MHIS215

Problems in Big History

S2 Day 2015

Dept of Modern History, Politics & International Relations

Contents

General Information

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Credit points
3

Prerequisites
MHIS115

Corequisites

Co-badged status

Unit description

This unit will explore some of the fundamental problems raised in the transdiciplinary first year course MHIS115 as they play out across multiple disciplines. Is there a universal long-term trend towards rising complexity? Does the notion of Universal Darwinism work outside the biological realm? What new mechanisms of change can be observed with the appearance of our own species, Homo sapiens? What are the main similarities and differences in methods of studying the past as we move from the realms of physics to those of geology and biology and eventually to human history? The course will explore these and many related questions. The choice of topics will be determined in part by discussions in the first week. In a problem-based course, lectures are less valuable than group discussions, so the classes will combine short informal lectures with group discussions and debates. The unit will also explore a flipped classroom model that will deliver some unit content and learning tasks digitally through the iLearn learning management system.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

Students will be able to apply ideas and concepts across disciplines

Students will deepen their understanding of the history of the universe and of the place of human history in that larger story

Students will explore themes that link the sciences and the humanities

Students will learn to write using jargon-free language that can explain ideas across many disciplines

Students will develop skills in debate and argumentation about complex trans-disciplinary topics

Assessment Tasks

Name	Weighting	Due
Group Project	10%	Week 4
Short Essay	30%	Week 6
Draft Essay	10%	Week 8
Synoptic Essay	40%	Week 13

Name	Weighting	Due
Participation Grade	10%	Week 13

Group Project

Due: **Week 4**
Weighting: **10%**

Group Project 1000 words: 10 % Small groups produce a short statement describing a key problem

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Short Essay

Due: **Week 6**
Weighting: **30%**

Short Essay 1000 words: 30 % Essay exploring the problem described in the first projec

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Draft Essay

Due: **Week 8**
Weighting: **10%**

Draft Essay 500 words: 10% essay explaining proposed theme for synoptic essay

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Synoptic Essay

Due: **Week 13**
Weighting: **40%**

Synoptic Essay 2500 words: 40 % essay expanding short essay and exploring links between several different problems in big history

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Participation Grade

Due: **Week 13**
Weighting: **10%**

Participation: Seminar attendance & contribution 10 % + post at least one comment and one comment on other contributions to the discussion for each week

On successful completion you will be able to:

- Students will develop skills in debate and argumentation about complex trans-disciplinary topics

Delivery and Resources

LECTURE/SEMINARS:

The course will be taught in 2 hour lecture/seminars, consisting of introductory lectures followed by discussion. Lecture/Seminar 1 will meet on Mondays from 12-2 pm in W6B 315. Lecture/ Seminar 2 will meet on Thursdays from 2-4 pm in W6B 345.

TEXTS:

Basic Text: A summary of the core narrative of big history can be found in David Christian, Cynthia Stokes Brown and Craig Benjamin, *Big History: Between Nothing and Everyting,* New York: McGraw-Hill Education, 2014.

Optional texts:

- David Christian, *Maps of Time: An Introduction to Big History (Berkeley,* CA: University of California Press, 2004).

- For the second half of the course you may find David Christian, *This Fleeting World: A Short History of Humanity* (2008), helpful as a short overview of human history.

- Particularly useful for the synoptic essay will be Fred Spier, *Big History and the Future of Humanity* (2010, 2nd ed., 2015).

Where to Get Texts: Required and Optional texts will be available for purchase at the Co-Op bookstore on campus. External students can also contact the Co-Op via phone at (02) 8986 4000, fax at (02) 8986 4099 and the internet at http://www.coop-bookshop.com.au and arrange for texts to be sent to them.

In all, you have 3 options for purchasing '*Big History: Between Nothing & Everything'.* Please read the options carefully before choosing which to purchase!

1.   PRINTED TEXTBOOK

RRP **$87.95 AUD**. ISBN 9780073385617. Purchase from the Co-op Bookshop:

http://www.coop.com.au/bookshop/show/big-history-between-nothing-and-everything-christian-benjamin-brown/9780073385617/

2.   SMARTBOOK

An adaptive online eBook. SmartBook facilitates the reading process by identifying what you know and don't know. As you read, the material continuously adapts to ensure you are focused on the content you need most to close specific knowledge gaps. Learn more about SmartBook here:

$47.95 AUD. 1 year access. Purchase from McGraw-Hill Education at:

http://www.mheducation.com.au/9781259324604-aus-smartbook-online-access-for-big-history/

3.   EBOOK

A downloadable eBook. Allows you to search, highlight and add notes.

