**Catalog Description**

Our planet is finite. Our political and economic systems were designed for an infinite planet. These difficult truths frame this inquiry into the historical origins of our political economy and what can be done to transform it into an ecologically and socially sustainable system. Topics covered range from the laws of thermodynamics to the laws of supply and demand; from the “empty planet” assumptions encoded into the U.S. Constitution by way of the work of 18th century democratic theorist John Locke to the probable future of Fifth Amendment Takings cases (which will prove to be one of the contact points between infinite planet expectations and finite planet reality); from a history of human energy use to alternative visions for how our economy (and its political controls) should be understood, maintained and operated.

The main goal of our studies will be to empower us to become informed participants in our culture’s transition to a sustainable relationship with the ecosystems in which we are embedded. This transition is inevitable; by definition unsustainable systems do not last. The only question is what sort of sustainable system we will have—one we choose, one that evolves through crisis, accident, and catastrophe or (most likely) something that is a mixture of both. Our particular focus will be an examination of critical leverage.
points where efforts to change the system will have amplified effect, with energy, money, food, economic theory, and property law prominent among them.

**Objectives**

This course examines the ways that contemporary economic and political theory, and institutions and practices grounded in it, encode the assumption that the planet is infinite. It asks you to explore and evaluate ways of adapting those ideas, institutions and practices to a world that has ecological limits. Many people have come to the realization that our physical infrastructure needs to be adapted to finite-planet reality: we need solar and other renewable energy systems, we need a post-petroleum agriculture, we need mass transit, we need compact village and urban centers in a healthy, working landscape. Less obvious are the changes that need to be made to our intellectual infrastructure; this course examines those changes as well.

As noted, the primary objective of the course is to empower you to become informed participants, even leaders, in our culture’s transition to a sustainable relationship to its host ecosystems. Subsidiary objectives for the course include developing your understanding of:

- The four facets—ecological, economic, social, and cultural—of sustainability;
- The laws of thermodynamics and their importance to economic and ecological theorizing and modeling;
- Human energy use as a powerful explanatory factor in world history;
- The origins of modern democratic and economic theory in 18th and 19th century societies that inhabited a less populous, less developed planet on which infinite economic growth seemed feasible;
- The concepts of natural capital and ecosystem services;
- The perpetual-growth, infinite-planet assumptions implicit in mainstream political and economic theory;
- Contemporary crises brought on by the source-and-sink limits of planetary ecosystems, including climate change, peak oil, peak agriculture, peak water use, and peak extinction rates;
- The ethical implications of resource use, wealth creation and wealth distribution, including questions of intra-social, international and intergenerational equity and justice;
- Specific leverage points for changing an unsustainable economy, including:
  - Use of alternative indicators (like the Genuine Progress Indicator, Gross National Happiness, the Happy Planet Index, etc.);
  - Acknowledgement and measurement of the benefits of social capital;
  - Revision of a financial system dependent on infinite economic growth;
  - Changes in property law to reflect the value of ecosystem services;
  - Achieving sustainable throughput of matter and energy in the economy with a focus on energy, water and food.

**Format of the Course**
The class is a seminar, which means in-class discussion is central to your learning experience. Participation therefore counts for a great deal (see “How you will be evaluated,” below). You’ll have focused assignments (assigned readings and regular writing in your learning journal, described below) framing the discussion each session. There will be a midterm exam. Your final evaluation will be based on a take-home final essay exam and your presentation in class of a final or capstone project, which will also be turned in as a written paper and slide deck. There will be other opportunities for you to practice the skill of presenting to a small group, as you do smaller research projects and share the results (see “scavenger hunt” assignments below).

Writing and Research Assignments

In addition to completing the assigned readings, preparation for class will include writing in your learning journal—twice a week to start, once a week after the midterm.

You’ll use the Blackboard Journal feature to do this so that I can review your entry before class. The writing will usually be free form, as you respond to the reading in your own way (keeping in mind the general guidelines for learning journals given in a separate handout that is posted separately in Blackboard.) On occasion I might ask you to share with the class a particular thought or issue you’ve expressed in your learning journal. Entries should be substantive but need not be lengthy. The LJ serves two functions: it guarantees that you’ve not only done the reading before class but that you’ve thought about it in some way; and it stimulates you to digest the reading and make connections. (Which is to say, it’s for both of us: for your learning, and for me to see your learning.) An entry of 125 words is short; 250-300 is in the median range; and 500 words is longer than expected.

