework for Chapter 8 due by Midnight, Midterm (The midterm will open at 8:00 AM and close at midnight on Friday 7/26)

Friday 7/25 Watch Chapter 14 video lecture and read Chapter 14

Monday 7/28 Homework for Chapter 14 due by Midnight

Tuesday 7/29 Watch Chapter 15 video lecture and read Chapter 15

Wednesday 7/30 Homework for Chapter 15 due by Midnight

Thursday 7/31 Watch Chapter 16 and Chapter 17 video lecture and read Chapter 16 and 17

Friday 8/1 Homework for Chapter 16 and 17 due by Midnight

Monday 8/4 Watch Chapter 19 and Chapter 20 video lecture and read Chapter 19 and 20

Tuesday 8/5 Homework for Chapter 19 and 20 due by Midnight

Wednesday 8/6 Watch Chapter 22 video lecture and read Chapter 22

Thursday 8/7 Homework for Chapter 22 due by Midnight

Friday 8/8 Watch Chapter 23 video lecture, and read Chapter 23, Project 2 due by midnight

Saturday 8/9 Homework for Chapter 23 due by Midnight, Final (The final will open at 8:00 AM on 8/9 and close at midnight on Sunday 8/10)