Phase IIB CCN TEMPLATE

Background

- This CCN Course Template was developed by Astronomy discipline faculty representatives from the California Community Colleges, California State University, University of California and independent colleges and universities during October-December 2024, starting with local course outline of record and syllabi information provided by intersegmental faculty during the pre-convening survey process.
- Development of the CCN Course Template was facilitated by ASCCC with advisory input from segment articulation officers and transfer experts.
- Approved and Submitted to the Chancellor's Office: June 2025

Subject: Astronomy	**Subject Code:** ASTR
Proposed Course Number (Identical): C1001	
Course Title (Identical): Introduction to Astronomy	
Catalog/Course Description **Part 1 (Identical and Required):** 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 (Optional Expanded Description, Local College Discretion):**	

Minimum Unit Threshold | 3.0 Semester Units Unit amounts must adhere to the established minimum.
Prerequisites (Identical): None
Co-Requisites (Identical): None
Other Limitations on Enrollment (determined locally)
Advisories/Recommended Preparation (determined locally)

Course Content

Part 1: Required Topics (Identical):

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: Optional Expanded or Additional Topics (optional):

Laboratory Content: (if applicable) N/A

This is a lecture course.

Course Objectives/Outcomes

Part 1 (Identical and Required):

At the conclusion of this course, the student should be able to (Identical and Required):

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.

Part 2 Optional objectives/outcomes (optional):

At the conclusion of this course, the student should be able to:

Methods of Evaluation

Part 1 (Identical and Required):

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.

Part 2 List Additional Methods of Evaluation (Optional):

Representative Texts, Manuals, OER, and Other Support Materials

Part 1 (Identical and Required):

Texts used by individual institutions and even individual sections will vary.

- Fraknoi, A., Morrison, D., Wolf, S., et al. (2022). Astronomy 2e. OER: OpenStax.
- Frank, A. (2020). Astronomy: At Play in the Cosmos. 2nd ed.: W. W. Norton and Company.
- Bennett, J., Donahue, M., Schneider, N., & Voit, M. (2022). The Essential Cosmic Perspective. 9th ed.: Pearson.
- Seeds, M., & Backman, D. (2025). Foundations of Astronomy. 15th ed.: Cengage.

- Palen, S., & Blumenthal, G. (2022). 21st Century Astronomy. 7th ed.: W. W. Norton.

Part 2 List Sample Textbooks, Manuals, or Other Support Materials (optional):

Date Approved:

June 16, 2025, following ASCCC facilitation of template development process, including engagement of faculty discipline representatives from California Community Colleges, California State University, University of California, and independent colleges and universities and advisory input from segment articulation officers and transfer experts.