Introductory Astronomy and Cosmology
Phys 202–005 F2023
MW 11:30-12:50

Slides and reinforcing videos, are posted before class on canvas.njit.edu.

Instructor

Dr. George E. Georgiou
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georgiou@njit.edu (preferred contact method)

OFFICE HOURS: M 1:30-2:30, after class or by appointment (send email)

Textbook

Primary on which class is based:
"Astronony" by A.Fraknoi, D.Morrison, S.Wolf …
Downloadable Open Stax text: https://openstax.org/details/books/astronomy

Optional paper textbook: (if do not like reading e-books)
Jeffrey Bennett, Megan Donahue, Nicholas Schneider, and Mark Voit. *The Cosmic Perspective Fundamentals*, 2nd Ed. Pearson Education, Inc., United States of America, 2015. – but ANY EDITION will work for reading material

Additional Reading (optional but may be interesting):

Neil deGrasse Tyson, J. Richard Gott and Michael A. Strauss, Welcome to the Universe, an Astrophysical Tour, Princeton University Press (2016)

Grade

Your final grade will be based upon class participation / attendance (10%), two in-class exams (25% each),and one Final Examination (40%). The number grade is .25*(exam 1+2) + .4*Final + .1*participation.

The exam schedule is as follows:

First Examination	(25%)	10/16 (Monday)(Thru week 5)
Second Examination	(25%)	11/13 (Monday)(Thru week 9)
Final Examination	(40%)	TBD 12/17-12/23(All-inclusive)

There are no make-up examinations without a valid reason. The following table will determine your final letter grade.

85% to 100%	A
80% to 85%	B+
70% to 80%	B
60% to 69%	C+
50% to 59%	C
40% to 49%	D
0% to 39%	F

Introductory Astronomy and Cosmology (Phys 202) and Introductory Astronomy and Cosmology Laboratory (Phys 202A) are two separate courses. You can be registered for 202 now and take 202A later.

Academic Integrity

Any student who is disruptive in the classroom or cheats during an examination, will be in violation of the Academic Honor Code and will be reported to the Dean of Student Services.

Syllabus (Chapters for reading refer to OpenStax Download text)

Week 1 -- WM	9/6	Observing the Sky (Chapters One & Two)
		Orbits and Gravity (Chapter Three)
Week 2 -- WM	9/13	Earth, Moon, and Sky (Chapter Four)
		Radiation and Spectra (Chapter Five)
Week 3 -- WM	9/20	Astronomical Instruments (Chapter Six)
		Introduction to the Solar System (Chapter Seven)
Week 4 -- WM	9/27	Earth and Other Cratered Worlds (Chs. 8 and 9)
		Venus and Mars (Chapter Ten)
Week 5 – WM	10/4	Giant Planets, Rings, Moons (Chapters 11 and 12)
		Comets, Asteroids, Samples (Chapters 13 and 14)
Week 6 -- W	10/11	The Sun (Chapters 15 and 16)
Week 6 – M	10/16	EXAM 1 (uses Canvas, in-class)
Week 7 – WM	10/18	Starlight and Stars (Chapters 17 and 18)
		Distances. Gas & Dust in Space (Ch. 19 and 20)
Week 8 – WM	10/25	Star & Planet Formation (Chapter 21)
		Stars' Adolescence to Old Age (Chapter 22)
Week 9 -- WM	11/1	Death of Stars (Chapter 23)
		Black Holes, Curved Space-Time (Chapter 24)
Week 10 -- W	11/8	The Milky Way Galaxy (Chapter 25)
		Week 10 - - M 11/13 EXAM2 (uses Canvas)
Wk11 -- WM	11/15	QSOs, Black holes, Galaxy Evolution (Chs. 27 & 28)
Wk 12 -- M	11/20	The Big Bang (Chapter 29)
W	11/22	NO CLASS (F schedule)
Wk 13 -- M	**11/27**	**More Big Bank (Chapter 29)**
-- W	**11/29**	**???**
Wk 14 – M	**12/4**	**Review**

Last Day of Class	W Dec 13,2023	
Reading Days	R and F Dec. 14-15	
FINAL EXAM	Dec 17-23	Cummulative,

Fall 2023 Academic Calendar

Sept	4	Labor Day. University Closed
Sept	5	First Day of Classes
Sept	11	Last Day to Add/Drop a Class
Sept	11	Last Day for 100% Refund, Full or Partial Withdrawal
Sept	12	W Grades Posted for Course Withdrawals
Sept	18	Last Day for 90% Refund, Full or Partial Withdrawal - No Refund for Partial Withdrawal after this date
Oct	2	Last Day for 50% Refund, Full Withdrawal
Oct	23	Last Day for 25% Refund, Full Withdrawal
Nov	13	Last Day to Withdraw from Classes
Nov	21	Thursday Classes Meet
Nov	22	Friday Classes Meet
Nov	23	Thanksgiving Recess Begins. No Classes
Nov	26	Thanksgiving Recess Ends
Dec	13	Last Day of Classes
Dec	14	Reading Day 1
Dec	15	Reading Day 2
Dec	16	Saturday Classes Meet
Dec	17	Final Exams Begin
Dec	23	Final Exams End
Dec	25	Final Grades Due