A Big History Directory, 2009: An Introduction

Barry Rodrigue and Daniel Stasko

In 2009, a group of scholars recognized that basic information about the growing field of Big History needed to be assembled from around the world. As a result, they began to develop a directory of Big History courses, instructors and publications.

This Directory began at the end of the summer in 2009, in the wake of the Russian Academy of Sciences’ Fifth International Conference on Hierarchy & Power in the History of Civilizations. Several professors of Big History participated in this conference, in a series of panels on “Macroevolution: Hierarchy, Structure, Laws and Self-Organization.” These included Fred Spier, Akop Nazaretyan, Esther Quaedackers, and Barry Rodrigue. In contrast to the other papers, which tended to be on research in particular aspects of macro-studies, Fred and Barry’s presentations focused on the pedagogy of Big History. They described the structure of their courses to their colleagues and, in the process, came to appreciate the need to get a better handle on the teaching of Big History around the world.

The first step was to identify where these courses were being taught, their content and audience, and who was doing it. So, upon his return to the States, Barry Rodrigue and his colleague, chemist Dan Stasko, set about gathering this information. The Directory grew in a very organic manner. Barry and Dan put together a list of the courses about which they knew and sent it to those instructors. These colleagues then added to that list. At that point, David Christian suggested a posting on H-Net, which drew quite a number of new courses and links to other instructors. In the course of contacting people, more courses and professors were discovered, and excellent suggestions were made: Add biographical statements, a basic reading list, websites, etc. It was a very friendly and collegial process.

This Directory contains many surprises. First of all, the ballpark figure that many of us had been using of a dozen Big History courses being taught around the world was far too conservative. We discovered that Big History is taught at 32 institutions by 28 professors (or teams) in 7 countries. The largest numbers of courses are offered in the United States, in 10 different states.

We also discovered that the older view of “Big History” was too simplistic a concept. In addition to 27 survey courses about Big History, there are also 9 courses that do not fit under this category, including sequel courses that are offered to the surveys. Some of the non-survey courses are World History courses that have been expanded to include presentations about cosmic origins, while others couch a more focused topic in a Big History context, such as “The Big History of Grass” and “Macrosociology.” Other courses grew out of public lecture series into formal offerings for academic credit. The pathways are intriguing for offering models for outreach.

What all the courses have in common is a “big” context that is keyed to large-scale and thematic aspects of the natural and social sciences. The content of courses in Big History
tends to vary somewhat from instructor to instructor. In part, this is a result of the professional formation of the instructors, who come from many disciplines: Astronomy, Psychology, History, Anthropology, Geology, Chemistry, Philosophy, Geography, etc. Astronomers tend to focus on cosmic influences, while anthropologists focus on human development. Nonetheless, all the instructors strive for an interdisciplinary and holistic format.\(^3\)

This Directory is still a work in progress. While it focuses on the English-speaking world, we are aware that there has been independent development of Big History in a variety of global regions, such as Universal History in the Soviet Union. So, there needs to be a renewed effort to learn about these other academic traditions. This is an exciting prospect.

The opportunities for the growth of Big History into the basic historical course in higher education are good. Big History has been incorporated into the General Education curriculum required of all students at 3 universities, and 1 of these is also offered online. Also, 2 of the courses are specifically designed as continuing education courses for primary or secondary level school teachers.

As luck would have it, one of our colleagues, Alex Moddejonge at California State University at San Marcos, is engaged in writing a historiography of Big History. We invite you to read his information flyer in the Addendum of this Directory and to contact him. We will continue to update this Directory and ask you to contact Barry Rodrigue (rodrigue@usm.maine.edu) with any information that might help us in this on-going project.
Big History:
A Working Directory of Courses & Materials,
2 September 2009

(In order to avoid spam attacks, we’ve substituted # for @ in the e-mail addresses)

Assembled by Barry Rodrigue and Daniel Stasko
University of Southern Maine (USA)

Academic Survey Courses on Big History

Australia

New South Wales

Macquarie University, Sydney:

Instructors: David Christian, Professor, Department of Modern History, Politics, International Relations & Security (david.christian#mq.edu.au). Dr. Christian is originally a historian of modern Russia and the USSR, publishing research on aspects of the social history of 19th century Russia. Since 1989, he has developed and taught courses on Big History. He is trying to bridge the gap between these very different scales by completing a history of Inner Eurasia.

Peter Edwell, Lecturer, Department of Ancient History (pedwell#hmn.mq.edu.au). Dr. Edwell presently convenes “An Introduction to World History” for the Department of Modern History. He specializes on the study of Romans in the Middle East and is currently researching the role of smaller polities, such as the Palmyrenes, in promoting exchanges between the agrarian civilizations of Greece, Rome and Persia from c 500 B.C.E.–1000 C.E.

Course Description: HIST 115 “An Introduction to World History.” While most history courses look in detail at a particular country, theme or period, our course surveys history on the biggest possible scale. It begins with the origins of the universe and goes on to tell a series of linked stories about the origins of the stars and planets, the earth and its inhabitants, human beings and various types of human societies to the present day. Questions range from how and when the universe created to what practices and ideas give shape to the modern, capitalist world. Students also ponder the similarities between “big” history and traditional creation myths.

