Version 3 January 2023
Week-by-week schedule will be finalized with input from first class meeting

Power and Environment

Professor Susan Paulson: spaulson@latam.ufl.edu

Spring 2023, Wednesdays periods 5-7 (11:45 am - 2:45 pm), Grinter Hall 376
LAS 6938, section 2288 / ANG 6930, section 4E48

Participants in this political ecology course ask: How does power work in and through ecosystems, earth systems, cities, bodies, design, arts, and science itself? They consider material and energy use, unequal ecological exchange, and contested understandings of human and other nature. Approaches include environmental justice, conservation and development, resilience science, ecological economics, ecofeminisms, decolonial feminisms, and degrowth. Our multiscale frame locates Latin American cases in comparative and global analysis. As course participants critically analyze existing ecosocial dynamics, they also work toward building positive alternatives. Materials include UNEP Making Peace with Nature (2021), IPCC Reports, The Environmental Justice Atlas, IPBES Global assessment report on biodiversity and ecosystem services (2019), The EcoModernist Manifesto (2015), and Pope Francis' Encyclical on Care for Our Common Home (2015). This course counts toward Graduate Certificates in Latin American Studies and in Tropical Conservation and Development.

"The Earth is what we all have in common." —Farmer Poet Wendell Berry.

"Anyone who believes in indefinite growth on a physically finite planet, is either mad or an economist."
— Economist Kenneth E. Boulding

"Despite, and because of, great acceleration of scientific knowledge and technology over the last few hundred years, human-nature systems are in danger of collapse" (Parra and Walsh 2016: 229).

LITERATURE AND OTHER MATERIALS

- Students need to obtain **one book:** *Less is More, How Degrowth will Save the World*, by J. Hickel 2020.
- Most **readings** are available electronically through UF libraries.
- V**ideos, podcasts, news and other materials** are available on the internet OR on Canvas.
- A number of assigned readings are available in English, Portuguese and Spanish.

LEARNING OBJECTIVES

The goal of this course is to motivate and empower participants to see environmental issues in new ways and to develop transformative responses.

Students who engage actively in this course will develop the capacity to:

1. Exercise skills and strategies to engage in transformative research and practice.

2. Identify power-environment dynamics in empirical cases involving lifestyles, agriculture, forests, wildlife, urban planning, arts, energy, and other domains.

3. Use evidence-based writing to describe observed conditions and processes, and to make arguments about power relations at play therein.

4. Contextualize and assess contrasting visions and discourses on human-environment relations: sustainable development, ecological economics, resilience science, eco-feminism, eco-modernism, eco-spiritualism, buen vivir, and degrowth.

5. Investigate global distributions and flows of natural resources and waste, including GHG emissions.

6. Apply methods including ecological footprint, value chain analysis, ecosystems assessment, consumption diary, embodied consumption, and material flows analysis.

7. Define and use contested concepts including sustainability, power, development, and nature.

8. Reflect critically on their own consumption and lifestyles, the socio-environmental impact of their life choices, and ways to forge more meaningful and sustainable lives.

9. Explore visions and projects for building more equitable and resilient futures.

COURSE POLICIES

Attendance is required. Class meetings are a vital part of this course. All students are expected to complete assignments and readings before class, and to participate actively in classroom learning. Absences will be reflected in grades. Classes will involve a great deal of interaction and discussion, and participants are encouraged to learn collaboratively with respect, enthusiasm, and open minds.

Personal technology in the classroom. During most regular class time students will be fully engaged in live interaction, without access to personal technology devices (laptops, smartphones, mobile phones, iPads, and similar technologies). The instructor will indicate when devices may be used for select class activities. Exceptions will be made for students who use personal technology devices in relation to special needs, or students who anticipate emergency calls. Presentations will be available on CANVAS, reducing need for notes.

ACADEMIC RESOURCES

- **Latin American and Caribbean Collection at UF Libraries**: Specialized staff support use and enjoyment of the 500,000 volumes, 50,000 microforms, thousands of current and historical serial titles and digital resources in this world-class collection. LACC library staff provide expert help in online searches for research and study materials.

- **Academic Writing, Grammar and Style:** the UF Writing Studio is committed to helping University of Florida students and faculty meet their academic and professional goals by becoming better writers. We support independent learning and scholarship by providing one-on-one consultations, workshops tailored to specific classes (graduate and undergraduate), and faculty retreats focusing on publishing original research. Students and faculty at all levels and in every discipline are welcome!

- **Technical difficulties with E-learning in CANVAS**: Contact the UF Help Desk at Learning-support@ufl.edu or (352) 392-HELP, then select option 2.

LEARNING METHODS

This course brings together ideas and approaches from biology, ecology, anthropology, geography, forestry, economy, sociology, agronomy, political science, environmental studies, development studies, and religious and spiritual studies. Participants explore tensions and possibilities among different assumptions, purposes, and criteria for truth or usefulness.

Course participants meet in person once each week, while conversations and interactions develop continually through a virtual intellectual community interconnected through the course CANVAS website.

Most weekly meetings will include a lecture by instructor and some kind of participatory learning activity.

