



Hope Community Academy Earth Space Science

Course Syllabus 2024/2025

Textbook: Holt Earth Science

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Week	Topic	Chapters	Homework	MN Standards
1 August 26-30	The Nature of Science	Chapter 18 Section 1 The Night Sky Early Models of the Universe Ptolemy, Copernicus, Kepler, Galileo	Section 1 Review Page 350	
2 September 3-6	Orbits and Gravity	Chapter 18 Section 1 The Earth and Moon and Apples	Newton's Laws worksheet	9E.2.2.1.1
3 September 9-13	Light and Electromagnetic Radiation	Chapter 18 Section 2 Refracting and Reflecting Telescopes Radio Telescopes X-Ray Telescopes Hubble Telescope James Web Telescope	Section 2 Review Page 356	9P.1.2.1.1
4 September 16-20	Mapping the Stars	Chapter 18 Section 3 Constellations Declination and Right Ascension The Expanding Universe	Section 3 Review Page 364	9E.4..1.1.2

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5 September 23-27	Stars	Chapter 19 Section 1 Color Spectrum, Brightness Stellar Distance	Section 1 Review Page 370	9E.4.1.1.2
6 September 30- October 4	Star Birth and Death	Chapter 19 Section 2 H-R Diagram Supernova White Dwarf Neutron Stars Black Holes	Section 2 Review Page 376	9E.4.1.1.2
TEST 1		Chapters 18 and 19 Sections 1 and 2		
7 October 7-11	Galaxies!	Chapter 19 Section 3 Types of Galaxies The Milky Way Hubble Deep Field	Section 3 Review Page 380	9E.3..2.1.2
8 October 14-16	The Formation of the Universe	Chapter 19 Section 4 The Big Bang The CMB General Relativity Einstein Revealed Video	Chapter 19 Worksheet 1	9P.4.2.1.2
9 October 21-25	The Formation of the Universe	Quantum Mechanics GR vs QM The Fabric of the Cosmos Video: What is Space?	Worksheet 2	9P.4.1.1.1
10 October 28- November 1	The Formation of the Universe	Special Relativity Time Dilation The Lorentz Transform Video	Worksheet 3	9P.4.1.1.1

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11 November 4-8	The Formation of the Universe	The Fabric of the Cosmos Video: what is time? Entanglement, Schrödinger's Cat EPR The Fabric of the Cosmos Video: The Quantum Leap	Worksheet 4	9P.4.1.1.1
12 November 11-15	The Formation of the Universe	The Fabric of the Cosmos Video: Universe or Multiverse?	Worksheet 5	9P.4.2.1.2
Test 2		Relativity and Quantum Mechanics		
13 November 18-22	The Formation of the Solar System	Chapter 20 Section 1 Planetary Nebula Star Formation Gravity vs. Pressure Planet Formation Terrestrial, Gas Giants and Ice Giants	Chapter 20 Section 1 Review Page 388	9E.3.2.1.2
14 November 25-26	The Formation of the Solar System	The Internal Structure of the Sun Sun Spots, Solar Flares, Coronal Mass Ejections	Chapter 20 Section 2 Review Page 394	9E.2.1.1.1
15 December 2-6	Exploring Space	Chapter 22 Rockets Movie: Interstellar	Chapter 22 Section 1 Review Page 438	9P.2.2.1.1
16 December 9-13		Life Out There The Conditions For Life As We Know It	Worksheet on Alien Life	9L.3.2.1.2
17 December 16-20		Movie: Contact		

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Test 3		Chapters 20, 21 and 22		

Grading

Homework: 30%

Tests: 70%