

AST2003: Introduction to the Solar System

Fall 2025 | 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: M,W,F, Period 7 (1:55 PM - 2:45 PM)

Class location: CSE E119

Instructor:

Name: William Schap

Office Building/Number: Bryant Space Science Center 207

Email: wschap@ufl.edu

Office Hours: Mondays and Wednesdays after class, 2:45-3:45 PM

Course Description

Survey of the solar system: sun, planets, satellites, asteroids, meteorites and comets. This course affords students the ability to critically examine and evaluate the principles of the scientific method, model construction, and use the scientific method to explain natural experiences and phenomena.

AST2003 is a survey of our Solar System designed for non-science majors. The only prerequisite for this class is algebra and natural curiosity. We will study the planetary processes that shape our Solar System, compare our Solar System to systems of planets orbiting other stars, and come to appreciate Earth's place—and ours—in the universe. This course satisfies part of the Natural Sciences General Education requirement. Students who are planning to major in the sciences, or are considering the Astronomy major, are strongly encouraged to take AST3018 instead. Lectures in this class are highly interactive! A portion of your grade is based upon participation, through voting (via the iClicker platform, accessible via desktop and smartphone app) on polling questions I will pose to you during each lecture. Your participation grade is based only upon responding to these questions in real time during lecture, not whether you submitted the right answer. The in-class discussion with other students and myself is an important component of my teaching, plus the participation portion of your grade depends on your in-person attendance. Our final exam, per the registrar's website, is 10 AM-12 PM on December 12. All exams are held in person. Exceptions are granted for students with accommodations submitted to me through the Disability Resource Center (see more information below).

Prerequisites

Prereq: simple algebra.

General Education Designation: Physical Sciences (P)

Natural Science courses afford students the ability to critically examine and evaluate the principles of the scientific method, model construction, and use the scientific method to explain natural experiences and phenomena. **Physical Science (P)** is a sub-designation of Natural Science courses at the University of Florida. These courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the physical sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern physical systems. Students will formulate empirically testable hypotheses derived from the study of physical processes, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

All General Education area objectives can be found [here](#).

Course Materials

- The Cosmic Perspective, 10th Edition ("TCP") by Bennett, Donahue, Schneider, & Voit.
- A "Mastering Astronomy" account, created through Canvas
- An iClicker student account

Materials will be available through the following means:

- The textbook can be purchased either online or through the UF bookstore.
- The University of Florida has an institutional membership to the iClicker platform; this access is free to you. To join, make an account [here](#), then specify your institution as University of Florida. On the landing "Courses" page, select "University of Florida", and then search by "Schap" to find our class. Once you have enrolled, download the "iClicker" app to your smartphone and sign in. If you do not have a smartphone, you can vote via desktop (if you have neither option, please let me know).

Materials Fee: N/A

II. Course Goals

Course Objectives

In this course we will:

- We will study the planetary processes that shape our Solar System
- Compare our Solar System to systems of planets orbiting other stars
- Appreciate Earth's place—and ours—in the universe

Student Learning Outcomes

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

Identify the differences of the Solar system planets

Explain the tools astronomers use to study our Solar system

Recognize what differences exist between our Solar system and systems of known exoplanets

III. Graded Work

Graded Components

Participation (15%): Based on iclicker participation and reading quizzes

Homework/Worksheets (30%): In class and at home assignments related to course materials

In-Class Exams (30%): Lowest exam dropped

Cumulative Final Exam (25%): Cannot be dropped

TOTAL: 100%

Grading Scale

Letter Grade	Number Grade
A	100-93.3
A-	90-93.3
B+	86.6-89.9
B	83.3-86.6
B-	80-83.3
C+	76.6-79.9
C	73.3-76.6
C-	70-73.3
D+	66.6-69.9
D	63.3-66.6
D-	60-63.3
E	60-0

