

ASTRON 3 Course Outline as of Fall 1981**CATALOG INFORMATION**

Dept and Nbr: ASTRON 3 Title: STELLAR ASTRONOMY

Full Title: Stellar Astronomy

Last Reviewed: 1/25/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

Catalog Description:

Not open to students who have completed Astronomy 2. A non-mathematical description of the universe beyond the solar system. Observed properties of stars, stellar evolution, interstellar medium, stars clusters, variable stars, the Milky Way, other galaxies, relativity, cosmology and life in the universe.

Prerequisites/Corequisites:**Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100.

Limits on Enrollment:**Schedule of Classes Information:**

Description: A non-mathematical description of the universe beyond the solar system; stars, nebulae, galaxies, cosmology. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100.

Limits on Enrollment:

Transfer Credit: CSU;UC.

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area		Effective:	Inactive:
	C	Natural Sciences	Fall 1981	
CSU GE:	Transfer Area		Effective:	Inactive:
	B1	Physical Science	Fall 1981	
IGETC:	Transfer Area		Effective:	Inactive:
	5A	Physical Sciences	Fall 1981	
CSU Transfer:	Transferable	Effective:	Fall 1981	Inactive:
UC Transfer:	Transferable	Effective:	Fall 1981	Inactive:

CID:

Certificate/Major Applicable:

Not Certificate/Major Applicable

COURSE CONTENT

Outcomes and Objectives:

Provides the student with the theoretical, descriptive and methodological framework required to successfully understand stellar astronomy and related physical concepts.

Students participating in this course will have the opportunity to learn the natural processes that govern and shape our universe. They will be able to comprehend and demonstrate some knowledge of astronomy through lecture discussion, written assignments and examination.

Topics and Scope:

- I. Introduction
- II. Electromagnetic Radiation
- III. Stellar Distances
- IV. Stellar Motions
- V. Measuring Starlight
- VI. Stellar Spectra
- VII. Binary Stars
- VIII. Variable Stars
- IX. H-R Diagram
- X. Stellar Structure and Evolution
- XI. Interstellar Medium
- XII. Star Clusters
- XIII. The Galaxy
- XIV. Other Galaxies
- XV. Cosmology

Assignment:

Evaluation of student performance will be determined through examination and at least one of the following written assignments; comprehensive research paper, analytic essay, book review, observational assignments, or extra credit reports. Each student will be required to master textbook and research material independently outside the class.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework, Reading reports, Term papers

Writing
10 - 30%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Quizzes, Exams

Problem solving
0 - 10%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances, Performance exams

Skill Demonstrations
0 - 10%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items

Exams
50 - 75%

Other: Includes any assessment tools that do not logically fit into the above categories.

None

Other Category
0 - 0%

Representative Textbooks and Materials:

"Universe" Wm. Kaufmann

"Exploration of the Universe" G. Abell

"The Dynamic Universe" T. Snow

"Astronomy", M. Zeilik