What is it?

Big History is the study of the past as a whole—not just of human societies. It includes the study of the earth and the universe and tries to understand how human beings are connected to their environments and the billions of years of historical evolution that preceded their appearance on the planet. Beginning with Big Bang cosmology and continuing all the way through to the future, Big History is an attempt to put everything into perspective.

What will we read?


*Big History* is available in the AUC bookstore and on reserve in the library, but I suggest you purchase a copy. It will be easier for your coursework and it’s a good book to add to your collection.

Do the readings before you come to class. At least skim through the chapter. I’ve tried to keep the readings relatively brief, but some of the material is rather challenging, and it will help a lot if you are familiar with the ideas before we discuss them.

How do I earn a good grade?

- Attendance/participation: 15%
- Group (or individual) project/report: 25%
Take-home writing assignments (two x 15%) 30%
In-class writing assignments (two x 15%) 30%

What are we going to do?

The idea here is to share this experience through talking, reading, writing, in-class work … I want it to be a fun learning environment. This is a unique course and hopefully it will be one of the most interesting and exciting ones that you will ever take, for it concerns all of us … Where we come from, why we are here, the meaning of life, what will happen in the future.

In addition to written assignments, we will also be doing some group projects (or individual reports for those of you who are not into such things). But don't be shy. It’s fun to share! Part of what I’m trying to do in this course is to get you guys to teach each other. *Come to class every day and come prepared*. And get to know me. Let’s talk and let me help you prepare and do well. I'm the best resource you have for all this.

**Week 1**  
*Big History, Chapter 1, pp. 3-15*

Feb 1  
Big History is a new approach to the past that combines the natural and social sciences. Every society has an explanation for creation. Big History's explanation is modern/scientific and relies upon the idea of evolution and the Big Bang theory of the origins of the universe.

3  
The universe was created around 13.5 billion years ago when matter and energy exploded out of emptiness creating both time and space.

5  
As the universe cooled, galaxies and stars appeared. The sun and our solar system were formed in turn following the collapse of a supernova about 4.6 billion years ago. Stars provide both the raw material from which the earth was created and the energy that fuels the biosphere.

Video: Stephen Hawking on the Big Bang
8 The earth was formed about 100,000 years later from debris left over from the explosion of that same supernova. The earth too is about 4.6 billion years old. Early earth was a mass of rock and trapped gases. Over time, the core heated up and melted, the earth's crust took shape, carbon dioxide seeped out to create an atmosphere, and it rained for several million years, filling the oceans.

10 Single-celled organisms, little more than strands of DNA floating in a membrane, appeared about 3.5 billion years ago. As these organisms, a sort of bacteria, began the process of photosynthesis, free oxygen was released, creating earth's life-sustaining atmosphere, and the conditions necessary for the evolution of the first multi-celled organisms.

12 Video: Life On Earth

15 Beginning with what is called the “Cambrian explosion” (c. 600 million years ago), the first organisms with shells appeared; then the first corals, vertebrates, fishes, trees, sharks, amphibians, reptiles and insects. Coal formed at the same time.

17 Between 250 and 150 million years ago dinosaurs roamed the earth. Also the first birds, plants and mammals. Around 65 million years ago a huge asteroid slammed into the planet. The resulting dust cloud blocked out the sun, most vegetation died, and the dinosaurs became extinct.

19 Following the extinction of the dinosaurs, the first primates evolved, followed by apes, and around 36 million years ago, the first hominids. The hominid and ape lines separated about 23 million years ago, and the first human-like creatures (Australopithecines), came down out of the trees and learned to walk on two legs about 5 million years ago.
Week 4

22 After more than 3.5 million years of further evolution in terms of brain size, our first human-like ancestors (homo erectus), appeared. They used tools, fire, lived in small kin groups, and spread across the face of the earth. Our species, homo sapiens, capable of speech, emerged in east Africa around 250,000 years ago and soon replaced all other hominines to dominate the planet’s food chain and natural resources.

Video: Guns, Germs and Steel (Part 1)

24 By 100,000 years ago they had moved into Asia and from there across the planet. All people on the earth today have their origins in east Africa. At this time, there were about 500,000 human beings.

Video: Guns, Germs and Steel (Part 2)

26 Between 100,000 and 10,000 years ago, through their successful adaptation to nearly all parts of the world, humans developed full speech and brain power, and took on all the aspects of modern people. During this time, they came to look, talk and think the way we do today.