Some students like to keep a physical learning journal, one that includes sketches, diagrams, conceptual maps, etc. This is perfectly acceptable—as long as you scan and upload the relevant pages to the online journal so that I can see it.

Before the midterm, learning journal entries are due at two times:

- Sunday at noon the day before Monday’s class
- Thursday at noon the day before Friday’s class

After the midterm, learning Journal entries are due

- Sunday at noon before Monday’s class

I’ll read your learning journal entries before class and you’ll get a general sort of response to them, but they won’t be graded. Nor will others in the class be able to view your journal. I may call on you to share an insight or idea from your journal in the ensuing class discussion.

In addition to the learning journal, writing assignments will also include three reflective and integrative essays (of 500 to 800 words), the written portion of your final project
(of 3000 to 3500 words; see the fuller description below) and a final narrative self-evaluation of your experience and work in the course. The reflective papers and the final project will be submitted for grading. For all graded work, you’ll have the chance to submit a draft and then revise it in response to feedback before getting a final grade. Your final grade for any revised writing will reflect a 40% - 60% split: 40% for the first submission, 60% for the revision.

In addition to the reading and the journal writing, sometimes the assignment for class will include a small-scale research project. (One possibility, by way of example: “find and bring to the next class several examples of how the term ‘sustainable’ has been used in news media.”) I think of these as “scavenger hunt” assignments—everyone in the class goes out to see what they can find and in the next class we compare what was found. When you’re sent off to do this sort of research, you’ll be expected to submit some kind of documentary evidence of what you found. The assignment will determine what counts as the documentary evidence: it might be a photocopy of a paragraph from a book, a copy of a map, or a short write-up that reports the finding. In each case you’ll need to cite sources appropriately.

For your convenience, here are details on the various kinds of writing:

Learning Journal: This you keep regularly, using the Journal function on the course Blackboard site. The course requirement is that you write twice a week before the midterm and once a week thereafter. That’s the minimum. You are welcome to use the learning journal more ambitiously than that. You could use it to record responses to the class discussion (thus framing each class session with both a before and an after entry). You could keep a regular, maybe even daily record of the connections you make between the course material and other aspects of your experience (the learning you’re doing in other courses, the conversations you have outside of class, your experience of news and other media, and so on). You can highlight ideas, contradictions, or questions that arise that might form the basis for a reflective essay or your final project.

Beyond the minimum expectation, you can do anything else in your journal that you think or feel contributes to your learning of the material. Individual entries in the Learning Journal will not be graded, but the keeping of the journal is worth 10% of your final grade. In practice this means that the journal is a pass-fail activity for 10% of your grade. Keep it regularly and well (i.e., meet the minimum expectation outlined here) and you’ll get an A for 10% of your grade. You’ll lose some consideration if the required entries are sloppy, ungrammatical, perfunctory, or give any other indication that the thinking and writing is slapdash.

Reflective essays: You’ll submit three reflective essays for grading during the semester. One may be an extension of a learning journal entry, if you wish; the others (or all three) will be in response to a prompt set by the instructor. You’ll have the opportunity to revise each of these essays in response to feedback from the instructor, and your final grade on each will be a 40-60 blending of the grades on the original (40) and the revised (60) paper.
**Other writing:** I’m a firm believer in the value of writing as a way of integrating thought, and so there are likely to be other, ungraded writing assignments. These may emerge from discussion in class, or be intended to provoke discussion. The assignment may be given as an assigned prompt for you to reply to in your Learning Journal, or it may be a write-up of a scavenger-hunt research quest, or it may be a short opinion piece (no research needed) done for a particular class. Mostly these assignments emerge out of our class experience and are shaped by me in response to what I perceive as being useful for class members.

**Final Project:** The subject of your final, capstone project will emerge in discussions with me and other classmates. The purpose of the capstone paper is to integrate aspects of the course content and to give you practice at completing a significant research project that extends your knowledge. The project has two parts: a researched paper you turn in and a presentation you make to your fellow classmates. Both parts will be evaluated for your grade on the project.