Queensland

University of Queensland, Brisbane:
Instructor: Paul Turnbull, Professor, School of History, Philosophy, Religion & Classics (p.turnbull1@uq.edu.au). Dr. Turnbull’s research interests are focused on the construal of humanity’s deep past by European scientists and intellectuals from the late 18th to the early 20th century. He is also greatly interested in the use of networked digital media in historical research and teaching.

Course Description: Big History is taught at first year undergraduate level under the title of HIST 1601 “Turning Points in World History.” It explores significant themes and issues in world history through a detailed study of selected critical “Turning Points” that have shaped and defined the history of our modern world. It commences by exploring select themes in cosmology, the history of the earth, the emergence of life and the evolution of the human species. The course makes significant use of David Christian’s Maps of Time and is supplemented by other recent scholarship in the field of Big History.

Egypt

The American University in Cairo, Cairo:

Instructor: David Blanks, Associate Professor, Department of History (dblanks@aucegypt.edu). Dr. Blanks originally trained as a medievalist and has written about the medieval Mediterranean world, with a particular emphasis on western views of Islam. More recently, he has begun to teach, research and publish on world history, especially the global histories of exploration, higher education and food.

Course Description: HIST 111 “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.

India

Gujarat

Physical Research Laboratory, Navrangpura, Ahmedabad:

Instructor: Tom Gehrels, Fellow. Dr. Gehrels began as a Sarabhai Professor in India, which evolved into a lifetime fellowship. He works at the Physical Research Laboratory once a year in the spring semester. (See below, under Arizona, for more details).

Course Description: This course is a short and specialized version of “Universe, Humanity, Origins & Future” (described below under Arizona). It is for graduate students and is sponsored with the Centre for Space Science and Technology Education in Asia and the
Pacific (affiliated with the United Nations) for selected graduate students from Kazakhstan, North Korea, Indonesia and locations in between.

Netherlands

Noord-Holland

University of Amsterdam, Amsterdam:

Instructor: Fred Spier, Senior Lecturer, Institute for Interdisciplinary Studies (f.spier@uva.nl). Dr. Spier has organized the annual Big History course in Amsterdam since 1994. Trained as a biochemist with research experience in genetic engineering, he subsequently studied cultural anthropology and received a Ph.D. in cultural anthropology and social history. During this period, he studied the 10,000 year interplay of religion and politics in Peru, which led to the publication of two books.

Course Description: “Big History.” For centuries, people have wondered about the origin of the world around them and have created stories as answers to these questions. The contemporary scientific version of these narratives is Big History, which places the history of humanity within the entire known cosmic past, from the beginning of the Universe up until life on Earth today. By explaining how everything has become the way it is now, Big History helps students to understand their position in time and space in a way no other approach to history can offer. The insights gained in the Big History course may also help students to prepare themselves better for the future.

Big History, University of Amsterdam: (http://www.iis-communities.nl/bighistory/).

Amsterdam University College, Amsterdam:

Instructor: Fred Spier (see above).

Course Description: “Big Questions in History” offers an overview of human history placed within the context of the history of life, the Earth, the Solar System and the Universe. This approach to human history is known as Big History. Special attention will be paid to the last 10,000 years of human history, when culture took over as the main adaptive mechanism. This period witnessed the worldwide emergence of agriculture as well as the rise of state societies, while globalization, science, industrialization, urbanization and democratization have all contributed to deeply transform human societies during the past five hundred years. We focus on how humans have been transforming their natural environment, while the last lecture will deal with what we may expect from the future. This course has been taught at the newly-founded Amsterdam University College since 2009.

Big History, Amsterdam University College:
Noord-Brabant

Eindhoven University of Technology, Eindhoven:

Instructor: Fred Spier (see above).

Course Description: Dr. Spier has taught Big History at the Eindhoven University of Technology since 2003 (see description above).


Russian Federation

Moscow Region

International State University, Dubna:

Instructor: Akop Nazaretyan, Professor, Department of Sociology & Humanities (anazaret#yandex.ru). Dr. Nazaretyan’s research specialty is in the theory of catastrophes and mass psychology. He is also an academic in the Russian Academy of Sciences, Institute of Oriental Studies, where he works in the Department of Cross-Cultural Research; a Visiting Professor at Moscow State University, in the Department of Psychology; and a member of the Russian Academy of Natural Sciences and the U.S. Society for Cross-Cultural Research.

Course Description: “Big History” surveys the concepts and foundations of the discipline. We look at mega-trends in cosmic, geological, biological and social evolution. The course questions if the history of humankind has been a single unified process, in keeping with the evolution of the Universe, and considers the pre-history and evolution of intelligence. We study techno-humanitarian balances (a systems relationship between technology, behavior-regulation, and sustainability) as an explanation of human-generated crises and advances. And, finally, we ponder the crossroads and dramas of the 21st century, as well as longer term prospects.

Komi Republic

Syktyvkar State University, Syktyvkar:

Instructor: Igor Fedorovich, Department of Philosophy (fiv#rol.ru). No details provided.

Course Description: No information provided.
South Korea

Ewha Woman’s University, Seoul:

Instructor: David Christian, Visiting Professor, Institute of World & Global History (see above).