Most classes start with **presentations by students** who communicate issues they are passionate about and/or personally involved with, showing connections with course readings and concepts. Presentations may include power point slides, facilitation of debate or activities, performance, video, or other audiovisual aids. Presentations should last around ten minutes. This experience is free from grading.

Grades will be based on engagement in a series of learning activities; detailed guidelines for each, together with expectations for student performance, are included below.

GRADED LEARNING ACTIVITIES

Learning activity	**Due Date**	**Maximum points earned**
Weekly contribution to CANVAS discussion board **(**10 commentaries @ 2 points each)	Each Wednesday 8am	20
Attendance and participation	All semester	10
5-part activity (40 points total)		
Consumption diary: practice and meaning	Monday Jan 23	5
Critical engagement w ecological footprint (short paper)	Monday Feb 6	5
Embodied material consumption (short paper)	Monday Feb 20	5
Synthesis paper: Analysis of my role in ecological/economic flows and global value chains	Monday March 6	20

Debate analysis paper, collaborative (35 pts total)		
Draft paper	Monday March 27	10
Final paper	Monday May 1	25

Letter grades will be implemented using the following scale

		78-79.99	C+	60-62.99	D-
95-100	A	73-77.99	C	0-59.99	F
90-94.99	A-	70-72.99	C-		
88-89.99	B+	68-69.99	D+		
83-87.99	B	63-67.99	D		
80-82.99	B-				

GUIDELINES AND ASSESSMENT CRITERIA FOR LEARNING ACTIVITIES

Written work

All written work for this course should use U.S. punctuation and follow standards in Chicago Manual of Style, accessible online at UF libraries. Resources and quotes must be properly cited, and references listed as described in The Chicago Manual of Style Author-Date system. Written materials should be uploaded onto CANVAS in Word documents (**not PDF**), unless images or figures require other format. Please label each submitted document with your name.

Every student is encouraged to visit the UF writing studio for support in developing scholarly writing skills and strategies: http://writing.ufl.edu/writing-studio/ On each student's first paper, the instructor will mark punctuation and style errors, but not subtract points. Errors that are repeated in later papers are penalized.

Weekly comments, questions, and creative expressions inspired by assignments

Before 8am each Wednesday, students post on CANVAS DISCUSSION space critical reflections on readings and videos assigned for the week. These reflections may take the form of artwork, written comments, videos, poetry, or other. Keep written entries under 250 words. Respond briefly to postings by classmates to activate dialogue.

Each posting should do *at least one* of the following:

- Identify and define one key concept in the readings.
- Provide and discuss a quote from readings/videos that expresses an idea or argument that you think is valuable or interesting, or that raises doubts.
- Connect course learning to events on campus.

Center events calendar:
Tropilunch seminar, 12:45 every Tuesday in Grinter 376
TCD news and events

Power-environment debate analysis paper written in groups

Working in groups of three, students produce papers that describe one environment-related challenge and engage two or three contrasting responses to that challenge, identifying power operating on various scales and places in each position and approach. An example of an issue might be: How to supply global demand for food without further degrading the environment? Competing responses might be: (A) Expand high tech

agroindustries and GMOs to produce more food. (B) Support more balanced and efficient distribution of existing food to reduce waste and obesity, as well as undernourishment and starvation. (C) Shift support to plant-based local food grown via agroecology, permaculture, and other low-impact means. Papers draw on course concepts and materials, complemented with resources discovered outside of class.

Collaborative project design, implementation, and writing may take many forms. You may jointly forge every paragraph, so that the whole paper is a negotiated mutual expression. Or you may choose to write the introduction and conclusion together, then each write a section or case study in individual sections that complement each other.

Target length is 2000 to 3000 words. All resources and quotes must be properly cited, and full references listed as described in: http://www.chicagomanualofstyle.org/tools_citationguide.html

Each writing group will submit two versions of the paper: a draft version on which instructor will comment extensively, and a final version that responds to suggestions.

The draft version of the paper may earn up to 10 points according to the following criteria, the final paper may earn double the points indicated in each category, totaling up to 20 points:

Criteria	A successful debate paper will:	points
name challenge, describe & contextualize	Clearly identify the environmental challenge to be addressed. Use specific information, citing sources, to describe phenomenon; contextualize historically, geographically, culturally.	1
method	Describe your method, positioning, and collaboration in producing this paper. Discuss positions and research methods applied by investigators you cite in this paper.	1
connect w. course	Quote and actively engage relevant ideas and information from at least **6** materials assigned for this course (publications, videos, websites) .	3
competing responses	Identify 2 or 3 contrasting ways to address the challenge, review literature on each w attention to positioning of authors/orgs.	2
analysis	Assess pros and cons of each alternative (for differently located people and places), with special attention to power dynamics.	2
writing and references	Show correct punctuation and grammar, subject-pronoun coordination, full attribution of quotes and paraphrases, and reference list according to CMS Author-Date system.	1

In class, each group will present a brief (10 minute) presentation on their debate paper, then facilitate an interactive discussion. Practice timed presentations! Study examples and hints for 3 minute thesis presentations.