You’ll tackle the final paper in stages. The course schedule shows five distinct deadlines for these stages. They are:

- 10/24 Preliminary topic statement (thesis statement) due
- 10/31 Refined topic, Preliminary conceptual outline and annotated bibliography are due
- 11/7 Detailed structural outline, first 3 paragraphs and writing plan due
- 11/18 Completed paper due [comments on this draft will be returned by 11/23]
- 11/28 – 12/2 In-class presentation of work

**Portfolio:** Taken together, final versions of your three graded essays, your final project and your narrative evaluation constitute your portfolio for the course. The portfolio is due on December 15. NOTE: You may submit revisions of the graded essays and the leverage paper for inclusion (please indicate that you are doing so by including also the graded version of these items). You can improve your mark on the essays and the leverage paper up to one-half grade by revising it and submitting it in your portfolio (though of course there’s no guarantee that you resubmission will be graded higher than the original).

**Narrative self-evaluation.** The narrative self-evaluation is your summative reflection on your learning for the semester. It will be at least 500 words but could be significantly longer if you find it useful to go into greater detail. The self-evaluation is yours to create for yourself—it isn’t graded—and it should respond to questions like these:

- What do you know now and what can you do now that you didn’t know and couldn’t do before?
- What were the principle learning activities that brought you this knowledge and these skills?
- What resources did you make use of? (List books, articles, other readings, movies, presentations, lectures, interviews done, discussions had, etc.)
How did you demonstrate your learning during the semester; that is, what products of study did you create?

What were some of the high points of your learning in this subject this semester? What really worked, what do you feel you did really well or learned a lot from? Why?

What were one or two low points? What didn’t work, what do you feel you could have done better or would rather not have done at all? Why?

Does completion of this work this semester point to other learning agendas for you in the future? If so, what’s next?

The narrative self-evaluation is due at the scheduled Finals time for this course.

Other Expectations

Participation: It is expected that you will attend every class and participate fully in the class, including making contributions to discussion. The single factor that most closely correlates with success in the Honors College is simple attendance. Absences are reported to the HCOL staff so that we can track troubling or self-defeating patterns before they get out of hand. Personal or family emergencies that would require you to violate the attendance expectation are covered under college policy.

Your class participation should show that you are prepared for class—have done the reading and any other assignment—and that you have comments or questions to share. Ideally I’d hear everyone’s voice at least once in every class.

The official policy for this class is no cuts. In practice this means your final grade will be reduced by 1% for each unexcused absence.

Excused absences include religious holidays; varsity games (of a team you’re on, of course); serious illness; and death in the family. If you cannot make a class for an excusable reason you need to inform an instructor beforehand unless circumstances (such as, you were in a serious accident on the way to class) prevent this. You must also offer independent verification of the reason for the absence; otherwise the absence is unexcused. Unexcused absences include family vacation, wedding, having a plane ticket for travel that has you miss class, signing up for a field trip for another class, and of course oversleeping.

The relevant university policy on attendance is in the student handbook.

Group work and peer consulting and reviewing: At several points in the semester we’ll do small group work. This will help ease you into another course expectation: you’ll work with one or more other members of the class, to help each other to articulate your final project and to review drafts of the work at various stages.

Individual meetings with the instructor: You’re expected to meet with the instructor for an individual appointment at least twice during the semester—once in the first two or
three weeks, and again to discuss the topic for your final paper. These two meetings are part of your class participation and contribute to your grade in that area. You are of course welcome (even expected!) to seek the instructor out during office hours (or other times by appointment) if you have any questions, issues, or problems arising from the class.

**Methods of Evaluation**

You’ll be evaluated on your written work as collected in your portfolio; on whether your journal has been kept well and is serving you as a useful tool; on your class participation; on your performance on the midterm exam and several quizzes; on your performance as a peer collaborator and reviewer; and on the quality and clarity of your project presentation. Written work will be evaluated according to the writing rubrics that are included as part of this syllabus. I encourage you to think in terms of these rubrics when revising your own work and when helping classmates think about their writing. The relative weight that each of these products of study will have in determining your grade is given in a chart below.

*Exams*: There will be one quiz during the semester checking your comprehension of course material (the technical vocabulary, concepts, theories and other content) and your ability to apply this material to events and circumstances in the world. The midterm will be a mixture of objective (short-answer, matching, fill-in-the-blank) and take-home essay under deadline (as in, you’ll have perhaps 24 hours to prepare the essay and submit it, which renders last minute studying problematic.) The final exam will be a take-home essay exam.

