

GEL 120 - Origins: From the Big Bang to Today
David Osleger, Dept. of Earth & Planetary Sciences

Spring, 2021

Textbook: *Big History: Between Nothing and Everything* (Christian, Brown, & Benjamin, 2014)

Goals for the course:

- To hone critical thinking skills and scientific literacy in a manner that elicits a heightened curiosity about your place in the cosmos.
- To enhance your willingness to challenge assumptions about our origins.
- To provide a chronology of key thresholds and events in the history of the universe, our planet, the biosphere, and humanity at a wide range of time and space.

Please be sure to carefully read the homepage on the GEL120 Canvas site.

Date	Topic	Reading
March 29	What is Big History? Scales of Space & Time	pp. 1-8
Mar. 31-Apr 2	Threshold 1: Big Bang Origin of the Universe	pp. 17-22
April 5-9	Threshold 2: The Stars Light Up (<i>quiz 1: April 5</i>)	pp. 15-17, 22-24, 4-7
April 12-14	Threshold 3: Origin of the Elements (<i>quiz 2: April 12</i>)	pp. 24-30
April 16-26	Threshold 4: Origin of Earth & Early Earth (<i>quiz 3: April 19</i>)	pp. 33-45
April 28	Midterm 1 (30%)	
April 30 - May 5	Threshold 5: Emergence of Life & Early Life Great Oxygenation Event	pp. 55-57, 63-71
May 7-10	Snowball Earth, Metazoans (<i>quiz 4: May 10</i>)	pp. 71-72
May 12-19	Phanerozoic Earth & Life (<i>quiz 5: May 17</i>)	pp. 68-76
May 21-26	Threshold 6: Quaternary Climate & Human Evolution (<i>quiz 6: May 24</i>)	pp. 79-83, 83-98
May 28	Threshold 7: Agriculture & Civilization	pp. 103-107, 127-130
May 31	Memorial Day	
June 2	Threshold 8: Great Acceleration, Anthropocene, the Future	pp. 215-217, 243-246, 283-285
June 9, 6:00-8:00 pm PST	Final Exam (40%)	