

From Big Bang to the Anthropocene (ENVR 610) – Fall 2015

Readings

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| Week 1 | <p>Genesis 1-4</p> <p>Eric Chaisson: Non equilibrium Thermodynamics in an Energy Rich Universe</p> <p>The Anthropocene Review (also http://anr.sagepub.com/content/1/1/3)</p> |
| Week 2 | <p>Pope Francis “<i>Laudato si’</i> ” the 2015 encyclical</p> <p>Lynn-White Junior</p> <p>Peter Singer: Animal_Liberation</p> <p>Merchant_1996:_Reinventing_Eden</p> <p>Matthews, HD, Quantifying historical carbon and climate debts among nations. Nature Climate Change</p> <p>Islamic call on rich countries to end fossil fuel use</p> |
| Week 3 | <p>The Sermon on the Mount</p> <p>Robert Goodin:_Protecting the Vulnerable (Selections)</p> <p>Liberation Theology</p> <p>United Nations Sustainable Development Goals/2015</p> <p>Carrying Capacity as an Ethical Concept</p> |
| Week 4 | <p>Nordhaus: Summary for Concerned Citizens</p> <p>Ausubel: Nature_Rebounds</p> <p>Rockstrom: Safe Operating Space for Humanity, Nature 2009.</p> <p>Brown: Climate Change and the Planetary Trust</p> <p>Ausubel: Nature_Rebounds</p> |
| Week 5 | <p>Schrodinger: Order, Disorder and Entropy from <i>What is Life</i></p> <p>Schneider and Kay: Order from Disorder</p> |

Chaisson (2013): Using complexity science to search for unity in the natural sciences
2nd appendix to Maps of Time (Chaos and Order; 4 pages) – see textbook

Week 6

Eric Chaisson: *Cosmic Evolution: From Big Bang to Humankind*, Harvard University, 2015,

Lawless_Big History and Bioregions, *Evolution: A Big History Perspective*, Leonid Grinin, Andrey Korotayev, Barry Rodrigue, eds. (Volgograd, Uchitel Publishing, 2011), pp. 264–268.

Akop Nazaretyan, “Mega-Evolution and Big History,” *From Big Bang to Galactic Civilizations: A Big History Anthology*, Volume 1, *Our Place in the Universe: An Introduction to Big History*, Barry Rodrigue, Leonid Grinin, Andrey Korotayev, eds. (Delhi: Primus Books, 2015), pp. 125–143.

Rodrigue, *Big History – A Study of All Existence 2015* (Leipzig: Network of Global & World History Organisations, 2015).

Yue Sun, “The Tao of ‘Big History’ in China: Chinese Traditions,” *From Big Bang to Galactic Civilizations: A Big History Anthology*, Volume I, *Our Place in the Universe: An Introduction to Big History*, Barry Rodrigue, Leonid Grinin, Andrey Korotayev, eds. (Delhi: Primus Books, 2015), pp. 235–246.

Soehyung Kim: Chapter 1

Yue Sun: Big History Bibliography_2015(reference document, not required reading)

Week 7

The Lord’s Prayer

The Ten Commandments

Immanuel Kant: Preface to *Fundamental Principles of the Metaphysics of Morals* (Gutenberg)

John Stuart Mill: Utilitarianism Chapter 2

Gifford Pinchot: The Forester’s Point of View in *The Training of a Forester* (Gutenberg)

Elliott: Ethics for a Finite World Chapters 1-2

Week 8

Mohawk Thanksgiving Prayer

Aldo Leopold: The Upshot (from *Sand County Almanac*)

George Santayana: Reason in Religion, Chapter 10 Piety (Gutenberg)

Brown: Ethics for Economics in the Anthropocene

Berry: Great Work Chapter 9 (1999)
TED talk: The language of Dophins, Denise Herzing at TED 2013

Week 9
Friedrich Hayek: The Road to Serfdom
Tom Tietenberg & Lynne Lewis: Environmental and Natural Resource Economics,
Introductory chapter
Georgescu-Roegen: Energy and Economic Myths

Week 10
Berkes: *The Cree Worldview—Chapter 5 of Sacred Ecology: from the Inside*
Brown and Garver: Right Relationship, Introduction and Chapters 1-4
Boulding: The Economics of the Coming Spaceship Earth
Goudy and Erickson: The Approach of Ecological Economics

Week 11
Locke's The Second Treatise of Civil Government, Chapter 5: Of Property
Locke's The Second Treatise of Civil Government, Chapter 9: Of The Ends of
Political Society and Government
William Ophuls: Requiem for Modern Politics, Introduction
Prophets of Doom
Brown: Are there any natural resources?

Week 12
Manno: The Great Laws of Peace
Garver: Rule of Ecological Law I (guest lecture)
Brown and Garver: Right Relationship
Treaty of Westphalia
Democracy in the Anthropocene (Peter G. Brown)

Week 13
Wilson – Consilience Chapter 1
Wilson-Consilience_Chapter12_and notes_combined
Sideris – Science as Sacred Myth
Earth Jurisprudence Burdon (2015)

**Optional
Readings**
Readings on the Neurological Basis of Ethics
Neuroethics – Moll

Neuroethics – Haidt

Neuroethics – Casebeer Empirically Informed Ethics: Morality between Facts and

Norms Christen et al (2014)

Landgrabbers Pearce (2012)