

Honors Senior Seminar: The Universe Story
Palmer Trinity School
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Course Description:

The title of the course, *The Universe Story*, is taken from Thomas Berry's and Brian Swimme's book of the same title. Following the core arguments of this book and additional works by these and other authors, the course asks a series of fundamental questions. These questions would include: (1) Why do we see or experience the natural world the way we do? (2) How did we learn to see this way? (3) Why in the face of overwhelming scientific information concerning the realities of global warming, the sixth extinction event, soil, air, and water pollution do we continue to live as we do? (4) What is going to motivate us to live differently?

These questions and the construction of the course arise then from a series of assumptions that would include: (1) The way we see ourselves and the world is embedded in a worldview. (2) Worldviews are primarily transmitted through narratives, especially cosmological myths. (3) Myth is here understood as a narrative that expresses how a people or culture view the world and that a cosmological myth in particular narrates the origin, nature, and purpose of the *kosmos* and the human role within it. (4) Starting with the Scientific Revolution and continuing up until the present, astronomy, physics, geology, and evolutionary biology in particular have been creating a new cosmology, an epic of evolution, whose implications have not been culturally grasped nor integrated. (5) These revolutions demonstrate that humanity is intimately linked to stellar and planetary evolution and thus by definition cannot be separate from the natural world. (6) The implications, integration, and application of these scientific principles are absolutely necessary to, but not sufficient for, solving the current environmental crisis. (7) Necessary, but also not sufficient, in solving current global ecological problems are the moral and spiritual agency of the world's religious traditions. (8) These religious traditions model commitment and relationship to something higher that individualistic satisfaction; they model moral action emerging out a relationship built on love.

Our culture's current construction of the world is one that creates humanity as separate and disconnected from the world around us. This isolation, indifference, and objectification of nature are root causes of the environmental crisis. These perceptions run counter to what the sciences are telling us about how deeply humanity is embedded in the evolutionary processes of the earth. One step towards healing this disconnection is to help students begin to see the truths the sciences are showing us and to move into an active relationship with the natural world around them. This call to new relationship is based on the conviction that we cannot love, appreciate, value, or serve what we do not know. First steps towards moving into relationship with the natural world are grounded in beginning to know it, a knowing redefined as relational and thus loving, a bond not based on objectification, disconnection, and dominance, but on compassionate and responsible

connection. “[K]nowledge is a prerequisite for love. ‘Less and less do I see any difference between research and adoration,’ wrote the great Jesuit theologian Pierre Teilhard de Chardin near the end of his life. For Teilhard, as with many poets and mystics, prayer is a meditation on the world, informed by knowledge, open to mystery.”¹ Out of this knowledge and relationship, this openness to mystery comes experiences of awe, wonder, and beauty for the intricate and yet profoundly simple world around us.

Methodologies and Grading

This course is designed to be an interdisciplinary seminar. That interdisciplinary nature is reflected in the content of the readings and in the course being cross-listed in the history, science, and religious studies departments. As a seminar core educational activities will center on extensive reading and written reading notes, Harkness discussion, and the writing of formal papers. Other educational methods will include observational and reflective journal writing and class field trips.

Reading and Reading Notes – As an honors course you can gauge the reading and note-taking process as running between 45 – 60 minutes five nights a week. Due to the reading load you can count on regular class reading days. It is essential that you do the reading. Without doing the reading you cannot participate fully in Harkness discussion nor respond and reflect fully in written papers. Students who enrolled in Religion in America already know the tricks to intensive reading and reading notes. For those who are new to the seminars time will be spent showing you what to do and helping you learn the proper balance between doing too much and doing too little. Please come talk to me if at any time you need help with this. Please see the “Survival Notes” written by last year’s Religion in America seminar and posted on Ed-Line for help and tips. This is a very valuable resource.

The reading notes for each book or article groups will be picked up and graded. I am looking for thoroughness without re-writing the book, thoughtfulness, in that, you can distinguish between central points of the reading and what might interest you, and utility in terms of Harkness discussion and essay writing. These notes are to be typed. They carry the grade weight of an essay.

