# **Astr 325: Astrophysics**

## **Syllabus**

## **Instructor**

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## **Description**

A broad introduction to the physics of celestial objects including formation, structure and evolution of stars, the physics of the interstellar medium, stellar remnants (white dwarfs, neutron stars, black holes), galaxies and the large-scale structure of the universe.

Prerequisites and Co-requisites: PHYS 212 (pre), MATH 263 (co).

Class Schedule: T TH 9:30 AM - 10:45 AM, Lewis Hall 228

#### Textbook:

- Dan Maoz, Astrophysics in a Nutshell. Princeton University Press. Hardcover. ISBN-10: 0691125848, ISBN-13: 978-0691125848 (required)
- Bradley W. Carroll and Dale A. Ostlie, An Introduction to Modern Astrophysics (2nd Edition). Benjamin Cummings. Hardcover: 1400 pages. ISBN-10: 0805304029, ISBN-13: 978-0805304022 (recommended)

#### Course Credit Hours: 3

## **Evaluation**

Grade Type: Plus/minus letter grade (A - F)

#### Grade Ranges:

- A: .. 88% and up
- B: ..... 75-87%

- C: ..... 60-74%
- D: ..... 40-59%
- F: less than 40%

These values are tentative, but will not be higher than indicated here.

#### Grade Percentage:

- 40% Homework & Quizzes
- 15% In-class test 1
- 15% In-class test 2
- 30% Final Exam

#### Homework:

Homework assignments will be announced in class. <u>Late homeworks will not normally be accepted</u>, but students may be excused from turning in an assignment if there is a valid reason. If a student joined the class late, or has extended unavoidable absences the instructor may make some adjustments to the homework policy. Homeworks must be turned in at the beginning of class on the day they are due.

Homeworks must be easy to read; please do not use red pen; staple the pages together. Student full name and problem set number must be written on the first page of the homework.

#### In-class tests and final exam:

The in-class tests will consist on written progress reports of a semester-long project. The final exam will consist of a written final report on the project outcome and an oral in-class presentation. Failure to do either of the in-class tests or the final exam will result in an F grade.

## **Course Attendance Policy**

All students are required to be present for all class meetings.

## **Academic integrity**

Students are responsible for knowing and adhering to the academic integrity policy of the University of Mississippi listed in the Student Academic Conduct and Discipline <u>Policy number 10000600</u>, <u>Code ACA.AR.600.001</u>. Examples of academic misconduct inlude but not limited to cheating and plagiarism. Any academic misconduct will be reported to the Academic Discipline Committee.

## **Non-Discrimination policy**

It is the policy of the University of Mississippi not to discriminate against anyone on the basis of race, color, religion, sex, national origin, handicap, age, sexual orientation or being a disabled veteran or veteran of the Vietnam era. Students are encouraged to freely examine and exchange diverse ideas both inside and outside the classroom.

### Changes to syllabus

If a revision of the syllabus becomes necessary during the semester, it will be discussed in class. Any changes to the syllabus will be posted on the course website.