



Alabama Community College System

AST 220 Introduction to Astronomy

I. AST 220 Introduction to Astronomy—4 Semester Hours

II. Course Description

This course covers the history of astronomy and the development of astronomical thought leading to the birth of modern astronomy and its most recent developments. Emphasis is placed on measuring techniques and the structure and evolution of the universe. Lab is required.

III. Prerequisite

NONE

IV. Textbook

Due to the varied selection of quality college-level textbooks, each college will select the textbook needed to meet the requirements of this course.

V. Course Learning Outcomes

By the end of the course, students will be able to:

1. identify the history and major contributors in the development of astronomy,
2. locate and describe celestial objects and events in the sky,
3. discuss how the properties of light are used in an astronomical context,
4. describe the physical properties and evolution of the bodies of the universe using appropriate terminology,
5. discuss recent astronomical events and current topics in space exploration,
6. demonstrate proper techniques in lab exercises, and
7. apply scientific reasoning to interpret data.

VI. Course Outline of Topics

Lecture Topics:

1. History and the development of astronomy
2. Orientation to the night sky
3. Properties of light and optics
4. Use of telescopes
5. The solar system
6. The Sun
7. Properties and evolution of stars
8. Properties and evolution of galaxies
9. Structure and evolution of the universe
10. Current events and recent exploration in astronomy

Lab Topics:

1. Scientific measurements
2. Telescopes
3. Light
4. The solar system
5. The moon
6. Gravity
7. Stars

VII. Evaluation and Assessment

Grades will be given based upon A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, and F = below 60%.

VIII. Attendance

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

IX. Statement on Discrimination/Harassment

It is the official policy of the Alabama Community College System and entities under its control, including all Colleges, that no person shall be discriminated against on the basis of any impermissible criterion or characteristic, including, without limitation, race, color, national origin, religion, marital status, disability, sex, age, or any other protected class as defined by federal and state law. (ACCS Policies 601.02 and 800.00)

X. Americans with Disabilities

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College.