

Astronomy 104 - Introduction to Astronomy of Stars and Galaxies (Summer II-July 2010)

Introductory astronomy is a course which will challenge the student to take a critical look at Nature, both qualitatively and quantitatively, as well as giving access to the use of telescopes, including the 15-inch Grubb refractor from the late 1800s and a 25-inch reflector, to see with one's own eyes some of what the Universe has to offer. It is hoped, that upon completion, the student will have a deeper appreciation for the Universe and his/her place in it.

The topics to be covered include: a history of ideas concerning man's understanding of the universe, basic astrometry and spherical astronomy, the magnitude system, telescopes, basic orbital mechanics, basics of the solar system, the interstellar medium, stellar formation, structure and evolution, variable stars, compact objects, galactic morphology, kinematics and dynamics, formation of galaxies, active galactic nuclei, quasars, the universe at large, its formation and fate.

A class session shall consist of two lectures, each approximately 50 minutes in length, with a short interval in-between. In addition, there is a laboratory session lasting two hours in length twice per week. This is where most observations will be done, and is thus an integral part of the course. Exercises on a given topic will be suggested, but neither collected nor marked. In addition, there will be two take-home examinations. These examinations will be collected and reviewed, however not marked. There will be a cumulative final examination. The result of the final examination and participation in the laboratory will determine the course mark. It is important to note, that three unexcused (3) absences from the laboratory, will result in a failure of the *entire* course independent of performance on the examination. The marking scheme will be: A - Excellent, B - Good, C - Average and F - Failure.

Text: *The Cosmic Perspective* by Bennett, et al.

Class sessions: M-Th 13.00 to 15.50 in Lewis Hall room 101

Laboratory sessions: Either M and W or T and Th 21.00 to 22.50 in room 1 of Lewis Hall

Brian Mazur

bmazur@olemiss.edu

Kennon Observatory, room 6