Capstone 427-01 - Syllabus
Cosmology and Ecology

Instructors: Craig Kochel, Geology Department
Mary Evelyn Tucker, Religion Department

Class time: Monday evenings 7-10
Classroom: O’Leary 102

“It takes a universe to make a child
both in outer form and inner spirit.
A universe to fulfill a child.

“It takes a universe to
educate a child.
A universe to fulfill a child.”

Brian Swimme
Earth Spirit Rising Conference
June 15, 2001

The child awakens to a universe.
The mind of the child to a world of meaning.
Imagination to a world of beauty.
Emotions to a world of intimacy.

It takes a universe to
make a child
both in outer form and inner spirit.

It Takes a Universe
by Thomas Berry

“The universe is full of hydrogen gas. Leave it alone for 13 billion years. It turns into rosebushes, giraffes and humans.”

It takes a universe to make a child
both in outer form and inner spirit.

It takes a universe to educate a child.
A universe to fulfill a child.
General Course Objectives:

This course will survey the development of the universe from its earlier emergence through the formation of galaxies and supernovas to the evolution of the Earth and life forms. It will explore how some scientists have viewed this process as a cosmological story that has implications for orienting humans to a larger sense of life's meaning and continuity.

Description of Subject Matter:

The course will examine how creation stories have provided the framework for life's larger questions: where do we come from, where are we going. In a time of rapid diminishment of species and resources these questions become even more pressing. How does this larger context of universe unfolding relate to our present ecological crisis? As we are discovering the size and scale of our universe we are also realizing what is being lost on the planet. To what extent can the perspective of the universe story provide a context for a global environmental ethics.

Method of Instruction and Evaluation:

The course will consist of readings and videos which will be discussed in class.

Class attendance and participation 30%
Leading discussion and generating questions 20%
Projects 50%

Instructional Materials and Sources:

Books:

1) Brian Swimme and Thomas Berry, The Universe Story (SanFrancisco: Harper, 1992)
2) Cliff Matthews, ME Tucker, P. Hefner, eds. When Worlds Converge (Open Court 2002)

Videos:

B. Swimme, The Canticle to the Cosmos (12 part video series)
Schedule of Seminars on Monday Evenings:

January 20  “The Story of Our Time”
"The universe, the solar system, and the planet earth in themselves and in their evolutionary emergence constitute for the human community the primary revelation of that ultimate mystery whence all things emerge."

January 27  “The Primeval Fireball”
"The universe is a unity, an interacting and genetically related community of beings bound together in an inseparable relationship in space and time. The unity of the planet earth is especially clear; each being of the planet is profoundly implicated in the existence and functioning of every other being of the planet."

Readings: The Universe Story Ch. 1; When Worlds Converge Ch. 1
February 3 “Feast of Consciousness”
"From its beginning the universe is a psychic as well as a physical reality."

Readings: The Universe Story Ch. 2; When Worlds Converge Ch. 4

February 10 “Destruction and Loss”
"The universe has a violent as well as a harmonious aspect, but it is consistently creative in the larger arc of its development."

Readings: The Universe Story Ch. 3
February 17 “The Fundamental Order of the Universe”
"The three basic laws of the universe at all levels of reality are differentiation, subjectivity, and communion. These laws identify the reality of the universe, the values of the universe, and the directions in which the universe is proceeding."

Readings: The Universe Story Ch. 4; When Worlds Converge Ch. 2

February 24 “A Magical Planet”
"The earth, within the solar system, is a self-emergent, self-propagating, self-nourishing, self-educating, self-governing, self-healing, self-fulfilling community. All particular life forms must integrate their functioning with this larger complex of mutually dependent earth systems."

Readings: The Universe Story Ch. 5
March 3  “Sex, Death, and Dreams”

"Genetic coding process is the process through which the world of the living articulates itself and its being and its activities. The great wonder is the creative interaction of the multiple codings among themselves."

Readings: The Universe Story Ch. 6 & 7

Spring Break
March 17  “The Nature of the Human”
“The human is that being in whom the universe activates, reflects upon, and celebrates itself in conscious self-awareness.”

Readings: “The New Story” by T. Berry***; When Worlds Converge Ch. 8

March 24  “Fire in the Mind”
"At the human level genetic coding mandates a further trans-genetic cultural coding by which specific human qualities find expression. Cultural coding is carried on by educational processes."

Readings: The Universe Story Ch. 8; When Worlds Converge Ch. 5 & 6
March 31  "The Human Story" with Guest professor- John Grim

"The historical sequence of cultural periods can be identified as the tribal-shamanic period, the Neolithic-village period, the classical civilizational period, the scientific-technological period, and the emerging Ecozoic era."

Readings: *The Universe Story* Ch. 9-11; *When Worlds Converge* Ch. 14

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April 7  "The Great Story" – film of Thomas Berry

**Reviews:**

"Tom gave us the picture--it's a picture of the earth as the center of everything...of our consciousness, of our physical being, of our world. As a theological person, that really turned my whole thinking upside down.”

Rev. James Parks Morton

"We are grateful to Thomas Berry and to the makers of this marvelous film who have captured some of his spirit and his deep message so important for our times." Matthew Fox
April 14  "The Timing of Creativity"
"The emergent process of the universe is irreversible and non-repeatable in the existing world order. The movement from non-life to life on the planet earth is a one-time event. So, too, the movement from life to the human form of consciousness. So also the transition from the earlier to the later forms of human culture."

Readings: When Worlds Converge Ch. 19 (Confucianism)

April 21  "A New Prosperity"
"The main task of the immediate future is to assist in activating the inter-communion of all the living and non-living components of the earth community in what can be considered the emerging Ecozoic era of earth development."

Readings: The Universe Story Ch. 12-13 & Epilogue

We all have our particular work. We have a variety of occupations. But beside the particular work we do and the lives we lead, we have a Great Work that everyone is involved in and no one is exempt from. That is the work of moving on from a terminal Cenozoic to an emerging Ecozoic Era in the story of the planet Earth. This is the Great Work. -- Thomas Berry
April 28  Summary session/ student reports