

“[Arcosanti] is optimism in concrete. It works by believing that there is
a tomorrow that can be prodigiously affirmative.”
– Paolo Soleri

ENS350 Environmental Visions: Adventures in Eco-Futurism

Short description

This travel course offers an up-close look at two eco-futurist visions that are taking shape today: Paolo Soleri’s hyper-dense “arcology” (**architecture / ecology**), a prototype of which is rising in the high desert near Phoenix, Arizona; and a maximally sustainable “permaculture” (**permanent agriculture**) as it is being practiced and taught in the seaside rainforest at Punta Mona, Costa Rica. We will live, study, and work at each site for about a week. Accompanying side trips – to Biosphere 2 near Tucson; to Frank Lloyd Wright’s Taliesin West in Scottsdale; to Tacotal Eco-Villages in San Mateo, Costa Rica – will complement (and complicate) the two main visions. Students’ concurrent term project will be to complete a radical eco-futurist redesign of their own for Elon University. Three preparatory evening seminars will be required during Fall term..

Fuller description

Today we are invited to imagine the Great Green Future mostly along the lines of carpooling or mass transit, more locally-grown food and more energy-efficient buildings. It’s an important agenda, but it has a few limits and liabilities. One is that it is totally unimaginative: it is essentially a form of technological and social tinkering rather than a new vision of how humans can truly live sustainably and *wonderfully* on this planet. Another small liability is that it is not going to work. It is too little and too late: a few cutbacks here and there are not going to make any real difference – anyway not enough.

In short, we need *radical* alternatives, and as soon as possible. But what would a radically different and radically “green” form of life actually look like? As mainstream environmentalism sputters along battling the sceptics and scaling back its already-limited tinkering still farther, some visionaries are beginning to answer this question – and not only in theory. Actual alternatives are taking shape on the ground. They are where we need to look if we are to provoke our imaginations and come to grips with the scale and the promise of the challenges we now face.

This course takes advantage of the January travel opportunity to explore two such radical and on-the-ground alternatives up-close – living and working for about a week each at two alternative and very different kinds of sites, with some provocative side trips along the way.

We begin in the Fall term with three preparatory seminars, the middle of which will be a visit to Arcadia Co-Housing in Carrboro, NC, in conjunction with a reading Ernest Callenbach's futuristic novel *Ecotopia*, which will be a main reading for the course along with the instructor's own book in progress, *Green Dreaming*. Other Fall meetings will cover logistics and introduce the radical/critical frame of the course as a whole. (It's too much for a mere January: you have to let the ideas begin to sink in sooner...)

As soon as possible in January, this course will convene first in Phoenix, Arizona – about as *unsustainable* a city as you will find in America. We then spend a day each at the **Biosphere 2** project near Tucson and Frank Lloyd Wright's Taliesin West in Scottsdale, with a daylong hike in the Superstition Mountains in between. Then we arrive at our first main site, Paolo Soleri's **Arcosanti** – a prototype of a hyper-dense, concrete/organic “arcological” city being built (slowly, mostly by volunteers and residents, which will include us for a week) in the high desert north of Phoenix. We will have readings from Soleri's writings and others, on-site instruction by Arcosanti architects and staff, possibly including Soleri himself, and tours, construction work, and craft sessions as well.

At the end of our Arcosanti residency we head back to Phoenix and fly to San Jose, Costa Rica. Here we will be met by Stephen Brooks, founder of Kopali Organics and a number of other sustainability-oriented enterprises, most notably the **Punta Mona** Center for Sustainable Living & Education on Costa Rica's Caribbean coast. Before we head to Punta Mona, Brooks will take us to two Eco-Village communities that he is building near San Mateo, Costa Rica. On the way down to the Caribbean coast the next day, we will visit some typical banana and pineapple plantations to see for ourselves how these fruits are usually grown – about as *unsustainable* an agriculture as you will find on the continent. Our Punta Mona residency will combine a comprehensive introduction to “permaculture” (**permanent agriculture**) with the extensive tours and work within a tropical rainforest that is being transformed and managed according to permacultural principles, along with an introduction to medicinal plants and other tropical topics of interest, and (yes) some time for snorkeling and kayaking.

At the end of our Punta Mona residency we will head back to San Jose, back to Elon, take a short night's sleep and then begin two days of wrap-up. Progressively throughout the trip, and intensively at Punta Mona, students will be collaborating on small-group design projects to radically redesign Elon University using some of the ideas we have encountered. After another day's summary and planning sessions, the course ends on Finals Day with a studio presentation of your designs.

Course Objectives

In ENS350, students will develop:

1. An understanding of some radical critiques of contemporary society and also of contemporary environmentalism – that is, an understanding of the case for *new* environmental visions, and the depth to which green re-imagination may have to go.
2. Correspondingly, an understanding of the possibility of such thorough-going re-visions, of new and more adventurous shapes for the environmentalisms of the future: that is, some broad paradigms for green re-imagination – what Soleri calls “reformulation” versus mere “reformation”, or what your instructor calls *Eco-Futurism* – along with some specific imaginative and conceptual methods for such work.
3. Knowledge from the inside – from extended experience and interaction – of two actual alternative environmental visions, specific, concrete, and contemporary: Soleri’s arcology, as it is emerging at Arcosanti, and permaculture, as transposed to and developed in the Costa Rican rainforest at Punta Mona; along with some others more briefly along the way.
4. An ability to bring these new resources and experiences to bear on real re-design challenges back home: specifically on Elon’s own campus.