$46 USD. (*This transaction will likely be converted back to AUD by your bank and this will be at the currency rate of the day.*) Purchase from McGraw-Hill Education at:

https://create.mheducation.com/shop/#/catalog/details/?isbn=9781121743687

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If you have any queries regarding these options, please visit https://www.mheducation.com.au/contact-us to contact McGraw-Hill Education.

SUPPORT: If you need any technical support when buying or using SmartBook or the eBook please take a screenshot of the issue and visit http://mpss.mhhe.com/contact.php to contact McGraw-Hill's Customer Experience Group.

Unit Schedule

MHIS215 PROBLEMS IN BIG HISTORY: WEEKLY SEMINAR TOPICS

Week	Lecture/Seminar Topics	Assessment & Deadlines
	Seminar 1: Monday, 12-2 pm, W6B 315 **Seminar 2: Thursday, 2-4 pm, W6B 345**	
1	**INTRODUCTORY:** Defining Big History: its place in modern education & research; a modern origin story? **(Week beginning July 27)**	Start thinking about group projects
2	**A CONCEPTUAL TOOL KIT (1):** Complexity, Thermodynamics & Energy **(Week beginning Aug 3)**	Discuss group projects
3	**A CONCEPTUAL TOOL KIT (2):** Emergence, Thresholds, Goldilocks conditions and drivers of change, such as Universal Darwinism **(Week beginning Aug 10)**	Present on group projects
4	**EPISTEMOLOGY:** Truth, Science & Claim Testers **(Week beginning Aug 17)**	Submit group projects
5	**INFORMATON, MEANING & ETHICS:** What is information? How do you get meaning from a scientific origin story? **(Week beginning Aug 24)**	
6	**LIFE:** A new type of complexity? Genes, Reproduction, and 'learning' through natural selection **(Week beginning Aug 31)**	Discuss synoptic essays
7	**HUMANS:** Another new type of complexity? Culture, networks and collective learning **(Week beginning Sep 7)**	
	SESSION 2 RECESS **(Sep 14-25)**	
8	**ENERGY IN HUMAN HISTORY:** The Agricultural and Fossil Fuels revolutions **(Week beginning Sep 28)**	Submit draft of synoptic essay
9	**POWER, INEQUALITY & COMPLEXITY IN HUMAN SOCIETIES:** Why does complexity seem to require hierarchy and inequality in human history? **(Week beginning Oct 5)**	

10	**COMPLEXITY REVISITED:** What new insights into the nature of complexity are suggested by the course so far? **(Week beginning Oct 12)**	
11	**THE ANTHROPOCENE & THE FUTURE:** The challenges of the Anthropocene; the remote future: how can we think rigorously about the future? **(Week beginning Oct 19)**	
12	**TBD** **(Week beginning `Oct 26)**	
13	**TBD** **(Week beginning Nov 2)**	Submit Synoptic Essay

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student_conduct/

Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

IT Help

For help with University computer systems and technology, visit http://informatics.mq.edu.au/help/.

When using the University's IT, you must adhere to the Acceptable Use Policy. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

Commitment to Continuous Learning

Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue knowledge for its own sake. They will continue to pursue learning in their careers and as they participate in the world. They will be capable of reflecting on their experiences and relationships with others and the environment, learning from them, and growing - personally, professionally and socially.

This graduate capability is supported by:

Learning outcomes

- Students will learn to write using jargon-free language that can explain ideas across many disciplines
- Students will develop skills in debate and argumentation about complex trans-

disciplinary topics

Assessment tasks

- Synoptic Essay
- Participation Grade

Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

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Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

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Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

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Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

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Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

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Socially and Environmentally Active and Responsible

We want our graduates to be aware of and have respect for self and others; to be able to work with others as a leader and a team player; to have a sense of connectedness with others and country; and to have a sense of mutual obligation. Our graduates should be informed and active participants in moving society towards sustainability.

This graduate capability is supported by:

Learning outcome

- Students will deepen their understanding of the history of the universe and of the place of human history in that larger story