

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Physics</u>
COURSE RUBRIC AND NUMBER	<u>ASTR 1303</u>
COURSE TITLE	<u>Stars and Galaxies</u>
COURSE CREDIT HOURS	<u>3 3 : 0</u> Credits Lec Lab

I. Catalog Description

Provides an introductory study of astronomy. Includes topics on the sun, stellar properties, stars, galaxies, and cosmology. May not be counted as physics credit toward a major or minor in physics, but may be counted as a laboratory science for non-science majors. **Prerequisite: READ 0309 or INRW 0311 or ESOL 0340 (can be taken concurrently) or by placement exam or ENGL 1301 with a “C” or better or ENGL 1302 with a “C” or better. Corequisite: ASTR 1103. (3:0).**

II. Course Objectives

Upon completing this course, the student will be able to:

- A. Understand the basis properties of stars: distance, spectral class, motion, magnitude, composition and parallax.
- B. Discuss the classification scheme of stars as to spectral classes.
- C. Understand the Hertzsprung – Russell diagram and how it relates to stellar evolution.
- D. Know the stages of stellar evolution as to the birth, life and death of any size star.
- E. Explain the interstellar medium and how it relates to atoms, molecules, dust and nebulae.
- F. Identify the classification scheme for binary stars, the importance of binary stars to astronomy and the origin and evolution of binary systems.
- G. Describe the various types of natural star groupings in our galaxy and how they evolved.
- H. Know the structure of our galaxy (both historical and modern) and the galactic coordinate system.
- I. Describe the two major stellar population types and their characteristics.
- J. Identify the Hubble classification scheme of galaxies and our local group of galaxies.
- K. Describe the Doppler shift as it relates to astronomical objects.
- L. Describe Hubble’s Law and its implication for an expanding universe.
- M. Understand quasars.
- N. Explain the cosmological principle.
- O. Identify current astronomical beliefs about the nature and origin of the universe.
- P. Understand the nature of life and be aware of the possibilities of life on other planets in the universe.

III. Evaluation

- A. Preassessment
There is no preassessment for this course.
- B. Postassessment
The scheduling of examinations, homework, and quizzes will be the sole prerogative of the instructor. The manner, frequency and extent of these instruments will be indicated to the student in the course syllabus that is distributed at the beginning of the semester. The philosophy of the college endorses frequent evaluation.
- C. Remediation
The instructor may provide a student with a means of improving a grade. The timing, form and method of remediation will be determined by the instructor and included in the course syllabus.
- D. Grading
All grading will follow current EPCC Catalog standards. The assignment of letter grades to percent scores obtained in various class activities will be determined by the instructor and included in the course syllabus.

IV. Disability Statement (American with/Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

V. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.