Prerequisites

Students should have taken at least one ENS course, although there is flexibility for students who bring other relevant background. Permission of the instructor is required. There will be a simple application process: one form available at the Interest meeting or from the instructor by email.

There will also be three required meetings in the Fall by way of preparation.

Please note that this course does not count for International Studies credit – we won’t be abroad long enough – but that it can count toward the ENS BA (possibly also in the BS by special permission) depending on your concentrations, as well as for general upper-level out-of-major credit for other students.

Challenges

This course will be challenging on many levels. For one, we will be on the road for nearly three weeks, and the schedule is full 24/7: every day is planned. In my view, if we are going so far and

to such extraordinary places, with people eager to teach us all about them, we need to use every minute to absorb and participate all we can. You can rest later -- after you get back home (and complete the final design project!).

Being constantly on the move, we will need to pack carefully – one moderate-sized backpack per person, period, no suitcases, though we will be living in two totally different climates. Bring clothes you don't need to launder much, or can hand wash. We will not always have email (don't even think about bringing a laptop) and US cellphones do not work in Costa Rica. Emergency communication will be possible, but mostly you should expect to be out of touch – more time to experience *where you are*...

The weather may be wonderful... or not. The Arizona high desert can be freezing in January, and Soleri was not a big fan of a lot of heating, it seems. Punta Mona may be hot and buggy. There can be spiders in the composting toilets, masses of army ants on the paths, chickens sharing your bathroom, food you have never eaten before (both sites tend toward the vegetarian/vegan, and in the rainforest we eat the food that grows right there, featuring all sorts of tropical fruit), and it could even rain the whole month. If you look at all of this in the right way, it is part of the adventure... so the challenge here is to be ready for that kind of adventure!

You will also need to be in good physical shape. We will be climbing all over Biosphere 2, taking a ten-mile hike in the Arizona mountains, doing construction work at Arcosanti, slogging through five miles of muddy rainforest to get to Punta Mona, and rising at the crack of dawn every day. More adventure...

Finally, on the academic side, your main creative project for the month will be to work out your own radical environmental vision for the future of Elon University. No big deal: I am just expecting something completely off the scale of anything you or we (meaning Elon right now) are currently thinking – inspired by what you learn and experience over the month. If this course succeeds, you should not only be able to meet this challenge but should also, as it were, be unable *not* to think this way. I look forward to what you'll do!

Required books and other readings (tentative)

To read in the Fall:

- Anthony Weston, *Mobilizing the Green Imagination: An Exuberant Manifesto* (New Society Publishers, 2012)

To read over the holidays

- Michael McDonough and Bruce Sterling, "Newer York, New York"
<http://www.wired.com/wired/archive/8.01/futuretekture.html>

- Selections from, Margaret Mitchell and Scott Pentzer, *Costa Rica: A Global Studies Handbook* (ABS-CLIO, 2009)

- Selections from Bill Mollison, *Permaculture: A Designer's Manual* (Tagari, 1997) and/or David Holmgren, *Permaculture: Principles and Pathways Beyond Sustainability* (Holmgren Design Services, 2002)

- Selections from Richard Register, *Eco-Cities: Rebuilding Cities in Balance with Nature* (New Society, 2006)

To read on the road (as much as possible in photocopy, to keep bulk down):

For Biosphere 2:

- Selections from Rebecca Reider, *Dreaming the Biosphere* (U of New Mexico, 2009): “Genesis” and “Pioneering” and possibly “The New New World”

For Taliesin West:

- Robert Fishman, *Urban Utopias in the 20th Century* (MIT, 1982): chapters on Frank Lloyd Wright.

For Arcosanti:

- Selections from Paolo Soleri, *Arcology: The City in the Image of Man* (Cosanti Press, 2006)

- Paolo Soleri, *Quadernos* 1, 9, 11 (handouts)

- Supplementary: TBA

For Punta Mona:

- Selections from Bill Mollison, *Permaculture: A Designer's Manual* (Tagari, 1997) and/or David Holmgren, *Permaculture: Principles and Pathways Beyond Sustainability* (Holmgren Design Services, 2002)

- [materials from Stephen]

Students will also need a sketching/painting journal (I will show you some examples), along with drawing pencils and a reasonable set of watercolor pencils (these could be shared), and a few brushes.

Course requirements

The most basic requirement is (1) full participation in all activities of the course. At all of our stops there will be tours and other presentations; at both of the main sites there will be detailed presentations from staff, sometimes also from me, along with discussion seminars, work periods, and exploratory hikes. You are expected to be timely, courteous, fully attentive and energetically participatory, and to take the kind of care for yourself and others that will enable all of us to maintain the most productive learning throughout the trip.

