

Astronomy 101 1B : Astronomy of the Universe

MWF 9:00 – 10:00 :: 301 Campbell Hall

Required Text: *Astronomy: from Earth to the Universe: 6th Ed* .Pasachoff

Required Text: *A Brief History of Time*: Hawking

Instructor: Dr. Robert Mohr : rmohr@uab.edu : 382 CH : 205-934-8107

Office Hours: MWF 10:30 – 12:00; TR 4:00 – 5:00; or by appointment

This is an introductory astronomy course that focuses on the formation and evolution of our universe. Major topics include the Big Bang Theory, Quasars, Black Holes, Forces of Nature, Symmetry, and Hawking Radiation. The main purpose of this course is to acquaint the student with the scientific thought process, and then apply that process to the study of how our Universe evolves. At the end of the semester, the student should be able to discuss various processes that contribute to the understanding of why our Universe appears as it does today.

There will be three homework assignments this semester, each one consisting of a discussion question that should be at least one page and at most two pages. For full credit homework papers should either be legible or typed. Homework assignments will be due one week after being assigned.

There will be five quizzes this semester. The quizzes will contain ten multiple choice questions (6 points each) as well as five short answer questions (8 points each). You will have a time of 30 minutes for each quiz. Quizzes will be given on Friday of the week indicated below.

The final examination will be cumulative. It will be exactly the same format and number of questions as the five in class quizzes. This exam will be given during the time allocated for the final exam listed below.

Any make-up will be determined on a case by case basis. Make-up exams will be given on the day of the final unless there is an extreme, unavoidable conflict.

Your grade will be determined in the following manner: The lowest of your six tests this semester will be dropped (5 quizzes plus final). The remaining

five grades will be averaged and this will count as 75 percent of your final grade. The remaining 25 percent will come from your homework average.

Tentatively, the following averages will result in the indicated grade:

89.5 - 100: A	79.5 - 89.4: B	69.5 - 79.4: C
	59.5 - 69.4: D	Below 59.5: F

These scales are not completely rigid but extenuating circumstances must be present for deviation. Attendance is not required; however, a valid excuse is needed in order to make up a missed quiz or late homework.

We will also be using an in class remote system to aide with discussions. The primary purpose for the system will be to determine the level at which various topics should be discussed. The remotes are available in the student book store in the Hill University Center.

Below is a tentative schedule of material to be covered as well as homework assignments and quizzes:

Aug 23:	Chapter 1-6	
Aug 28:	Chapter 1-6; 24-26	
Sep 4:	Chapter 24-26	Quiz One
Sep 11:	Chapter 27-31	Homework One
Sep 18:	Chapter 27-31	
Sep 25:	Chapter 34-38	Quiz Two
Oct 2:	Chapter 34-38	
Oct 9:	Chapter 34-38	Homework Two
Oct 16:	Hawking 1-2	Quiz Three
Oct 23:	Hawking 3-4	Last Day to Withdraw
Oct 30:	Hawking 3-4	
Nov 6:	Hawking 5-6	Quiz Four
Nov 13:	Hawking 5-6	Homework Three
Nov 20:	Hawking 7-10	
Nov 27:	Hawking 7-10	Quiz Five
Dec 4:	Other topics; Review	
Final Examination:	Monday December 11	8:00 – 10:30 am