*Other forms of evaluation*:

The methods of evaluation outlined above will be applied to all class members. The class as a whole, or individuals within the class, may request to be evaluated on additional materials or activities, and to have those evaluations factored into their grades. The nature of those materials—be they tests, additional essays, public presentations, video presentations of class content for a general audience, etc.—is subject to mutual agreement before their production is undertaken. (Don’t just go and make a video for Youtube, and then present it as part of your portfolio, without talking to me first!)

**Relative weights of study activities:**

<table>
<thead>
<tr>
<th>Product</th>
<th>Percentage of final grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Three graded essays</td>
<td>15</td>
</tr>
<tr>
<td>Learning journal</td>
<td>10</td>
</tr>
<tr>
<td>Capstone project</td>
<td>25</td>
</tr>
<tr>
<td>Quiz</td>
<td>10</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>25</td>
</tr>
<tr>
<td>Participation</td>
<td>15</td>
</tr>
</tbody>
</table>

**Readings**

There are two books on the syllabus that are available from the bookstore.

Daly, Herman and Joshua Farley, *Ecological Economics: Principles and Applications*

Zencey, Eric. *The Other Road to Serfdom and the Path to Sustainable Democracy.*

(That’s right—I’ve assigned a book I wrote. I did this because I want you to encounter the material in it and I certainly didn’t want to lecture it all at you. Having you read it seemed the most efficient and effective way to communicate it to you.)

In the syllabus, “Zencey” refers to this book, while “D and F” refers to (wait for it…) the Daly and Farley book.

The other assigned reading will be found online, either on the course Blackboard site or easily found on the web. As I write this (late August) I’m working on pulling together a booklet of these readings so that we can all have hard copy in front of us as we talk about the work. I’m not sure when this will be finished.
<table>
<thead>
<tr>
<th></th>
<th>HIGHEST</th>
<th>AVERAGE</th>
<th>FAILING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context and purpose</strong></td>
<td>Demonstrates very good understanding of context and purpose of the writing; is responsive to the assigned task, which focuses all elements in the work. Purpose is clear throughout.</td>
<td>Demonstrates adequate consideration of context and purpose and is mostly responsive to task. Purpose is evident nearly throughout.</td>
<td>Begins to show awareness of context and purpose of the writing; is only partially responsive to task; purpose is sometimes obscured or not in evidence.</td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>Uses appropriate, relevant, compelling content, illustrating mastery of the topic and effectively communicating the writer’s understanding</td>
<td>Uses appropriate and relevant content but fails to be fully compelling for want of additional relevant content; displays good acquaintance with but not mastery of topic</td>
<td>Uses insufficient, inappropriate or irrelevant content; fails to convey sturdy acquaintance with topic</td>
</tr>
<tr>
<td><strong>Conventions</strong></td>
<td>Demonstrates detailed attention to and successful execution of a wide range of conventions particular to the discipline and/or writing task, including organization, content, presentation, and stylistic choices</td>
<td>Demonstrates consistent use of conventions, including organization, content, presentation, stylistic choices</td>
<td>Very little organizational effort is in evidence; presentation is confused and confusing; stylistic choices are mostly inappropriate</td>
</tr>
<tr>
<td><strong>Sources and evidence</strong></td>
<td>Demonstrates skilful use of high-quality, credible, relevant sources and evidence to develop ideas relevant to purpose</td>
<td>Demonstrates consistent use of high-quality, credible, relevant sources and evidence to support ideas that are familiar within the discipline and supportive of purpose</td>
<td>Makes no attempt to use sources and evidence to support the purpose</td>
</tr>
<tr>
<td><strong>Control of mechanics</strong></td>
<td>Uses graceful language that skillfully communicates meaning; is virtually error-free</td>
<td>Uses straightforward language that conveys meaning to readers with clarity and has few errors of usage, spelling, punctuation, grammar, etc.</td>
<td>Gives evidence of lack of control of mechanics (spelling, punctuation, grammar, etc.). Work is not clear due to errors</td>
</tr>
</tbody>
</table>

_**Fall 2016**_
1. Introduction to the Course

8/29 Reading: Syllabus
   Activity/Assignment due today: none

8/31 Reading: D and F, introduction and chap. 1; independent research
   Activity/Assignment due today: share research

9/2   D and F, chaps 2 & 3

2. Paradigms and Clear Thinking

9/5 LABOR DAY no class

9/7 Reading: Zencey, Introduction & chap 1.