Harkness Discussion – Edward Harkness was a philanthropist who in the 1930’s promised to give Phillips Exeter a hefty financial gift if the faculty could come up with a creative and engaged new pedagogy. After several attempts the faculty met Mr. Harkness’s guidelines. The focus was on a text centered, student centered discussion that treated students as a responsible community of committed learners. These discussions took place around an ovoid table and were not teacher driven. Harkness is not typical discussion where the teacher is the expert (“Socratic”) eliciting responses or thoughts from students. Equally different from other discussion methodologies is the Harkness focus on listening and conversation as opposed to student achievement being promoted as the first to speak. Your syllabus section on First Class contains more material on Harkness. These notes have a section called “How will I grade you in Harkness?” Here too, if you are new to Harkness, do not worry. I will clearly explain the guidelines, and we will always take time in class to helpfully critique the day’s discussion.

¹ *Natural Prayers*. Chet Raymo. Saint Paul, Minnesota: Ruminator Books, 1999.

Harkness grades will be calculated for each major reading. I keep a spreadsheet for the class where each day I make notes. These notes become the basis for my grade. I will write you a short statement of comments and the resulting grade for each major reading.

Essays This course will have an intensive writing component. The vast majority of these assignments will be formal essays analyzing the reading you have done. Here is where your reading notes and Harkness conversation notes are essential. Papers run from three to seven pages in length. Time is often given in class for writing, and I am always available to proof drafts. Writing in this class is viewed as a constant process of revision. You should count on writing and rewriting. One component of being a laptop school is that you should find it very easy to keep your papers in an electronic file. As you finish revisions you should keep your papers in the order that they were written. These papers are bound together at the end of the year and become a part of your class portfolio and the end of the year oral exam.

Essays are graded using the SAT Essay Scoring Guide. A copy of the rubric is included in your First Class “Syllabus” section. This rubric is used by the English department and should remind you that writing style and structure are as important as content.

Portfolio and Oral Exam Your portfolio is a bound copy of your writing and forms the basis for your final exam. The final exam is an oral exam that takes the form of a discussion. Interested faculty members, administrators, and students are invited to attend. Each student’s portfolio will be read by at least two faculty members or administrators so that they can engage you directly about your thoughts. The exam lasts for two hours. As we get closer to the end of the year we will discuss the exam in more detail.

Policies, Procedures, and Expectations:

1. Late work on any assignment is penalized. Every day that an assignment is late the grade drops a full letter. On the third day I give the assignment a grade of 40. Even if you are late with work you are still required to do it. Problems and crunches do however happen. If you take responsibility to come talk to me before the assignment is due and ask for an extension, and your request is reasonable in my mind, then I will often give you an extension. Please remember, I decide if the request for an extension is reasonable, and I have the right to say no. Late work based on excused absences follows the policy of the student handbook.
2. As we are a laptop school I expect you to have a working laptop that you can access quickly. You need a laptop for word processing and access to First Class and Ed-Line.
On your laptop you have a “Universe Story” icon. The class icon is the major way you will receive articles for reading and discussion. I will email you these articles in PDF format. Articles are mailed by sections of study. It is your responsibility to print these articles, either at home or in the library. I will let you know in class when each reading section is posted and ready for printing. Due to the nature of the class and in the interests of learning new habits I would like those of you in last year’s Religion in America to print your materials on the second side of Religion in America documents. Recycle -Reuse

3. Easy access to Ed-Line is just as important. Our class page will contain several important documents. First, I post your assignment schedule there that covers six to eight weeks at a time. Print this out. It will help you plan your academic week and look ahead to larger assignments. This time management skill is an important one to learn for college. Our general reading and writing plan will be posted there as well as the class bibliography.

We will be doing some important web site work – for information and for reference; these sites as a whole are posted on Ed-Line as well under *Class Web Sites*.

Current Reading and Study Plan for the Universe Story

Introduction: Seeing What's Around Us: The Water

- *Ocean's End: Travels Through Endangered Seas* by Colin Woodward

Miami is bounded on the east and south by the Atlantic Ocean and the Bay of Biscayne. The western boundary is formed by the Everglades. Many area suburbs and urban spaces are shaped by limestone canals that drain water from the Everglades into the Ocean and the Bay. Palmer Trinity School is located less than a mile from the Bay of Biscayne.

Assignments for this summer reading work include note taking on each chapter with a focus on specific problems and the relationship between problems. Notes form the content of Harkness based discussion and for later papers. These notes are graded.

Under the rubric of water we then move to the water around us.

