



5055 Santa Teresa Blvd
Gilroy, CA 95023

Course Outline

COURSE: ASTR C1001 DIVISION: 10 ALSO LISTED AS: ASTR 1

TERM EFFECTIVE: Fall 2027 CURRICULUM APPROVAL DATE: 04/10/2026

SHORT TITLE: INTRO TO ASTRONOMY

LONG TITLE: Introduction to Astronomy

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours/Units</u>
3	18	Lecture:	3	54 / 3 Units of Lecture
		Lab:	0	0
		Other:	0	0
		Total:	3	54

Out of Class Hrs: 108.00
Total Learning Hrs: 162.00

COURSE DESCRIPTION:

This course introduces fundamental concepts of astronomy, including the Solar System, stars, supernovae, galaxies, black holes, and the expanding universe. Students learn how to study the cosmos and what the latest discoveries reveal about the origins and fate of the universe.

Part 2: Also known as ASTR 1.

CREDIT STATUS: D - Credit - Degree Applicable

GRADING MODES

L - Standard Letter Grade

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:

- 02 - Lecture and/or discussion
- 05 - Hybrid
- 72 - Dist. Ed Internet Delayed

STUDENT LEARNING OUTCOMES/COURSE OBJECTIVES:

By the end of this course, a student should:

1. Apply fundamental theoretical principles and evidence-based reasoning to explain how observations and data inform our current understanding of the universe and everyday phenomena.
2. Distinguish and compare the size, scale, and structure of astronomical objects.
3. Describe the diverse perspectives and contributions that have shaped humanity's understanding of the universe through the field of astronomy.

COURSE CONTENT:

1. Scientific method
2. Observing the sky
3. History of astronomy across cultures
4. Gravity, motion, and physical laws
5. Light, matter, and spectra
6. Telescopes
7. Analysis of light
8. Earth, Moon, Sun system
9. The Solar System and exoplanets
10. The Sun
11. Stars and stellar evolution
12. The Milky Way
13. Galaxies
14. Cosmology
15. Life in the universe

Part 2:

Curriculum Approval Date: 04/10/2026

METHODS OF INSTRUCTION:

Lecture/discussion, demonstrations, web-based exercises.

OUT OF CLASS ASSIGNMENTS:

Required Outside Hours 108

Assignment Description

1. Regularly assigned homework that requires students to analyze and study pertinent text material, solved examples and lecture notes.
2. Regularly assigned homework that requires students to apply the principles and skills covered in class by solving related problems.

METHODS OF EVALUATION:

Other methods of evaluation

Evaluation Percent 100

Evaluation Description

Examples of potential methods of evaluation used to observe or measure students' achievement of course outcomes and objectives could include but are not limited to quizzes, exams, activities, projects, research demonstrations, etc.

Methods of evaluation are at the discretion of local faculty.

REPRESENTATIVE TEXTBOOKS:

Astronomy 2e., Fraknoi, A., Morrison, D., Wolf, S, OER: OpenStax., 2022 or a comparable textbook/material.

College Level Grade Verified by: CCN Template Review

Astronomy: At Play in the Cosmos. 2nd ed, Frank, A., W. W. Norton and Company., 2020 or a comparable textbook/material.

College Level Grade Verified by: CCN Template Review

The Essential Cosmic Perspective. 9ed, Bennett, J., Donahue, M., Schneider, N., & Voit, M., Pearson, 2022 or a comparable textbook/material.

College Level Grade Verified by: CCN Template Review

Foundations of Astronomy. 15th ed, Seeds, M., & Backman, D., Cengage, 2025 or a comparable textbook/material.

College Level Grade Verified by: CCN Template Review

21st Century Astronomy. 7th ed, Palin, S., & Blumenthal, G. , W. W. Norton., 2022 or a comparable textbook/material.

College Level Grade Verified by: CCN Template Review

Part 2:

Understanding Our Universe, Stacy Palen George Blumenthal, W. W. Norton & Company, 2021 or a comparable textbook/material.

ISBN: 978-0393533835

13 Grade Verified by: Microsoft Word

ARTICULATION and CERTIFICATE INFORMATION

GAV GE:

GAV B1

GAV Area 5

CSU GE:

CSU B1

IGETC:

IGETC 5A

CALGETC:

CALGETC Area 5A

CSU TRANSFER:

Transferable CSU

UC TRANSFER:

Transferable UC

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: E

Course Control Number: CCC000301101

Sports/Physical Education Course: N

Taxonomy of Program: 191100

CIP: 400201