Course Description: Summer course # 10946 “New World History, Global History & Big History” presents a new form of world history that is called Big History. Like all forms of world history, big history tries to move beyond the nation-centered perspectives that dominate history teaching in most universities. Instead, it offers a more human-centered global approach to history. Big History surveys the past at all scales, beginning with the origins of the Universe and ending in today’s global world, before looking into the future. So, it is like a modern creation story. This is a form of world history that helps us understand the place of human beings within our Universe, using the best scientific information available to us early in the 21st century.

USA

Arkansas

Arkansas Technical University, Russellville:

Instructor: Alexander Mirkovic, Assistant Professor, Department of History & Political Science (amirkovic#suddenlink.net). Dr. Mirkovic teaches courses in Middle Eastern, European and Modern World History. His current research project is a history of Serbian nationalism in the 19th and 20th centuries. He is assistant editor of the forthcoming ABC-CLIO World History Encyclopedia, Era 8: 1900–1945 and assistant editor of the World History Bulletin.

Course Description: HIST 4514 “Big History” examines history on a “big” scale, from the Big Bang to Modernity and seeks the largest possible themes, issues, and patterns. It looks at the history of various theories of the origins of the cosmos, the natural history of human race, the nature of human complex societies, and the process of modernization and industrialization. It studies the changing perceptions of time through history and their dependence on human and technological development.

Arizona

University of Arizona, Tucson:

Instructor: Tom Gehrels, Professor, Department of Planetary Sciences (tgehrels#lpl.arizona.edu). Dr. Gehrels is an astrophysicist who studies the start of Big History in the multiverse, where our physics and principles of evolution originated. He
pioneered the first photometric system of asteroid identification, as well as wavelength dependence of polarization of stars and planets, discovered several asteroids and comets, and initiated the Spacewatch program to guard Earth from such impacts.

Course Description: NATS-102, Sections 14, 15H, 791 “Universe, Humanity, Origins & Future” is a survey of Big History as seen by an astrophysicist – with an emphasis on origins, without a detailed discussion of the history of any one species. On the other hand, a third of the course focuses on modern problems, such as Earth’s asteroid hazard and its mitigation, birth control (as Vikram Sarabhai approached it), and the search for basic principles in tackling modern problems. Students also participate in producing the second edition of the textbook, *Survival through Evolution, from Multiverse to Modern Society* (Amazon/BookSurge Publishing, 2007). The course and book are taught in the fall at the undergraduate level. The core paper on the multiverse is kept up to date and linked to the website: (www.lpl.arizona.edu/faculty/gehrels.html).

California

University of California, Berkeley:

Instructor: Walter Alvarez, Professor, Department of Earth & Planetary Science (platetec#berkeley.edu). Dr. Alvarez is the geologist on the Berkeley research team that discovered the first evidence that impact caused the extinction of the dinosaurs, and was involved later in the proof that the Chicxulub Crater in Mexico was the site of that impact.

Course Description: EPS C51 (= LS C70X) “Big History: Cosmos, Earth, Life, Humanity.” Usually, when we think of “history,” we have in mind the story of *humanity* – what has happened to *people* over the last few thousand years – the history that is written down in books and documents. But there is another, much broader view – that “history” is *everything that has ever happened* – not just to human beings, but to all living organisms, to the Earth and to the entire cosmos. At Berkeley, many different departments are involved in reconstructing the past: The Astronomy and Physics departments are figuring out cosmic history, the Department of Earth & Planetary Science studies the history of the Earth and the Planets, the Department of Integrative Biology and the Department of Molecular & Cell Biology focus on the history of Life, and the history of humanity is spread across many different departments in Humanities and Social Sciences. Up to now, no one has tried to tie all these kinds of history together. This is the goal of Big History.

Course Description: EPS 98/198 “Advanced Big History” is taught one hour per week and is open to students who have taken EPS C51 (= LS C70X) above, being numbered EPS 98 for lower-division students and EPS 198 for upper-division students. The course covers topics that integrate at least two of the four regimes of Big History (Cosmos, Earth, Life, Humanity) – in a seminar/discussion format, based on reading assignments.

Dominican University of California, San Rafael:
Instructor: Cynthia Brown, Professor Emerita, History Department and Education Department (cbcynthia#earthlink.net). After directing the single-subject credential program (Grades 7–12) for twenty years, while teaching world history part-time, Dr. Brown is using her retirement to teach and write Big History.

Course Description: HIST 3008 “World History & Geography” is a state-required course for liberal arts majors who plan to be elementary teachers. It starts with the Big Bang and runs to the present, concentrating on the material taught in California for the sixth grade (Paleolithic through Roman Empire). Texts are Cynthia Brown’s Big History and Robert Strayer’s Ways of the World.

Course Description: HIST 3510 “Whole Earth History” is part of a three-course colloquium (each in a different department) that undergraduates are required to take, choosing among several. The other courses matched with this one are “Life on Earth” (Science) and “The World’s Religions” (Philosophy and Theology). Despite its title, “Whole Earth History,” this course begins with the Big Bang and ends with the present, with an emphasis on environmental issues. Texts are Cynthia Brown’s Big History and Frans de Waal’s Our Inner Ape.