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

IV. Expected Calendar

Date	Topic	Readings/Preparation	Work Due
August 22, 2025	Welcome/Overview	TCP1	
August 25, 2025	Our Place in the Universe	TCP2	
August 27, 2025	Discovering the Universe for Yourself		
August 29, 2025	Discovering the Universe for Yourself		
September 1, 2025	Holiday	TCP3	
September 3, 2025	The Science of Astronomy		
September 5, 2025	The Science of Astronomy		
September 8, 2025	The Science of Astronomy		
September 10, 2025	Motion-Energy-Gravity		
September 12, 2025	Motion-Energy-Gravity		
September 15, 2025	Motion-Energy-Gravity	TCP4	
September 17, 2025	Motion-Energy-Gravity		
September 19, 2025	EXAM 1		
September 22, 2025	Earth+Moon/Solar System Formation	TCP7,8	
September 24, 2025	Earth+Moon/Solar System Formation		
September 26, 2025	Solar System Formation		
September 29, 2025	Geology of the Terrestrial Worlds	TCP9	
October 1, 2025	Geology of the Terrestrial Worlds		
October 3, 2025	Geology of the Terrestrial Worlds		
October 6, 2025	Geology of the Terrestrial Worlds		
October 8, 2025	Geology of the Terrestrial Worlds		
October 10, 2025	Geology of the Terrestrial Worlds		
October 13, 2025	Geology of the Terrestrial Worlds	TCP9, 5	
October 15, 2025	EXAM 2		
October 17, 2025	Holiday (Homecoming)		

Date	Topic	Readings/Preparation	Work Due
October 20, 2025	Light and Matter	TCP5, 10	
October 22, 2025	Light and Matter		
October 24, 2025	Atmospheres of the Terrestrial Worlds		
October 27, 2025	Atmospheres of the Terrestrial Worlds	TCP 10	
October 29, 2025	Atmospheres of the Terrestrial Worlds		
October 31, 2025	Atmospheres of the Terrestrial Worlds		
November 3, 2025	Jovian Planet Systems	TCP11	
November 5, 2025	Jovian Planet Systems		
November 7, 2025	EXAM 3		
November 10, 2025	Remnants of Ice & Rock	TCP11, 12	
November 12, 2025	Remnants of Ice & Rock		
November 14, 2025	Remnants of Ice & Rock		
November 17, 2025	Remnants of Ice & Rock	TCP13	
November 19, 2025	Exoplanetary systems & Astrobiology		
November 21, 2025	Exoplanetary systems & Astrobiology		
November 24, 2025	Holiday		
November 26, 2025	Holiday		
November 28, 2025	Holiday		
December 1, 2025	Exoplanetary systems & Astrobiology	TCP13	
December 3, 2025	Life in the Universe		
December 12, 2025	Final Exam		

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@ufl.edu, 352-294-1862). 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) or the Dean of Students Office (<http://www.dso.ufl.edu>; 352-392-1261).

VI. Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/Links to an external site.](http://www.dso.ufl.edu/drc/Links%20to%20an%20external%20site.%20)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

VII. Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>

[Links to an external site.](#)

Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>

[Links to an external site.](#)

VIII. Class Demeanor

Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

IX. University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code ([https://sccr.dso.ufl.edu/process/student-conduct-code/Links to an external site.](https://sccr.dso.ufl.edu/process/student-conduct-code/Links%20to%20an%20external%20site.%20)) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

X. Class AI Policy

The use of generative AI tools, including ChatGPT and other similar tools, to complete or support the completion of any form of assignment or assessment in this course is not allowed and would be considered academic misconduct.

XI. Counseling and Wellness Center

College can be a very stressful place. For contact information for the Counseling and Wellness Center, look to <https://counseling.ufl.edu/>, or call 352-392-1575, 8am-5pm Monday through Friday. If you need mental health services urgently for yourself or others after business hours, phone consultation with a counselor is available 24 hours a day, 7 days a week. Call UF CWC at 352-392-1575 or the Alachua County Crisis Center at 352-264-6789.