Big History, Chapter 4, pp. 57-71

Week 5

March 1 First In-Class Writing Assignment

3 About 10,000 years ago, some hunter-gatherer societies made the transition to agriculture and herding. This is called the “Neolithic Revolution.” It was the most important development in human history until the industrial revolution (c. 1750 CE).

Big History, Chapter 5, pp. 75-93

5 The earliest civilizations, which were characterized by cities, writing, monumental architecture and a more complex
social hierarchy developed in the Middle East between 5000 and 1000 BCE. Writing was invented.

Hand out first take-home assignment (due 22 March)

**Week 6**

8 Other early civilizations emerged at this time in Southern and Eastern Asia.

*Big History, Chapter 6, pp. 94-109*

10 Holiday

12 The ancient world (to 1000 CE) witnessed the power of the first great empires: Egyptian, Greek, Roman, Persian and Byzantine . . .

*Big History, Chapter 7, pp. 110-126*

**Week 7**

15 Video: Ancient Rome (Part 1)

17 Video: Ancient Rome (Part 2)

19 ... the Gupta empire of India, the Ch‘in and Han dynasties in China; the Carolingian dynasty in Europe; and the kingdom of Ghana.

*Big History, Chapter 8, pp. 127-146*

**Week 8**

22 As the power of states continued to grow, the world’s great religions: Zoroastrianism, Judaism, Christianity, Islam, Hinduism, Buddhism and Confucianism.

First Take-Home Assignment Due
24 Around this same time (c. 1st and early 2nd millennium CE), as both technological innovation and disease began to have an important impact among the old-world populations of Eurasia, powerful empires/cultures appeared in central America . . .

*Big History, Chapter 9, pp. 147-167*

26 . . . and south America.

**Week 9**

29 On the eve of the “Modern Revolution,” agriculturalists, pastoralists and foragers existed side-by-side across the globe in a complex and diverse arrangement of civilization and cultures.

*Big History, Chapter 10, pp. 168-187*

31 Video: Storm From the East (Part 1)

April 2 Video: Storm From the East (Part 2)

**Week 10**

5 Between 1000 and 1500 CE, European civilization began to establish itself as an economic, cultural and political power. (In these years, the Maya, Inca and Aztec empires of central and southern America reached their peak.)

7 The Ottomans, the Mughals, and the Safavids spread out across western, central and southern Asia . . .

9 . . . the Ming dynasty was founded in China, as well as the Tokugawa shogunate in Japan; and the empire of Zimbabwe became powerful in eastern Africa.

**Week 11**

Spring Break through 19 April
Week 12

21 In the fifteenth, sixteenth centuries and seventeenth centuries, Europeans developed the ships, maps, navigational techniques and the knowledge of winds that allowed them to reach and link every part of the globe.

*Big History, Chapter 11, pp. 188-209*

23 This was the era of global exchange and the gunpowder empires.

Week 13

26 Second In-Class Writing Assignment

28 Between 1000 and 1700, due, in large part, to population growth and technological change, the Modern Revolution began to unfold.

30 Europe saw the invention of printing, guns, the early Scientific Revolution, the Renaissance and Reformation (in Europe). These developments led to the emergence of the first secular nation-states and, in England, the world's first constitutional system.

Week 14

May 3 The industrial revolution of the eighteenth and nineteenth centuries created the social and economic conditions for the modern world.

*Big History, Chapter 12, pp. 210-229*

5 The French Revolution set the stage for the emergence of the modern, democratic nation-state.

7 Beginning in the mid-to-late nineteenth century, the effects of the industrial and French revolutions were felt across the globe.

Hand out second take-home assignment (due 19 May)
In the twentieth century, capitalism became the dominant mode of production and a series of technological/technical innovations including the invention of the internal combustion engine, the multinational corporation, atomic power and electronics.

Colonialism was entrenched, then collapsed.

Nuclear power was discovered; there was a revolution in communications and computer technology; and many traditional lifeways were destroyed.

As the world’s population grew from 1.5 to over 6 billion, man’s impact on the environment reached dangerous levels.

Big History, Chapter 13, pp. 230-248

Video: Mexico City

Second Take-Home Assignment Due

In the twenty-first and twenty-second centuries, the nation-state as we know it will be replaced by some form of world government and technological advances will solve our major ecological problems, but not before some world-wide biological crisis greatly reduces the population of the planet. The colonization of space and other planets will begin within the next thousand years. In about three billion years, the earth will become uninhabitable because the sun will begin to die. Several billion years later, the universe will decay into a state of featureless equilibrium.

Group/Individual Projects Due: Sunday, May 24, 12:30pm