

Stars and the Universe: Cosmic Evolution AS.171.118.21 Summer 2017

This course looks at the evolution of the universe from its origin in a cosmic explosion to emergence of life on Earth and possibly other planets throughout the Universe. Topics include big-bang cosmology, origin and evolution of galaxies, stars, planets, life, and intelligence; black holes; quasars; and relativity theory. The material is largely descriptive, based on insights from physics, astronomy, geology, chemistry, biology, and anthropology. Mon, Wed & Thu, 9:00 – 11:30 a.m. 3 credits Dr. Wei Zheng wzheng@jhu.edu

Textbook: “Astronomy Today” by Chaisson and McMillan, **Eighth** Edition

Date	Chapters	Chapter Titles
July 3 Monday	1	Charting the Heavens
	2	The Copernican Revolution
July 5 Wednesday	3	Radiation
	4	Spectroscopy
July 6 Thursday	5	Telescopes
	6	The Solar System
July 10 Monday	7	Earth
	8	The Moon and Mercury
July 12 Wednesday	9	Venus
	10	Mars
July 13 Thursday	11	Jupiter
	12	Saturn
	13	Uranus & Neptune
July 17 Monday	14	Solar System Debris and MID-TERM EXAMINATION
July 19 Wednesday	15	Exoplanets
	16	The Sun
July 20 Thursday	17	The Stars: Giants, Dwarfs, and the Main Sequence
July 24 Monday	19	Star Formation
	20	Stellar Evolution
July 26 Wednesday	21	Stellar Explosions
	22	Neutron Stars and Black Holes
July 27 Thursday	23	The Milky Way Galaxy
	24	Galaxies
July 31 Monday	25	Galaxies and Dark Matter
	26	Cosmology
August 2 Wednesday	27	The Early Universe
	28	Life in the Universe
August 3 Thursday		FINAL EXAMINATION