Maine

University of Southern Maine, Lewiston:

Instructors: Barry Rodrigue, Associate Professor, Arts & Humanities, Lewiston-Auburn College (rodrigue#usm.maine.edu). Dr. Rodrigue is a geographer and archeologist working on the Big History of the Norumbega Peninsula, between the St. Lawrence River and the Gulf of Maine. His academic focus is on French and Indigenous interaction in North America. He and his students are also engaged in global human rights work, notably in Chechnya, as well as with Indigenous and Métis issues.

Daniel Stasko, Assistant Professor, Natural & Applied Sciences, Lewiston-Auburn College (dstasko#usm.maine.edu). Dr. Stasko provides instructional and course design assistance for Big History. A synthetic chemist with a specialty in materials related to energy production and energy storage, his academic focus has been on increasing the access to and interest of students – from all backgrounds – to the wonders and importance of the physical sciences.

Course Description: LCC 350 “Global Past, Global Present: From the Big Bang to Globalization” is a thematic survey of global history from its origins in the Big Bang to the present. The result is a more realistic understanding of how humans fit into the vast expanse of the universe, instead of orienting the universe around humans. Students also consider the challenges of modern globalization, in the light of Big History, with an important theme being on the quest to develop sustainable and ethical lifestyles. The overall focus is on what such knowledge might mean in our everyday lives and how we should—as responsible individuals and a responsible species—conduct ourselves on this
world and off of it. It is a core curriculum course, required of all students. This course is also offered online.

Big History, University of Southern Maine: (http://usm.maine.edu/lac/global/bighistory/).

Massachusetts

Tufts University, Medford:

Instructors: Eric Chaisson, Andrew Kurtz, David Walt, Catherine Freudenrich and Lauren Sullivan. Contact: Eric Chaisson, Wright Center for Science Education, Department of Physics & Astronomy (eric.chaisson@tufts.edu); see below for details on Dr. Chaisson.

Course Description: Chemistry 5 “From the Big Bang to Humankind” explores the origin and fate of the Universe, the formation of Earth and its structure, the chemistry of life and its origin, the evolution and development of complex organisms, and the onset of modern humans. In this empirically based course, students learn the evidence for the various ideas presented, the scientific method used by scientists, and how the scientific community evaluates the evidence. This course is team-taught by an astrophysicist, a glacial geologist, an organic chemist, an evolutionary biologist and a cultural anthropologist.

Harvard University, Cambridge:

Instructor: Eric Chaisson, Harvard College Observatory (chasison@fas.harvard.edu). Dr. Chaisson is an astrophysicist and science educator who has taught, researched and written about cosmic evolution for some 30 years. He is also noted for his original research on the interstellar clouds and emission nebulae of the Milky Way Galaxy, as well as for his leadership in improving science education, both nationally and internationally. For details, please see (http://www.tufts.edu/as/wright_center/eric/ericpage.html).

Course Description: Astronomy 8 “Cosmic Evolution: The Origins of Matter and Life” is a study of the evolution of the Universe, from its origin in a cosmic expansion to the emergence of life on Earth and possibly other planets: Big-bang cosmology, origin and evolution of galaxies, stars, planets, life and intelligence, discussions of Nature writ large, from quarks to quasars, microbes to minds. The materials used are largely descriptive, based on insights from physics, astronomy, geology, chemistry, biology and anthropology.

Syllabus, “Cosmic Evolution,” Harvard University: (http://www.tufts.edu/as/wright_center/eric/ericteach.html).

“Cosmic Evolution,” Harvard University: (http://www.tufts.edu/as/wright_center/cosmic_evolution).

Boston University, Boston:

Instructor: Thomas Bania, Professor, Institute for Astrophysical Research, and the Department of Astronomy (bania@bu.edu). Dr. Bania studies the interstellar medium of the
Milky Way and other galaxies by using the techniques of radio spectroscopy. He studies promordial nucleosynthesis during the Big Bang, stellar nucleosynthesis, and the chemical evolution of the Milky Way galaxy by measurements of the light isotope of helium, 3-He.

**Course Description:** Astronomy 117 “Cosmic Evolution: The Search for Extraterrestrial Life” is an interdisciplinary course that follows the evolution of matter in the Universe, the evolution of life on Earth, the ascent of Humankind and the invention of civilization and technology. It will then discuss the search for other galactic civilizations, possible techniques for communication with such civilizations, and the future of Humankind. The goal of Cosmic Evolution is to build a scientific base from which to view all of creation and the presence of intelligent life in the cosmos.

University of Massachusetts, Amherst:

**Instructor:** James Walker, Professor, Department of Biology (jwalker#bio.umass.edu). Dr. Walker’s work has focused on the phylogeny, classification and evolutionary phytogeography of flowering plants. He has used scanning and transmission electron microscopy of the earliest known fossil angiosperm pollen grains from rocks of the Lower Cretaceous in this search. Dr. Stephen Schneider, Professor, Astronomy Department, is the co-instructor.

