This is an unorthodox or nonstandard philosophy of natural science because the science to be studied or taken as paradigmatic in this course is not physics or biology or neurophysiology but ecology. If ecology is part of biology it is, unlike many parts of biology, immediately and inexorably involved in pressing social and political issues. A philosophy of ecology course is therefore strongly related to social, economic, gender, aesthetic and other value issues in the way that a course which takes physics and its center would not be.

This said, the present course will raise the same sorts of questions posed in any philosophy of natural science course and deal with major figures in recent philosophy of science. That is, it will deal with positivism, falsificationism, historical relativism and other regnantisms in the 20th and 21st centuries. The professor’s philosophy of science will include aspects of each of these but will not be orthodox. If anything it will be closer to those of the two 20th-century metaphysicians H. Bergson and A.N. Whitehead, who emphasize the place of creativity process, and imagination in the history of the sciences.

The course will begin with a survey of 20th-century philosophies of science: positivism of the Vienna Circle, the antipositivism of Karl Popper, the antipositivism of Thomas Kuhn. It will then consider the science of ecology, both in itself and in its relations to the biological theory of evolution. Examples of ecological problems and questions will be drawn from the professor’s experience with Southwest Texas’ Big Thicket National Preserve. Throughout, an effort will be made to imagine a philosophy of science which suits a science like ecology.

One way of finding such a philosophy of science is through the study of those thinkers like Henri Bergson and Alfred North Whitehead, whose views are congenial to ecology. Bergson’s theory of knowledge and Whitehead’s metaphysics can be understood as “ecological” in the widest sense.

The course will conclude with questions concerning the practical implications of a philosophy of ecology. It will also use Aldo Leopold’s “Land Ethics” as a means towards this end.
This class is primarily lecture-oriented but includes class discussions. New materials from science journals, books, and magazines may be added to the course along with the textbooks.

**REQUIREMENTS**
This course will involve two hour examinations and one final examination. Any graduate student sitting in on the course will be required, in addition, to write a term paper.

Each examination will consist of an objective part and an essay part. The objective part will consist of True-False, Multiple choice and fill-in-the blank components and will account for 33% of the grade. The essay part will consist of six or seven questions, of which the student may answer one or two. The essay will count for 67% of the grade.

The final examination will have the same two-part structure as the two hour exams and likes them will count for one-third of the course grade.

**TEXTBOOKS**

**LATE / MAKEUP POLICY**
Extensions are not granted, except in case of illness or loss of a family member. If work cannot be submitted for these reasons, the student can resolve the situation with the professor after returning to the course. Documentation can be provided in office hours, by appointment or at the next class the student is able to attend, at the student’s discretion. A makeup arrangement will be worked out by mutual agreement based on the student’s need.

**GRADING POLICY**
This course is graded according to the requirements specified and weighted below. Discussion postings receive a numerical grade; class presentations and the research paper receive a letter grade. Letter and numerical grades are translatable on the following scale:
SYLLABUS * FALL, 2019
Philosophy of Science 3250.001

August 26: First Class Day – Presentation of course description and syllabus
August 30: SMW Chapters 3-4
September 4: SMW Chapters 5-6
September 6: SMW Chapters 7-8
September 9: SMW Chapters 11-13
September 11: SMW Discussion
September 13: First Hour Examination
September 16: Positivism (handout)
September 18: Falsificationism (handout)
September 20 Kuhnian Philosophy of Science (handout)
September 23: Discussion: Kinds of Philosophy of Science
September 27: IM (just start reading)
September 30: IM
October 7: *Nature's Economy*, Chs. 3-5
October 9: *Nature's Economy*, Chs. 6-9
October 11: *Nature's Economy*, Chs. 10-12
October 14: *Nature's Economy*, Chs. 13-15
October 16: *Nature's Economy*, Chs. 16-17
October 18: *The Big Thicket*, Chs. 1-2
October 21: *The Big Thicket*, Chs. 3-4
October 23: *The Big Thicket*, Chs. 5-6 (beginning)
October 25: *The Big Thicket*, Chs. 6, pp. 123-140
ATTTENDANCE POLICY
Attendance is required, though not graded.

You are responsible for reading, understanding and knowing UNT’s Academic Dishonesty Policy that can be found at http://www.vpaa.unt.edu/academic-integrity.htm
The research paper must be submitted to Turnitin.com

The University of North Texas is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 – The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. The Office of Disability Accommodation is located in Suite 321 of the University Union Building and can be reached at (940) 565-4323 and TTY (940) 369-8652 or through the website at http://www.unt.edu/oda/index.html

Drop/Withdrawal Information, and other important Academic Dates can be found at http://essc.unt.edu/registrar/schedule/scheduleclass.html
It is your responsibility to know and respect relevant deadlines.

OTHER
Professor Gunter’s telephone number is (940) 387 – 8948, his email address is gunter@unt.edu

Discussions outside of class can be arranged at Aura Coffee next to Voertman’s.
October 28: *The Big Thicket*, Chs. 6, pp. 141-166
October 30: *The Big Thicket*, Chs. 7 and discussion
November 1: *Texas Land Ethics*
November 4: *Texas Land Ethics*
November 6: *Texas Land Ethics*
November 8: *Texas Land Ethics*
November 11: Aldo Leopold, Sand County Almanac (handout)
November 13: *In Defense of the Land Ethic* (handout)
November 15: *Texas Land Ethics*, Ch. 4
November 18: *Texas Land Ethics*, Ch. 5
November 20: *Texas Land Ethics*, Ch. 6
November 22: *Texas Land Ethics*, Ch. 7
November 25: Bergson Handout
November 27: Bergson Handout
December 2: Bergson/Whitehead Discussion
December 4: Preparation for Final Exam
December 9: Final Exam 10:30 – 12:00 this semester’s class room