



蘇州大學
Soochow University

Soochow University

AST 101 Astronomy I

Summer 2021

Course Information

Course Credits: 4

Contact Hours: 58 hours

Class Time: 8:30 - 10:20

Instructor: TBA

Course Format: Online

Course Description

The course is an introduction to the science of astronomy and will focus on the mysteries of the solar system with no requirement for prior knowledge. In this course, students will explore the secret of the Earth, the Moon and other planets in the solar system, including their features and origins. They are also expected to develop their understanding of some travelers in the universe, like comets and asteroids. Besides, methodologies and tools for astronomic study will also be introduced.

Prerequisite(s)

None



Learning Objectives

Upon completion of this course, students will be able to:

1. Understand the basic terms related to the solar systems, the planets and other celestial bodies;
2. Describe and compare the features of each planet in the solar system;
3. Explain why the Earth is so special in the solar system;
4. Interpret the phases of the moon and the relationship between the Earth and the moon, and the Sun and the moon.

Methodology

Methodology	Hours	Hours of work During class	Hours of work After class
Online Video	50	88 hours (60%)	
Online Forum Discussion	8		
Assessment	30		
Personal study	30		68 hours (40%)
Tasks	22		
Practical teaching preparation	10		
Bibliographic search	6		
Total	156	88	68

Textbook(s)

The Cosmic Perspective by Jeffrey Bennett, Megan Donahue, Nicholas Schneider & Mark Voit, 8th Edition, Pearson Education, Inc. Press, 2017.



Tasks and Evaluation

Assignments	40% (10% for each)
Midterm	25%
Final exam	35%

Students are required to attend online classes on the scheduled time. Missing classes without permission will lead to decrease in overall grade.

- Missing less than two classes: no penalty.
- Missing more than two classes: 7% will be taken off from the overall grade.

Online forum discussion is required. Students are required to post at least one question and answer at least one question on the forum weekly.

Online Tutorials are mandatory. Students will read and discuss academic articles provided. Students will also discuss the case studies for the week's lectures. Each Tutorial will be 1 hour.

All exams will be held online and the time of each exam will be limited to 1 hour. Exams must also be taken at the scheduled time. There will be no make-up exams.

Rating System:

1. Assessment

ASSESSMENT ITEM	PERCENT OF FINAL GRADE
Assignments	40% (10% for each)
Midterm	25%
Final exam	35%



2. Grading Scale

A+ 96-100	A 90-95	A- 85-89
B+ 82-84	B 78-81	B- 75-77
C+ 71-74	C 66-70	C- 62-65
D 60-61	F < 60	

Course Content

Week	Lecture	Topics	Dues	%
1	1	A Modern View of the Universe		
	2	Discovering the Universe for Yourself		
	3	Discovering the Universe for Yourself (Cont.)		
	4	Light and Matter: Reading Messages from the Cosmos		
	5	Understanding Motion, Energy, and Gravity	Assignment 1	10
2	6	The Science of Astronomy		
	7	The Science of Astronomy (Cont.)		
	8	Telescopes: Portals of Discovery		
	9	Telescopes: Portals of Discovery (Cont.)		
	10	Our Planetary System	Assignment 2	10
3	11		Midterm Test	25
	12	Our Planetary System (Cont.)		
	13	Formation of the Solar System		
	14	Formation of the Solar System (Cont.)		
	15	Planetary Geology: Earth and the Other Terrestrial Worlds	Assignment 3	10
4	16	Planetary Geology: Earth and the Other Terrestrial Worlds (Cont.)		
	17	Jovian Planet Systems		
	18	The Planetary Bodies		



蘇州大學
Soochow University

	19	Asteroids, Comets, and Dwarf Planets: Their Nature, Orbits and Impacts	Assignment 4	10
	20	Asteroids, Comets, and Dwarf Planets: Their Nature, Orbits and Impacts (Cont.)		
5	21	Other Planetary Systems: The New Science of Distant Worlds		
	22	Space and Time		
	23	Einstein's Revolution and Relative Motion		
	24	Final Exam Review		
	25		Final Exam	35



蘇州大學
Soochow University

University Regulations and Services

Soochow University highly values the academic integrity and aims to promote the academic fairness, honesty and responsibility. Any academic dishonesty behaviors and any attempts to cheats and plagiarism will be reported to the university administration office. A written warning and the relevant penalties will be imposed. The record might be shown on the official university transcript.

Soochow University also highly respects students' accommodation for disabilities and religions. You might contact the Student Accessibility Office if you have any questions, concerns or if you would like to report any offensive behaviors.

Note:

Please contact the University Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material.