- *The Book of the Everglades* edited by Susan Cerulean (anthology)
Selections: "Path of the Panther," "The Lightning Bug and the Moth," "The Most Valuable Bird," "The Last Days of Florida Bay," "Saving Our Tails," and "A Call to Restoration."

- **Biscayne Bay**

The focus now turns to an ecological analysis of Biscayne Bay with specific attention paid to the local ecology of coral reefs and the mangrove swamps. Readings come from internet sources – (1) Reef Base – A Global Relief Organization, (2) Biscayne Bay National Park, (3) Biscayne Bay Restoration Project. These reading are supplemented by film segments of Bill Moyer's PBS *Earth on the Edge*.

- **Biscayne Bay Coral Reef Snorkeling Trip**

The goal of the trip is to begin to match knowledge with experience; the first steps in building a relational knowing. To help break the "class trip" mentality silence will be required for several sections of the trip. Silence will at times be coupled by observational journal entries of the coral reefs and of the Bay.

The Languages of Place –

Journal writing and observational notes from the Biscayne Bay Reef trip, the readings from *The Book of the Everglades*, and written reflections on childhood memories of nature become the venue to enter into a more nuanced and empathetic understanding of the places where we live and the relationship between biography and landscape.

- “Ground Notes” from *Staying Put: Making a Home in a Restless World* by Scott Sanders
- “A Sense of Place” Douglas Burton-Christie *The Way* 39:1(January,1999)
- *The Country of Languages* by Scott Sanders

1st Seminar Paper: Students will write a 5-7 page reflection on the relationship between their biography and place(s).

Section 1: The Nature of Worldviews

Viewing the World Ecologically by Marvin E. Olsen, Dora G. Lodwick, and Riley E. Dunlap

- “Theoretical Framework: Worldviews and their Components”
 - Concept and Components of Worldviews
 - Belief and belief systems
 - Paradigms: Social and Scientific (Thomas Kuhn)
 - Ideologies: Nature and Function
 - Paradigm Change Theories: Kuhn, Social Paradigm Change
 - Role of Anomalies in Paradigm Change
 - Two-Stage Paradigm Shift Model
 - Three-Stage Paradigm Dialectic Model

Exercise in Concept Mapping to develop order of magnitude of ideas and interconnection between concepts

The Nature and Function of Cosmogony and Cosmology

- “Cosmogony” by Charles Long from the Encyclopedia of Religion
- “Cosmology” by Kees W. Bolle from the Encyclopedia of Religion
- “This Side of Paradise: Creation Mythology” from Paul Brockelman’s *Cosmology and Creation: The Spiritual Significance of Contemporary Cosmology*

Foundational Cosmological Myths

- *Gaia and God* by Rosemary Reuther
- “Introduction”
- “Three Classical Creation Stories: Enuma Elish, Genesis 1 and 2, and Plato”
- *Enuma Elish*: textual analysis with focus on nature and purpose of the world as well as nature and purpose of humans
 - *Genesis 1 and 2*: textual analysis of the J and P narratives with a focus on the nature and purpose of the world as well as nature and purpose of humans

- *Allegory of the Cave* – *Republic Book X* Outline of points and image of the Allegory of the Cave
- *Timaeus* – “Plato’s Cosmology: The Timaeus, An Outline” S. Marc Cohen

Second Seminar Paper – Definition and Explanation of Worldview, Paradigms, Ideologies and Cosmology linked to an analysis of attitudes towards the world as seen in the mythic *Enuma Elish*, *Genesis I and 2*, Plato’s *Timaeus*

The Scientific Revolution: Copernicus, Brahe, Kepler, Galileo, Newton, Descartes, Bacon

- “What was Worth Knowing in 1500” in *Revolutionizing the Sciences: European Knowledge and Its Ambitions, 1500-1700* by Peter Dear
- *The Scientific Revolution and the Origins of Modern Science* by John Henry

These readings provide an overview of the major figures, problems, and achievements of the Scientific Revolution. They also provide important material on the medieval European worldview.