**Course Description:** Biology 190A (GenEd SI) “Cosmos: From the Origin of the Universe to the Evolution of Life and Intelligence” is a team-taught course with faculty from Departments of Physics, Astronomy, Geosciences, Microbiology, Biology, Anthropology, Psychology, Computer Science, Philosophy and History. Topics include Cosmic Fundamentals – space, time and relativity; the Universe – cosmology, dark matter and dark energy, origin and evolution of stars, the elements and the solar system; Life – its nature and origin, the microbial world, plants and animals; Intelligence – origin and evolution of biological intelligence, artificial intelligence and robotics. Friday Forums include topics such as Quantum Weirdness: “Nobody Understands Quantum Physics” – Nobel Laureate Richard Feynman, and The Grandest Finale: How Will It All End? Begun as a small (25-student) honors course in 2002, it evolved into a large (200-student) general education course for all students by 2008.

Salem State College, Salem:

**Instructor:** Hope Benne, Adjunct Professor, History Department (bennekh#msn.com). Dr. Benne specializes in Asian history, particularly Southeast Asia, and Peace History. She is working on a book titled, The World History of Peacemaking. She has taught Big History for 15 years.

**Course Description:** HIS 101 “World History I” is a freshman course and, along with HIS 102 “World History II,” forms a required sequence for all graduates. The goal is to explore factors that have affected humankind from the Big Bang to now and into the future. Some of these factors include the evolution of the universe and solar system, the emergence of

**Michigan**

Grand Valley State University, Allendale:

**Instructor:** Craig Benjamin, Associate Professor, Department of History and Meijer Honors College (benjamic@gvsu.edu). Dr. Benjamin specializes in ancient Central Asian history, world historiography, world history teacher-training and Big History. His most recent book on ancient Central Asian nomads is: *The Yuezhi: Origin, Migration, and the Conquest of Northern Bactria* (Brepols Silk Roads Studies XIV, 2007). He has taught Big History in Australia and the United States for 14 years, and is currently writing a Big History textbook for McGraw-Hill, with Cynthia Brown and David Christian.

**Course Description:** HST 101 “An Introduction to Big History” looks at the past on the largest possible time scale: it begins with the latest scientific account of the origins of the universe, and goes on to describe the origins of stars and planets, of life on earth, the emergence of human beings, and the various types of human societies that have existed up to the present day. Ultimately the course encourages us to consider our place in the global world of the twenty-first century, and to think of how we might contribute to the future of that world.

**University of Michigan, Ann Arbor:**

**Instructor:** Douglas Northrop, Associate Professor, Department of History, and the Department of Near Eastern Studies, (northrop#umich.edu). Dr. Northrop is a specialist on the modern history of Central Asia, focusing on questions of empire, culture and environment. His first book investigated the struggle over Muslim women’s veils in early Soviet Uzbekistan, while he is now writing a comparative study of natural disasters along the Eurasian frontier.

**Course Description:** History 239 (cross-listed with Geosciences) “ZOOM: A History of Everything” is an interdisciplinary course in Big History that integrates the human story with its terrestrial and cosmic surroundings. The course focuses on two key themes: 1). Scale, by “nesting” each topic and disciplinary perspective within its predecessor, from cosmic groups of galaxies through the solar system and our own planet to questions of biology, life and the human experience; 2). Complexity and connection, showing how the Universe and Earth have their own histories, which began with the Big Bang, and that these histories have been characterized by the emergence of more complicated aggregations of atoms, molecules and elements. Yet, just as stars and galaxies ultimately face collapse or a slow demise (via entropy), so human society confronts a range of resource challenges that are difficult to deny or overcome.
Missouri

Washington University, St. Louis:

Instructors: Ursula Goodenough, Professor, Department of Biology, (goodenough@wustl.edu); Dr. Goodenough and her colleagues study the molecular basis and evolution of life-cycle transitions in the flagellated green alga, Chlamydomonas reinhardtii. Michael Wysession, Associate Professor, Earth & Planetary Science (michael@mantle.wustl.edu); Dr. Wysession’s research focuses on seismic wave propagation, whole mantle seismic attenuation, and evidence for water in the lower mantle.

Course Description: BIO/EPS/PHYS L41 210A “Epic of Evolution: Life, Earth, and the Cosmos” is a study of the evolution of the Universe, Earth and life, all woven together in a narrative. Themes of complexity, scale, entropy and information are applied to the Big Bang, origins of matter, formation and history of the Earth, origins of life and diversification of species. We study the implications of the scientific epic for religion, philosophy, the arts and ethics.

University of Missouri, St. Louis:

Instructor: Kevin Fernlund, Associate Professor, History Department, and Division of Teaching & Learning (fernlund#umsl.edu). Dr. Fernlund is the executive director of the Western History Association and was a Fulbright scholar to Vietnam in 2001–2002. Author of Lyndon B. Johnson and Modern America (2009) and William Henry Holmes and the Rediscovery of the American West (2000), he also edited 1998 anthology, The Cold War American West, 1945 to 1989. He is currently turning his article, “To Think Like a Star: The American West, Modern Cosmology, and Big History” (see below), into a book-length study.

