

Viewing: **HIST 103 : A History of Everything: The Big Bang to Big Data**

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History

1. Jan 15, 2019 by Wendy Mathewson (wmathews)
2. Feb 23, 2019 by Amy Elli (amyelli)

General Information

Effective Term:

College: Liberal Arts & Sciences

Department/Unit Name (ORG Code): History (1451)

Course Subject: History (HIST)

Course Number: 103

Course Title: A History of Everything: The Big Bang to Big Data

Abbreviated Title: History of Everything

Course

Description:

This introductory survey in "Big History" explores different scales of time as it places human history in larger geological, ecological, and cosmic contexts. Topics include the big bang, planet formation, the origin and development of life, mass extinctions, the emergence of Homo sapiens, the development of agriculture and cities, wars, plagues, and natural disasters, the advent of religion and science, political revolutions, industrialization and globalization, and human impact on the environment.

Justification

Justification for change:

Please Note: a syllabus is required for General Education review:

Course Information

Course Credit

Course credit:

Undergraduate: 3

Graduate:

Professional:

Registrar Use

Only:

Banner Credit: 0 OR 3

Billable Hours: 0 OR 3

Grading Type

Grading type: Letter Grade

Alternate Grading
Type (optional):

Available for DFR: No

Repeatability

May this course be repeated? No

Credit Restrictions

Credit
Restrictions:

Advisory Statements

Prerequisites:

Concurrent
Enrollment
Statement:

Restricted
Audience

Statement:

Cross-listing

Cross Listed

Courses:

Class Schedule Information

Class Schedule

Information:

Fees

Is a fee requested No
for this course?

Course Description in the Catalog Entry

This is how the above information will be represented in the Catalog:

This introductory survey in "Big History" explores different scales of time as it places human history in larger geological, ecological, and cosmic contexts. Topics include the big bang, planet formation, the origin and development of life, mass extinctions, the emergence of Homo sapiens, the development of agriculture and cities, wars, plagues, and natural disasters, the advent of religion and science, political revolutions, industrialization and globalization, and human impact on the environment.

Additional Course Notes

Enter any other
course
information
details to be
included in the
catalog:

Course Detail

Frequency of
course:

Every Fall

Duration of the Full
course

Anticipated 200

Enrollment:

Expected distribution of student registration:	Freshman: 40 %	Sophomore: 30 %	Junior: 20 %	Senior: 10 %
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General Education

General Education Historical and Philosophical Perspectives

Category Western/Comparative Culture(s)

General Information

Is the course required for a major concentration? No

Is the course part of a sequence? No

What is the frequency with which the course will be offered?:

(For Example: every semester, once a year)

Once per year

Briefly describe how the course fulfills the General Education objectives:

This course is, essentially, an introduction to historical thinking. By choosing the widest possible time-frame—the origin of the universe to today—the course has several specific goals: First, it encourages students to consider the relationship of different scales of time—cosmological, geological, ecological, and human—and the perspectives on different kinds of phenomena and patterns of historical change each reveals. We normally consider “history” to pertain only to human society, but in fact there are a variety of scales of history, each of which can be accessed using different tools and methods. The “Big History” approach emphasizes the fundamental unity of historical investigation by examining how we have come to have knowledge of the past across a wide range of disciplinary approaches and temporal scales, and motivates students to consider how the relatively brief durations of individual human lives are connected with the deeper tempo and processes of natural history.

Second, the course emphasizes one of the central components of historical causality: the contingency and path-dependency of events. Viewed in hindsight, history—whether of humans or the natural world—can appear to be purposeful and even inevitable. However, as astronomers, biologists, geologists, and historians are well aware, major developments in history are often shaped by unpredictable, chance events—an asteroid striking the earth at a particular moment, a plague devastating an entire continent, an unexpected encounter between two people—that foreclose certain possibilities and create others. One of the advantages of viewing history on a grand scale is that

students can develop an appreciation for just how unpredictable future events are, and of the fundamental differences that exist between historical reasoning and investigation of deterministic phenomena in physics, chemistry, and other sciences.

Third, students will gain knowledge of scientific topics and historical events at several levels of resolution. While the course does not aim to replace courses in physics, geology, or biology, it nonetheless introduces basic concepts in a number of these areas, including the origin of the universe, the formation of the solar system and the earth, the emergence and diversification of life, ecological and climatic patterns, the emergence and spread of *Homo sapiens*, anthropogenic environmental impacts, etc. At the same time, students will also gain understanding of major trends and developments in human history (roughly two-thirds of the course will cover history since the advent of human societies) such as the invention of agriculture, the formation of cities and larger social units, major technological innovations, the spread of religious and philosophical ideas, the development of political and ethnic identities, the emergence of distinctive institutions, the impact of natural and artificial disasters, and ultimately phenomena such as imperialism, globalization, and industrialization. There will be a specific emphasis on how social norms—around gender, sexuality, and ethnicity—have been shaped by both macro (e.g., biological and anthropological) and micro-level historical forces.