As to formal requirements, there will also be: (2) Periodic short writing assignments, in part to help me keep track of how you are doing and what you are thinking. (3) Journal-keeping, for notes, sketches, and designs, due at the end of the term. (4) Your Elon re-design project, a work in progress all month and presented back on campus on our final day (Tuesday, 1/24: see schedule below). (5) There may be an in-class essay final on the afternoon of 1/24. All of these elements count roughly equally.

You will need a valid passport that does not expire at least until 1 August 2013.

Additional costs

This course will have additional costs for airfare, hotels, our two residencies, etc. Right now I have only the roughest estimate – it might be around \$3000. (Note that this does *not* include airfare to Phoenix, AZ on January 3rd: you're responsible for getting there on your own.) Deposits will be taken in the early Fall.

Very! Tentative schedule

Fall 2012

In Fall 2012 we will hold three required seminars (2-3 hours each, weekday evenings TBD):

Meeting 1. Introductions; the general plan; logistics (equipment, passports, trip support tasks, etc.). Introduction to radical sustainability and radical green design. Introduction to the sketch journal.

Meeting 2. Class meets at Arcadia and/or Pacifica Co-Housing Community, Carrboro, for an exploration of local green design. Tour with residents, dinner, and hopefully a talk with the project architect. More journal practice. Read *Ecotopia*.

Meeting 3. Back on campus, near the end of Fall term. Review of the travel plan. Review of basic permacultural and arcological ideas. Context of these ideas in contemporary

visionary environmental thinking. More journal practice. Start Weston, *Mobilizing the Green Imagination*.

January 2013

1. Thursday 1/3: **Convene at the airport in Phoenix, Arizona**, by 1 pm. (You are responsible for getting yourself there.) Van to afternoon hike in the city (Shaw Butte Trail). Dinner and evening organizational meeting.
2. Friday 1/4: Drive to **Biosphere 2** north of Tucson. First tour. Seminar meets. Stay at local hotel or at Biosphere 2 Conference Center.
3. Saturday 1/5: **Biosphere 2** second tour and class meeting. Stay at local hotel or at Biosphere 2 Conference Center.
4. Sunday 1/6: Leave B2 early; full-day hike in the Superstition Mountains east of Phoenix (LaBarge Canyon Trail). Dinner in Phoenix. Hotel in Phoenix.
5. Monday 1/7: Tours of **Taliesin West** (Frank Lloyd Wright), Scottsdale, Arizona. General tour at 10; special tour of apprentice structures at 1:15. PM: drive to Arcosanti (Mayer, AZ). Move-in and dinner.
6. Tuesday 1/8: **Arcosanti** residency begins (AM: general introduction (Tomiaki?); PM: tour and hike).
7. Wednesday 1/9: **Arcosanti** residency continues (AM: Arcology and the history of the project (Tomiaki); private meeting of seminar with AW; PM: work. Evening: film?
8. Thursday 1/10: **Arcosanti** residency continues (AM: Roger on arcology and Soleri; PM: introduction to desert ecology; desert hike and Hopi village). Evening: film (“Koyaanisqatsi”)?
9. Friday 1/11: **Arcosanti** residency continues (introduction to metal and silt casting; more work? meet with Paolo Soleri?
10. Saturday 1/12: **Arcosanti** residency ends ((the big picture: extending Arconsanti’s vision; initiate group design project; work session on Arcosanti construction)
11. Sunday 1/13: Depart Arcosanti, drive to Phoenix; fly to San Jose, Costa Rica. Van to hotel or hostel in San Jose (Aranjuez?).
12. Monday 1/14: Meet with Stephen Brooks. Van to San Mateo to tour **Eco-Villa** project and **Tacotal**; picnic and swim at Tacotal; return to hostel or hotel.

13. Tuesday 1/15: Drive to Puerto Viejo (Stephen: introduction to CR's Caribbean region and ecology; tour banana plantations and pineapple markets along the way). Stay at Puerto Viejo hotel or hostel.
14. Wednesday 1/16: Bus or van to Manzanillo; hike to **Punta Mona** (5 miles) with Tino (special guide). Evening: orientation and introduction.
15. Thursday 1/17: **Punta Mona** residency begins. (AM: core ideas of permaculture; their applications in the rainforest; PM: tour)
16. Friday 1/18: **Punta Mona** residency continues. (Permaculture continued; work session on the farm; planning sessions for Elon re-design project)
17. Saturday 1/19: **Punta Mona** residency continues (the big picture: extending Punta Mona's vision; permaculture and medicinal plants; work session)
18. Sunday 1/20: **Punta Mona** residency concludes. (TBD)
19. Monday 1/21: Return to Puerto Viejo (boat or hike); public bus to San Jose. Overnight in San Jose: dinner at S. J. Mirador?)
20. Tuesday 1/22: Van to airport: return to USA & Elon. Sleep!
21. Wednesday 1/23: Class meets all day on campus. Trip de-briefing; concluding discussions; final design project in high gear.
22. Thursday 1/24: AM: Presentation of group design projects; PM: Written final.