Course Description: HIS/SEC ED 4014/6014 “World History for the Secondary Classroom” has two purposes: 1) Introduce World History as a subject and as a field of study, with an emphasis on Big History, in which human history, natural history and cosmic history are integrated into a single, grand narrative; 2) Adapt the themes and subjects of World History, in particular Big History, to the high school classroom through readings and class discussion, practice teaching and curriculum planning.

Oregon

Portland State University, Portland:

Instructor: Todd Duncan, Adjunct Research Professor, Center for Science Education (duncan@scienceintegration.org). Dr. Duncan is also director of the Science Integration Institute (a nonprofit organization helping to connect human experience to a cosmic
perspective). He holds a Ph.D. in astrophysics from the University of Chicago and is author of *An Ordinary World: The Role of Science in Your Search for Personal Meaning* and coauthor of *Your Cosmic Context: An Introduction to Modern Cosmology*.

**Course Description:** “Our Cosmic History” began as a public lecture series in 2008-2009, funded by the Oregon Department of Education. It provides a big-picture context for science and history in K-12 education. This perspective on who we are, where we came from, and where we’re going is perhaps more important now than ever, as we make decisions that affect the fate of our species and our planet. But this broad perspective is difficult to achieve, particularly within today’s formal education system. This lecture series is designed to complement and support existing formal education by combining a unified scientific account of how things came to be as they are, with guidance on how to incorporate these insights into classroom units. Now entering its second year, the series is being transformed into a course for Spring 2010 that will be available both as a free public lecture series and for continuing education graduate credit.

“Our Cosmic History,” Portland State University: ([http://oregonteacherscholars.pbworks.com/Our+Cosmic+History](http://oregonteacherscholars.pbworks.com/Our+Cosmic+History)).

**Texas**

Southern Methodist University, Dallas:

**Instructor:** John Mears, Associate Professor, History Department (jmears@smu.edu). Dr. Mears began his career studying the emergence of standing professional armies in early modern Europe, as well as comparative revolutionary movements. His growing awareness of how global forces transformed the context of human existence in the 20th century motivated him to make World History a primary area of concern. His view of larger contexts continued to expand, which led him to Big History. He served as President of the World History Association (1994–1996).

**Course Description:** HIST 1301 & 1302 “World Cultures & Civilizations” is a year-long introductory course for undergraduates. The larger cosmic and evolutionary parts of Big History are directly used in the first half of the first semester, in order to create the largest conceivable context within which to place the human historical experience. The course is then structured around three great transformations of human history: the Upper Paleolithic takeoff, the origins of agriculture and urban life, and the global integration of human societies in recent centuries.

**Courses with a Focus on Aspects of Big History, Expanded World History Courses, Public Seminars, Projects, Etc.**

**Australia**

**Australian Capital Territory**
Australian National University, Canberra:

**Researcher:** Graeme Snooks, Coghlan Research Professor of Economic History, and Director, Global Dynamic Systems Centre, Research School of Economics, Institute of Advanced Studies (graeme.snooks@anu.edu.au). Dr. Snooks began his academic career as an economist and economic historian, but now focuses on the construction of social and biological theory using the historical method (induction).


**Project:** For the past 20 years Graeme Snooks has been developing a general dynamic theory (dynamic-strategy theory) to explain the emergence, development and future of life in general and humanity in particular. In short, it is a theory of Big History. It has also provided a new approach – a demand-side approach – to the theory of complex systems. This large-scale project has resulted in a dozen books and many articles in journals, such as *Advances in Space Research, Complexity, Social Evolution & History, and Globalization Studies*. Currently, this work is being conducted in the Global Dynamic Systems Centre at the Australian National University.


Canada

**British Columbia**

Simon Fraser University, Burnaby:

**Instructor:** Luke Clossey, Assistant Professor, Department of History (clossey@sfu.ca). Dr. Clossey works on early-modern world history, with a focus on religion.

**Course Description:** HIST 130 “Modern World History: Little Big History” is a survey of world history from the beginning to the end, with an emphasis on the period from ca. 1405 C.E. to the present. It is book-ended with initial and final lectures that seek to cover all of time, but from a Buddhist cosmological perspective, with links to modern science and other creation/destruction “myths.”

USA

**California**

California State University, Fullerton:

**Instructor:** Jonathan Markley, Assistant Professor, History Department (jmarkley@fullerton.edu). Dr. Markley’s focus is on ancient history, specializing in Roman
and Chinese studies. His work deals with both civilizations’ relations with “barbarians” and on the historiography in both parts of the world. He teaches courses on both ancient Rome and China, in addition to world history. His book, Peace and Peril, Sima Qian's Portrayal of Han-Xiongnu Relations, will appear in the Silk Road Studies series, published by Brepols next year. He is currently working on a “Big History of Grass,” a project that covers the period from the first evolution of grass to the present day.

**Course Description:** History 110A “World Civilizations to the 16th Century” is a general education course, and has a large number of sections. A large measure of freedom is given to instructors on how to pursue standardized learning goals, so only the sections taught by Dr. Markley can properly be characterized as “Big History.” The course begins with the Big Bang and progresses to the advent of the human race. More attention has to be paid to different human civilizations than in many Big History courses, but emphasis is placed on bigger factors, such as the impact of the evolution of grass, volcanism, plate tectonics, ways in which human societies can be characterized as symbiotic or parasitic.