3. The Laws of Thermodynamics and Energy in History


9/16 Reading: Homer-Dixon, pp. 31-75 from *The Upside of Down*.

   Writing prompt for first graded essay given out

4. Energy in World History

9/19 Reading: Zencey, pp. 32-54. “What ‘Sustainability’ Is” and “Oil, Economic Theory, and...”

9/21 Quiz also Reading: Zencey, pp. 55-71. The Econ Textbook that might save Civilization

9/23 Reading: D and F, chapter 4   The Nature of Resources and the Resources of Nature

   Due: first graded essay

5. Theorizing Natural Resources

9/26 Reading: D and F, Chap 5 Abiotic Resources
6. Diagnosing Infinite Planet Thinking

10/3 Reading: Zencey, 118 to 135 The EKC

10/5 Reading: Zencey 136-161 (Simon-Ehrlich Bet)

10/7 MIDTERM

7. Theorizing Complex Systems

10/10 COLUMBUS DAY no class

10/12 Reading: D and F, Chap 9, Supply and Demand


8. Market Failures

10/17 Reading: D and F Chapter 10 Market Failures

10/19 Reading: D and F Chapter 11 Market Failures and Abiotic Resources

10/21 Reading: D and F Chapter 12 Market Failures and Biotic Resources

9. Locke, Growth, Malthus and Money


**Final Project Milestone: preliminary thesis statement/problem-solution pairing due**

10/26 Reading: D & F, Chap. 15, “Money”;

10/28 Zencey, pp. 96-117 (Pyramid scheme, financial crisis). Zencey, Money and Malthus

**Due: second graded essay**

10/31 Research challenge: find (and bring in to class) text from an economics book that explicitly states that we can have, or encodes the assumption that we can have, infinite economic growth

**Final Project Milestone: Refined topic, Preliminary conceptual outline and annotated bibliography are due**

11/2 Natural and Social Capital

Reading: Putnam, “Bowling Alone” and Garrett Hardin, “Tragedy of the Commons”

11/4 Cuba and Peak Oil: the Power of Community (film in class)

**HW Research task: is this film accurate?**

**Select alternative indicator to research for 11/9**
11/7  New Views of Human Behavior and Human Needs
   Reading: Daly and Farley Chapter 13 "Human Behavior and Economics"
   Manfred Max-Neef “Development and Human Needs”
   HW due on: Is “The Power of Community” accurate?

Final Project Milestone: Detailed structural outline, first 3 paragraphs and writing plan due

11/9  Alternative Indicators D and F Chap. 14; additional (independent) reading in (choose one):
   Genuine Progress Indicator
   Gross National Happiness
   Canadian Index of Wellbeing
   Happy Planet Index
   (others TBA)
   Prompt(s) for third graded essay assigned

11/11 Distribution, Just and otherwise
   Reading: D and F 16, D and F 23

11/14 International Trade: D and F Chapter 18; review Max Neef
   Third graded essay due

11/16 Globalization: pro and con
   D and F Chap 19.
   Standard globalization argument (NCE text) TBA

11/18 Sustainable Scale
   D and F Chapter 22; Zencey, “Where Infinite Growth Meets Biophysical Limit” at
   http://steadystate.org/where-infinite-growth-meets-biophysical-limit/


11/28 Panel Presentations of Final Project Papers
   Reading: the papers being presented

Final Project Milestone: Completed paper due

11/30 Panel presentations of Final Project Papers
   Reading: the papers being presented

12/2 Panel presentations of Final Project Papers
   Reading: the papers being presented

12/5 The Great Transition: Post Petroleum Civilization, Finite Planet Economics
   Reading: Transition Towns Handbook (pages TBA)

12/7 Governance in the Long Emergency
   Reading: David Orr “Governance in the Long Emergency”
   James Howard Kunstler, last chapter from “The Long Emergency”

12/9 LAST CLASS Practical Political Economy
   Reading: Zencey, pp. 225 to end, “What Green Might Bring”