Describe the instructional format and provide special justification, if necessary:

The format of the course will be a combination of lecture and discussions. Two days per week students will attend lectures that will highlight important topics and themes from each unit, supplemented by smaller-group discussion sections once per week with the instructor or TA. This is the standard format for most large introductory courses in the Department of History. Discussion sections will be capped at 25 students each.

Describe the means by which the Communication Skills goal will be achieved:

Students will develop communication skills through a variety of assignments and activities. The two midterms and final exam will require students to reflect on course themes and demonstrate knowledge of course content through short-answer and essay questions. There will be no multiple-choice responses; rather, students will be expected to provide reflective responses to questions that require synthesis of the major topics and perspectives presented in readings, lectures, and discussions. In discussion sections, students will be challenged to reflect on course themes and to develop oral communication skills—including the ability to evaluate conflicting historical interpretations, weigh evidence, and gain appreciation for differing points of view. Students will also have the opportunity to develop writing skills through two short response papers and an interpretive essay.

Describe how evaluation and adherence to General Education guidelines will be monitored:

Please indicate the timeline for such evaluations

The History Department's Director of Undergraduate Studies will monitor the class's adherence to general education guidelines, evaluating its adherence most carefully whenever there is a substantial change in the syllabus or form of instruction.

Indicate those who will teach the course and describe procedures for training & supervising teaching assistants:

Due to the rather unique format and content of this course, it will be taught only by History Department faculty with specialized training in both history and the relevant sciences. David Sepkoski, the Siebel Chair in History of Science (who has advanced training and expertise in these areas) will be the primary instructor, although other faculty, including Robert Morrissey (an expert in environmental history) may teach the course occasionally. Prior to the beginning of classes, TAs will be expected to complete background training in the topic through a "boot camp" in Big History taught by the instructor. This will consist of an intensive, one-day workshop on the various scientific and historical topics that will be covered, an introduction to the course themes and learning objectives, and discussion of a variety of background readings. During the semester TAs will be closely monitored by the instructor, and will be required to attend weekly meetings in which course objectives will be discussed and recent experiences evaluated. Exams and essay topics will be developed collaboratively with TAs, as will written rubrics for grading. The instructor will monitor and provide guidance and feedback on graded assignments and will meet informally with TAs as necessary to answer questions and resolve problems.

Historical and Philosophical Perspectives

Describe the reading requirements in this course.

Students will read 50-75 pages per week. Readings will include textbook chapters, articles and book excerpts covering scientific and historical topics, and a wide variety of primary sources, including myths, religious texts, philosophical works, newspaper and magazine articles, scientific literature, and government documents.

Describe the writing requirements in this course.

Students will write two short papers (1-2 pages) analyzing primary source materials, and one longer essay (4-5 pages) reflecting critically on course themes and readings. The midterm and final exams will be long-answer and essay-based, emphasizing the ability to construct arguments rather than rote memorization of facts.

How does the course introduce students to the typical critical approaches and methods of the discipline, and to past accomplishments in the field?

The central theme of the course is a critical understanding of historical methodology:

what history is, how it is studied, what distinctive perspective historical reasoning offers. Students will read a variety of works by professional historians, but they will also be challenged to think critically about how historical methods are applied to very different kinds of problems, and to evaluate the appropriateness of particular methodologies for answering particular questions.

How does the course foster the goals of humanistic study, including: skill in communication; discriminating judgment and appreciation of ideas; understanding of cultural traditions; appreciation awareness of cultural ethnic and national diversity; and reflection on the human condition?

This course requires students to develop a broad understanding of the origins and development of human cultures and civilizations, surveying the entirety of the broad chronological and geographical sweep of human history. A central theme is cultivating a sense of humility about the standpoint of our current moment in Western culture in the face of both the immensity of deep time and the rich panoply of human cultural experience since the beginnings of civilization. Students will be exposed to a selection of primary sources that will challenge them to consider the perspectives and lived experiences of people in a wide variety of times, places, and cultures and to social differences, along gender, class, ethnic, and other lines, within particular cultures.

If the course contains elements of more than one category within the Humanities and the Arts (literature, the arts, historical perspectives, or philosophical perspectives), explain why this course is more appropriate for the category for which it is proposed.

Is this a course in Yes
historical
perspectives:

What chronological and/or geographical aspect of human history is studied in this course?

This course includes a broad survey of the history of global civilization from the advent of agriculture through the industrial revolution and the "Great Acceleration" of the 20th century.

Show how the course addresses continuity and change in the human experience and elucidates the development of institutions, ideas, beliefs, and social structures.

Given the framework of this course, students will be confronted with both the essential continuities of human experience (our relationship with our natural environment, our shared biological heritage, the goals and anxieties humans have had in common despite differences in time, place, and culture) as well as the reality of change and cultural difference over time. A central course theme is historical contingency, and

students will be challenged to consider how distinctive turning points in history (the collapse of civilizations, the flourishing of particular ideologies or institutions, the source of wars and conflicts) have often been the product of chance or unpredictable events.

Show how the course familiarizes students with significant movements, persons, and events in their intellectual, social, economic, and political contexts.