**Course Description:** Dr Markley is in the process of developing “The Big History of Grass,” which will trace the story of grass from its evolution c 90 mya, through the evolution of specialist grass consumers, to its domestication of humanity (not the other way around), to the emergence of the pastoralist/agriculturalist divide, to its growing importance both now and into the future.

California State University, San Marcos:

**Researcher:** Alex Moddejonge, Graduate Researcher, (modde001@cougars.csusm.edu). Mr. Moddejonge is currently writing a Master’s thesis on the intellectual and pedagogical development of Big History as a field.

**Project Description:** This project is to create a history of Big History – a narrative and annotated historiography called, The Biggest Story Every Told: The Development of Big History, 1989-2009. First, I will determine a working definition of what Big History is; then a chronology of big history’s evolution since 1989 will be drawn through sketches of the academics teaching such courses and the kinds of diversity existing within the field. Connections to the intellectual antecedents of big history – world history, environmental history, macro-history, universal history, and cosmology – will then be established. The view of historians outside the field, of general reviewers, and of readers will be considered to provide context. Finally I will offer my own critiques of Big History, draw links to certain intellectual trends in the past two decades (notably environmentalism, cosmopolitanism and secularism), and speculate further on its future as a field. (Attached at the end of this Directory is a research request form).

Menlo College, Atherton:

**Instructor:** Jeremy Neill, Assistant Professor, History Department (jneill@menlo.edu). Dr. Neill specializes in gender, imperialism and historiography.
Course Description: HIS 189 “Human Society & the Natural World” is a broad survey of the relationship between humanity and natural forces, what historians today refer to as Big History. We examine relationships between resources; climate change; interaction with other species; migration; and the development of human societies – how people changed their environment and how environments changed people. An emphasis is placed on relationships between differing environments and the means by which human societies have coped with them. Most importantly, students are asked to think in long-term and large scales. The course is broken up into three units: 1). The development of complex societies, 2). The downfall of complex societies, 3). The germs and seeds of industry. The Big History Course is taught as part of the Ethical and Environmental awareness theme within the business management degree program.

Illinois

Illinois State University, Normal:

Instructor: Thomas Burr, Assistant Professor, Department of Sociology & Anthropology (tbur@ilstu.edu). Dr. Burr researches the institutional foundations of consumer markets, long-term globalization and the evolution of human societies.

Course Description: SOC 220 “Global Social Change: An Introduction to Macrosociology” focuses on human social evolution. Drawing on archaeology and ethnology, social psychology and macrosociology, world history, international relations and macroeconomics, this class focuses on the expansion and increasing complexity of societies of one species, Homo sapiens sapiens, over the last ten millennia. It starts with the simplest human societies, foraging bands, and analyzes changes such as the Neolithic Revolution, the rise of the state, and the global expansion of Europe in the modern era. These changes have led to horticultural and pastoral tribes and chiefdoms; horticultural, pastoral, and agrarian states; industrial capitalist states; the development of the current global social system; and post-colonial, “developing” societies.

Lutheran School of Theology at Chicago, Chicago:

Instructors: A diverse panel of scholars and professors teach this course. They come from the University of Chicago, Northwestern University and other institutions. Big Historian Ursula Goodenough of Washington University in St. Louis (see above) has taught there.

Course Description: LSTC T-456 “The Epic of Creation: Scientific, Biblical, and Theological Perspectives on Our Origins” is offered as a public lecture series and as a graduate level seminar. It has been offered since 1989 and is unique in the United States. It is sponsored by the Zygon Center for Religion and Science.

Epic of Creation: (http://www.zygoncenter.org/epic.html).
**Maine**

University of Southern Maine, Lewiston:

**Instructor:** Barry Rodrigue, with Daniel Stasko (see above).

**Course Description:** HUM 498 “Global Future: Reflection & Action” serves as a sequel to the survey course on Big History, LCC 350 *Global Past, Global Present*. Although it also provides a survey of Big History, through the use of Fred Spier’s *Big History and the Future of Humanity*, it is more of a course on applied Big History – on the challenges of modern society and the quest to bring about a sustainable future. In other words, it is a primer on how we can become good global citizens once informed by the paradigm of Big History.

**Massachusetts**

Harvard University, Cambridge:

**Instructor:** Daniel Lord Smail, Professor, Department of History, (smail#fas.harvard.edu). Dr. Smail’s research concentrates on medieval subjects ranging from law, violence, and space to politics, conquest and colonization. He also addresses deep history or early global history. His book, *On Deep History and the Brain* (2008), tackled issues associated with deep history. A long-term project is to write a deep history and, to this end, he works with a group of historians, anthropologists, archaeologists and other paleohistorians to define some of the domains around which deep historical narratives can coalesce.

**Course Description:** History 70c “Topics in Natural History” is an undergraduate reading seminar aimed at students majoring in history. The course focuses on series of domains in which it is possible to envision a deep human history. Major themes, covered on a week-by-week basis, include: expansion and diaspora; biology and culture; sex and reproduction; language and gossip; material culture; food and diet; politics and status; environment and ecosystems; brain and behavior; and demography. An additional goal of the course is to explore the philosophy and methodology underlying a deep history of humanity.

