This is an unorthodox or nonstandard philosophy of natural science course 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 inescapably 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 regnant isms 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 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 Southeast 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 part will count for 67% of the grade.

The final examination will have the same two-part structure as the two hour exams and like 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:
A= 90%+
B=80-89%
C=70-79%
D= 60-69%
F=0-59%
ATTENDANCE 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://cssc.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 Big Mike’s Mighty Coffee Emporium next to Voertman’s.

Class Schedule

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<th>Date</th>
<th>Topic</th>
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<tr>
<td>Jan 20</td>
<td>Syllabus and Discussion</td>
</tr>
<tr>
<td>Jan 22</td>
<td>Introduction (lecture/discussion)</td>
</tr>
<tr>
<td>Jan 27</td>
<td>John Mullarkey *Introduction, An Introduction to Metaphysics</td>
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<tr>
<td>Jan 29</td>
<td>An Introduction to Metaphysics</td>
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<tr>
<td>Feb 3</td>
<td>An Introduction to Metaphysics</td>
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<tr>
<td>Feb 5</td>
<td>Basic Ecology (First half)</td>
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<tr>
<td>Feb 10</td>
<td>Basic Ecology (Second half)</td>
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<tr>
<td>Feb 12</td>
<td>The Big Thicket</td>
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<td>Feb 17</td>
<td>The Big Thicket</td>
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<td>Feb 19</td>
<td>The Big Thicket</td>
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<tr>
<td>Feb 24</td>
<td>Preparation for 1st Hr. Exam</td>
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<td>Feb 26</td>
<td>1st Hr. Exam</td>
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<td>Mar 3</td>
<td>Positivism</td>
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<td>Mar 5</td>
<td>Falsification</td>
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<td>Mar 10</td>
<td>Historicism</td>
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<td>Mar 12</td>
<td>Discussion: The Philosophies of Science</td>
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<tr>
<td>Mar 17</td>
<td>Spring Break</td>
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Spring, 2018

Class Schedules

Jan 16  Syllabus and Discussion
Jan 18  A.N. Whitehead Science and the Modern World Ch 1-2
Jan 23  Science and the Modern World Ch 3-4
Jan 25  Science and the Modern World Ch 5-6
Jan 30  Science and the Modern World Ch 7-8
Feb 1   Science and the Modern World Ch 11-13
Feb 6   Science and the Modern World discussion
Feb 8   FIRST HOUR EXAM
Feb 13  Positivism
Feb 15  Falsificationism
Feb 20  Historicism
Feb 22  Discussion: Philosophies of Science
Feb 27  John Hallyecky Intro. to Introduction to Metaphysics
March 1 Intro. to Introduction to Metaphysics
March 6  Introduction to Metaphysics
March 8  Introduction to Metaphysics
March 13 Spring Break
March 20 Introduction to Metaphysics
March 22 Introduction to Metaphysics
March 27 Discussion
March 29 Second Hour Exam
April 3 Nature's Economy D. Worster
April 5 Nature's Economy
April 10 Nature's Economy
April 12 Nature's Economy
April 17 Nature's Economy
April 19 The Big Thicket
April 24 The Big Thicket
April 26 Texas Land Ethics
May 1 Texas Land Ethics
May 3 Texas Land Ethics
May 10 8:00 - 10:00 a.m.