Given the broad scope of this course, students will gain knowledge of some of the most significant historical movements and trends in cultural, social, and political history: the development of writing, urban centers, and agriculture in the ancient Near East; the advent of monotheistic religions and the institutionalization of religious practice; the history of the great empires of the Mediterranean world, Central and East Asia, and Mesoamerica; the growth of political institutions, trade networks, and literary traditions in global context; the consequences of cultural exchange and conflict; the legacy of European expansion and Imperialism; the rise of modern scientific practices, beliefs, and institutions; the impact of technology on society and culture; and, ultimately, the formation of our modern, globalized society.

Is this a course in philosophical perspectives:

Western/Comparative Cultures

Show how the course treats topics and issues that promote a deeper understanding of the culture(s) discussed.

This course provides a broad survey of the diversity of human cultures over the entirety of human history. Students will gain understanding of and appreciation for both the sources of modern Western cultural views and attitudes (the religious, social, artistic and literary, political, and economic basis for many of our current cultural values) as well as a greater sense of the wider diversity of cultural practices and beliefs that have existed since the origin of civilizations. No particular culture will be privileged in this account; rather, students will learn, through historical analysis, how particular cultural views have originated, spread, flourished, or declined due to particular contingent historical circumstances. Again, a central message of the course is that history is neither inevitable nor necessarily progressive: particular beliefs, ideas, and institutions do not "succeed" because they are superior, but rather because of the complex interaction of broad historical forces and trends (including such factors as climate, disease, and proximity to resources or cultural contacts) with unpredictable local events (chance encounters, unlikely or fortuitous coincidences, actions of individuals, local beliefs, etc.). In the resulting picture, students will gain better appreciation for the vast diversity of human cultural expression, and also a sense of

humility and perspective on the contingency of the one in which they live.

Show how the course provides at least one of the following: (i) a broad description and analysis of the interaction of intellectual, artistic, political, economic, social, and other aspects of a society's cultural life; (ii) an intensive investigation of the cultural life of a society or group in a particular time and place; (iii) a focused investigation of particular aspects of the culture of a society or group (e.g., its art and architecture); or (iv) a comparative investigation of cultural systems and the development of constructs for cross-cultural sensitivity and analysis.

The view of cultural history presented in this course is macrocosmic, but as the course proceeds towards the present (advancing in increasingly smaller units of time) students will also gain insight—through case studies and individual “snapshots”—of particular moments in the intellectual, political, and economic history of specific cultures. We will pause, periodically, for example, to consider “what was life like” in a particular time and place: whether for a farmer in pre-Columbian Central America, or a monk in Medieval Italy, a bureaucrat in 17th century China, or an enslaved African on a sugar plantation. These episodes will not be designed to provide a comprehensive history of particular cultures, but rather are meant to encourage students to reflect both on the unity of human experience as well as the distinct challenges, circumstances, and constraints that humans have encountered at particular historical moments. In sum, this course provides both the broadest possible introduction to human social and cultural life (thereby meeting requirement i) and a culturally sensitive comparative perspective (thereby meeting requirement iv).

If the course contains elements of both the Western, U.S. Minority, and/or Non-Western categories, show how the emphasis of the course makes it more appropriate for the Western/Comparative Cultures category for which it is being proposed.

This course contains elements of both Western/Comparative Cultures and Non-Western Cultures. It is being proposed for Western/Comparative, however, because of the fundamental sense in which it emphasizes “understanding and appreciation of significant aspects of the cultural traditions of both Western and Non-Western” cultures.

Show how the course provides understanding and awareness of significant aspects of the cultural tradition evolved from the confluence of Greek and Roman philosophical thought and European religious traditions, i.e., the cultural traditions associated with European and North American countries; OR show how the course provides understanding and appreciation of significant aspects of the cultural traditions of both Western and Non-Western cultural traditions, and indicate the comparisons and contrasts drawn between the different traditions.

This course is, paradigmatically, a survey of comparative culture. Students will be exposed to some of the foundational traditions, practices, and beliefs of the West, but will also gain appreciation for cultural traditions ranging from Central, East, and South Asia, to Africa, to Central and South America. Many of the cultural expressions

surveyed in this course are common to many cultures: the development of writing and literature, the organization of political polities and institutions, the application of technology and science to human social problems, the development of religious and philosophical explanations for natural phenomena and human experiences. Attention will also be paid to cultural differences, posing questions such as “why did distinctive institutions appear in one culture rather than another?”, or “why did a certain form of cultural expression (e.g., experimental science or monotheism) flourish in a particular place and time?” Ultimately, however, the perspective this course takes to human culture is the same as its perspective on human nature and biology: viewed from the standpoint of Big History, our shared history is characterized much more by exchange, movement and migration, and similarity than it is by difference, provincialism, and parochial belief.

Additional Course Information

Does this course
replace an
existing course? No

Does this course
impact other
courses? No

Does the addition
of this course
impact the
departmental
curriculum? No

Has this course
been offered as a
special topics or
other type of
experimental
course? No

Will this course be
offered on-line?
Face-to-Face

Faculty members
who will teach
this course:
David Sepkoski

Course ID: 1011542

Comments to
Reviewers:

Course Edits
Proposed by:

Key: 11139