**Texas**

Southern Methodist University, Dallas:

**Instructor:** John Mears (see above).

**Course Description:** I contribute a series of seminars to a supporting field my department calls global and comparative history. Its purpose is to place the American experience into larger historical contexts and provide broad interdisciplinary perspectives on particular topics of global significance. My three seminars are entitled Global and Comparative History: Methods, Concepts, and Theories (HIST 6315), Confrontations and Connections: World-Historical Borderlands in Comparative Perspective (HIST 6316), and Modern
Revolutions in Comparative Perspective (HIST 6347). My approach in all three of these seminars, but especially the first one, is influenced directly or indirectly by the assumptions and purposes of Big History.

**Books & Articles on Big History**

Walter Alvarez:


Craig Benjamin


Cynthia Stokes Brown


Eric Chaisson:


David Christian:


*Big History: The Big Bang, Life on Earth, and the Rise of Humanity*, February 2008 (48 half hour lectures for *The Teaching Company*).


Kevin Fernlund, “To Think Like a Star: The American West, Modern Cosmology, and Big History” in *Montana: The Magazine of Western History* 59, Summer 2009, 23–44.

John Mears:


(forthcoming) – To Be Human: Perspectives on Our Common History. The first six chapters deal directly with Big History.


Graeme Snooks


Exploring the Horizons of Big History (Guest editor of a special issue of Social Evolution & History 4 (1), Moscow: Uchitel Publishing House, 2005.


Fred Spier:

The Structure of Big History: From the Big Bang until Today, Amsterdam: Amsterdam University Press, 1996.


“The Small History of the Big History Course at the University of Amsterdam,” *World History Connected* 2 (2), May 2005.


**Internet Resources on Big History**


Twitter Site on Big History, Fred Spier (University of Amsterdam), site manager: (http://twitter.com/bighistory).

Facebook site on Big History, John Kimball and Kessi Watters Kimball (University of Southern Maine), site managers: (www.facebook.com/pages/Big-History/99185533648?sid=40f694f1b5d227bf7337df0b885fd88c&ref).

A web-based, pre-collegiate model curriculum, Ross Dunn, Project director, San Diego State University: *World History for Us All* (http://worldhistoryforusall.sdsu.edu/).

**Barry Rodrigue** and **Daniel Stasko** both teach at Lewiston-Auburn College, University of Southern Maine. They have increasingly collaborated in the classroom on Big History over the last three years. They can be contacted at Rodrigue@usm.maine.edu and Stask@usm.maine.edu.
Addendum

Information Sheet

The Biggest Story Every Told: The Development of Big History, 1989-2009

Invitation to Participate and Purpose of Research
Alexander Moddejonge, a graduate student at California State University San Marcos, is conducting a study on the development of Big History. You are invited to participate in this study because you teach or have taught a course related to Big History or have written on the subject.

Procedures/Activities
If you agree to participate in this study, you will be asked to answer the following questions:
1). What is your academic background and how has it led you to big history?
2). How did you construct your course in big history? This includes the administrative, pedagogical, and intellectual details involved in such an effort.
3). Explain who the target audiences of these courses and/or writings are?
4). How is your version of big history similar to or different from other versions?
Further questions may be asked based upon your answers to those above or based on other sources of information (such as your writings on the subject).

Risks and Inconveniences/Benefits
There are potential risks involved in your attribution of certain information relating to reaction of fellow faculty members and administration to your Big History course or opinions on other Big History courses. The time taken to answer these questions may pose a potential inconvenience. Potential benefits include the dissemination of your views on Big History and the specific of how you teach such a course. This could have an influence both on the development of Big History as a field and on its pedagogy.

Safeguards, Confidentiality, and Voluntary Participation
Participation in this study is purely voluntary. If you do not wish to be involved or wish to withdraw you may do so at anytime. Any information you have divulged will be excluded from the final project. If you do wish to participate interview will be conducted via email. This will minimize any inconveniences by allowing you to answer questions at your leisure. I will forward a draft for verification of accuracy prior to publication.

Questions
This study has been approved by the California State University San Marcos Institutional Review Board (IRB). If you have questions about the study, you may direct those to me at:

Alex Moddejonge at 760-473-1023, (modde001@cougars.csusm.edu), or Peter Arnade, Professor of History, CSUSM, (parnade@csusm.edu).

Questions about your rights as a research participant should be directed to the IRB at (760) 750-4029.
The Russian Academy of Sciences’ Fifth International Conference on *Hierarchy & Power in the History of Civilizations* was held in Moscow (Russian Federation) on 23–June 2009.

These numbers can be calculated a bit differently, depending on what one would describe as teaching – courses, seminars, public lectures, ability to study Big History, etc. Several of the courses are offered by Big Historians at several different universities. Fred Spier wins the contest for teaching at the most institutions (3 in the Netherlands), while David Christian (Australia) and Tom Gehrels (USA) take the prize for distance education (David in South Korea and Tom in India).

Some scholars arrived in Big History as a result of training in multiple disciplines. For example, Fred Spier and Barry Rodrigue did their undergraduate work in biology, but moved into anthropology/geography and history in graduate school, along with large amount of ethnographic field work in remote areas.