The Worldview of the Scientific Revolution and The Enlightenment

With background information on the worldview structure firmly in place – now complemented by the historical outline of a major worldview shift that we can chronologically document (Scientific Revolution/Enlightenment) the reading turns to an in-depth analysis of the multiple effects (social, political, economic, technological, etc.) this worldview shift had on society by readings of

- Selections from: *The Death of Nature: Women, Ecology, and the Scientific Revolution* by Carolyn Merchant
- “Nature Disenchanted – The Modern View of Nature” from *Ecology and Religion: Ecological Spirituality in Cross-Cultural Perspective* by David Kinsley
- “Beyond the Enlightenment Mentality” Tu Wei Ming in *Worldviews and Ecology*.

Third Seminar Project: Two seminar papers are written. The first is an analysis of the changes in cosmological awareness that are characteristic of the Scientific Revolution. The second is an analysis and reflection on the shift in controlling images about the natural world and the human role in that world that effected constructions of politics, economics, social structure, and gender roles.

The Age of the Earth and Evolutionary Biology

As the changes in astronomy and physics created a macro-cosmic perceptual revolution the changes in geology and biology created a micro-cosmic one.

Charles Lyell and Geology (articles)

- “Sermons in Stone” and “The Age of the Earth” from Timothy Ferris’ *Coming of Age in the Milky Way*
- *The Sixth Extinction: Patterns of Life and the Future of Humankind* by Richard Leakey and Roger Lewin
- Field trip to the Florida Keys

Fourth Seminar Paper: The Sixth Extinction

The New Physics: Cosmology and Cosmological Myth

- “*Science as Epic: Can Modern Evolutionary Cosmology be a Mythic Story for Our Time?*” by William Grasis
- “The New Cosmology” from Paul Brockelman’s *Cosmology and Creation: The Spiritual Significance of Modern Cosmology*
- Rosemary Reuther’s “Does Science Have a New Creation Story?” from *Gaia and God*
- “Cosmology: Scientific Cosmologies” by John Polkinghorne from the *Encyclopedia of Religion*
- *Hidden Heart of the Cosmos* by Brian Swimme

Fifth Seminar Paper – What is the Universe Story?

Consumerism as the First Global Worldview – The Dark Cosmology Theoretical

- “The Religion of the Market” by David Loy from *Visions of a New Earth: Religious Perspectives on Population, Consumption, and Ecology*
- “*The Sacred Santa: Religious Dimensions of Consumer Culture*” by Dell de Chant

Global, Social, and Individual Implications

- *The Merchants of Cool* –PBS Video
- *The Persuaders*- PBS Video
- *Born to Buy: The Commercialized Child and the New Consumerism* by Juliet Schor
- “Landscapes of Global Capital: Representing Time, Space, and Globalization in Corporate Advertising” <http://it.stlawu.edu/~global/>

Sixth Seminar Paper – This writing assignment will be divided into two parts. The first essay will deal with the question: How does consumerism function like a religion? After students have written this paper we will move to look at the global, social, and individual implications of consumerism. These implications will be addressed in the essay question: What are the effects and results of this worldview globally, socially, and individually?

The Global Scope of Environmental Problems

- *The End of Nature* by Bill McKibben

- “Next Journey: Sustainability for Six Billion and More” by Larry Rasmussen in *Ethics for a Small Planet*

Seventh Seminar Paper: What does Bill Mckibben mean by “the end of nature ?” What are the roles of modern assumptions in creating “an end to nature?” What role does religion play in offering an antidote to modern assumptions about the natural world?

An Emerging Worldview: The Ecozoic

- *Dream of the Earth* -Thomas Berry Re-visioning and the Ecological Age
- *Worldly Wonder : Religions Enter the Ecological Age* -Mary Evelyn Tucker

Theoretical foundation for religion and ecology as a necessary part but not sufficient whole answer to the environmental crisis

Education for Sustainability

- “Education and Moral Values: seeking a new Bottom Line” Svi Shapiro
- *Earth in Mind: On Education, Environment, and the Human Prospect* David Orr

Final Seminar Paper and Oral Exam

Your final paper takes up several inter-related questions. You might very easily see this paper as having several parts. First, what is the emerging worldview and resulting ethic that is being called upon in these readings? Another way of asking this question is, “What is the dream of the earth?” What moral obligations do they point to? What are the roles of awe, wonder, mystery, and love in formulating and acting on the knowledge you have gained through the year? In light of all that, what does this mean about the structure of secondary education?. Are current models of education doing the job? Specifically, how, and in what ways would you suggest the curriculum of Palmer Trinity change, if at all?