

AST3019: Astronomy and Astrophysics 2

Spring 2026 | 3 credits

NOTE: This course complies with all UF academic policies. For information on those policies and for resources for students, please see UF's "[Academic Policies and Resources](#)" web page.

I. General Information

Meeting days and times: T7, R7-8

Class location: FLG260

Instructor(s):

Name: Desika Narayanan

Office Building/Number: BRT216

Phone: 3526941865

Email: desika.narayanan@ufl.edu

Office Hours: Fridays 3 pm

Teaching Assistant(s):

Name: Zoe Yates

Office Building/Number:

Phone:

Email:

Office Hours:

Course Description

Second part of a two part sequence. Survey of astronomy and astrophysics for physical science, engineering or mathematics majors. Covers compact objects; the Solar System; exoplanets; the Milky Way and galaxies; cosmology and relativity.

This is an introductory course in Astronomy and Astrophysics designed for students majoring in astronomy, physics, math, or engineering. This course pairs with AST 3018, discussing about half of the major topics in astronomy. While the other course focuses on stellar astrophysics and the interstellar medium, this course primarily focuses on planetary science, relativistic phenomena, Galactic and extragalactic astrophysics, and cosmology.

Prerequisites

Prereq: (PHY 2048 or PHY 2060) and (MAC 2311 or MAC 3472). Coreq: PHY 2049.

General Education Designation: none.

Course Materials

- Foundations of Astrophysics: UF Bookstore

Materials will be available through the following means:

Materials Fee: N/A

II. Course Goals

Course Objectives

In this course we will:

- We will study the Solar System and Exoplanets
- We will study Galaxies and Cosmology
- We will study high energy processes and relativity

Student Learning Outcomes

A student who successfully completes this course will be able to:

- Know the basic concepts, theories, and terminology of natural science and the scientific method in astronomy.
- Know the major scientific developments in astronomy and the impacts on society and the environment.
- Know relevant processes that govern physical systems in astronomy.

III. Graded Work

Graded Components

Worksheets (15%): Worksheets will be assigned during most classes to give you an opportunity to review the material and give the instructor the opportunity to check your comprehension of the material. Worksheets typically will be due at the end of the class they are assigned and are not accepted late. Class participation is expected and will greatly help you complete this work. The number and frequency of these assignments is at the discretion of the instructor. The lowest few (depending on the total number given) will be dropped or counted as extra credit for your final grade (this action is completed at the very end and does not show up in the Canvas gradebook).

Homeworks (45%): Problem sets will be regularly assigned throughout the semester. Late homework is penalized 25% per day; exception: when answers must be posted promptly for exam studying, no late homework after that point will be accepted. Working in groups is allowed for homeworks and (usually strongly encouraged) for worksheets, although if you do, discuss the problem/solution and then write your own answers without looking at the other students' paper; also write the names of the people you worked with on the submitted homework. Each student is required to show all work and submit separate homework solutions. No emailed work.

Midterm Exam (20%): The midterm exam will cover material from approximately the first half of the class (topics/ chapters will be provided when appropriate). The midterm exam will be during normal class time about halfway through the semester.

Final Exam (%): The final exam will primarily cover material after the midterm exam. 5/1/2026 @ 10:00 AM - 12:00 PM

TOTAL: 80%

Grading Scale

Letter Grade	Number Grade
A	100-92.5
A-	92.4-89.5
B+	89.4-86.5
B	86.4-82.5
B-	82.4-79.5
C+	79.4-76.5
C	76.4-72.5
C-	72.4-69.5
D+	69.4-66.5
D	66.4-62.5
D-	62.4-59.5
E	59.4-0

Note: A minimum grade of C is required to earn General Education credit.

IV. Calendar

Date	Topic	Readings/Preparation	Work Due
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V. Procedure for Conflict Resolution

Any classroom issues, disagreements or grade disputes should be discussed first between the instructor and the student. If the problem cannot be resolved, please contact Elizabeth Lada (elada@astro.ufl.edu, [3522941862](tel:3522941862)). Be prepared to provide documentation of the problem, as well as all graded materials for the semester. Issues that cannot be resolved departmentally will be referred to the University Ombuds Office (<http://www.ombuds.ufl.edu>; [352-392-1308](tel:352-392-1308)) or the Dean of Students Office (<http://www.dso.ufl.edu>; [352-392-1261](tel:352-392-1261)).