5-part individual activity

(1) Consumption diary: practice and meaning

Keep a diary of everything you consume during 24 hours. In addition to obvious commodities (food, water, shampoo), pay attention to the light, heat, electricity, transportation services you use; the technology you access (television, books, computers); the information and entertainment you consume. A range of approaches and schema are welcome: students doing this exercise have identified between 20 and 200 instances of consumption in one day.

Select five acts or moments of consumption during your day, and write about each. Describe the empirical sensations involved (sight, sound, touch, taste, smell), and express the cultural and personal meanings evoked by the act. Write about your decisions and judgements concerning these acts of consumption. Search for any forces or relations of power operating via the habits, feelings, and thoughts (or lack thereof) that accompany each act.

Sources for ideas:
Household Consumption & the Environment EU. Prezi
Empty promises Craze for minimalism

(2) Critical engagement with ecological footprint (short paper)

Write a brief paper (600-800 words) that addresses the following.

- Define ecological footprint, and explain how it is calculated. Mention water footprint and carbon footprint.
- Describe how National Footprints are calculated, and how these calculations are used by governments.
- Discover something interesting or curious about eco-footprint patterns across countries and/or cities.
- Take the quiz describing your life now in Gainesville, and take it again describing your life in the city/country/context where you lived previously.
- Using **quantitative** results, describe your ecological footprint as determined in online activities.
- What insights did the experience provide about how you might reduce your footprint?
- What are some benefits and limitations of each of these personal footprint calculators as educational and awareness-raising tools?

Process:

- Study Eco Footprint on the main site, read carefully "How the Footprint Works," "Country Work" and "City and Regional Work."
- On the open data platform, Look at Global Footprint Network's National Footprint Accounts, compare countries by data, and browse case studies.
- Using the Ecological Footprint Calculator AND at least one other calculator, do exercises that examine your personal ecological footprint and provide suggestions for managing your footprint.

Some complementary quizzes – please explore others according to your interests

- Foodprint calculator
- The Greens *Zero Footprint Youth Calculator*
- Tradewater: Reducing the world's carbon footprint
- Your Carbon Calculator (scoreapp.com)
- Carbon Footprint Calculator | ClimateCare
- Footprint Calculator - Measure your Impact - Global Footprint Network

(3) Embodied material consumption (short paper)

Write a brief paper (500-800 words) about 1 good or service selected from your consumption diary.

- Research the life cycle of selected commodity.
- Identify material and energy embodied during its life cycle, production and consumption processes, and emissions/wastes produced along the way.
- Comment on use of energy, HAANP, material flows analysis, or other measurement systems.
- Map out a model life cycle of your chosen good or service.

"Embodied Material Consumption" is the energy, water and all other resources that have been used to produce a good or service and to transport it to the place of consumption, together with the waste and emissions generated along the way. When I do a web search, for example, I not only use my laptop and the electricity powering it, but also the energy and materials used to produce the laptop and the content viewed. My use also embodies the production of high-energy servers and distant data processing centers that manage and distribute content, as well as material and energy used in production of the content I access.

You may not be able to trace the life cycle of the exact kiwi that you ate for breakfast; instead look on company websites and other sources to find out what you can about the life cycle of an average kiwi consumed in your location or sold by a certain company. You are welcome to use information and quantifications already compiled by others – just cite the sources.

The report should include a timeline roughly representing the life cycle of your good or service. Here is an (incomplete) example of some elements that make up the embodied material consumption of a hamburger:

- Water, sun, soil to grow grass in pasture
- Water, sun, soil to grow soy and corn crops produced for feed
- Agrochemicals to fertilize feed crops, insecticides and fungicides to treat them, etc.
- Tractor and fuel to plant and harvest crops
- Factory that turns soy and corn into balanced feed
- Fuel to transport feed to cattle farms
- Methane greenhouse gas emissions in form of cow burps
- Veterinary drugs, growth hormones, nutraceuticals for cattle
- Truck/train and diesel to transport cattle to slaughterhouse
- Materials to construct, light, power and clean slaughterhouse
- Materials to construct, light, power and clean slaughter and packing machines
- Energy for freezer compartments to store meat
- Freezer truck and diesel to transport meat to restaurant
- Energy for fridge or freezer in restaurant
- Gas to cook on grill
- Styrofoam shell to serve burger
  Physical consumption of one yummy hamburger
- To landfill: styrofoam shell, serving bag, napkins, refuse from farms and slaughterhouses, used tractors/trucks/freezers/slaughter machines/stoves
- To water table: runoff from fertilizers, pesticides, manure, etc.
- To atmosphere: emissions from fertilizer production, farming, burping, transporting, cooking, etc.
- Etc.

Following are excerpts from our reading, and other links that might be interesting.

People and the Planet 2012, 48-49. As international trade increases, the production of goods can become increasingly detached from direct consumption. Goods exported from one country to another carry with them **"embodied" material consumption**, which is necessary for their manufacture. Thus the water use and CO2 emissions of More Developed Countries appear lower than they would under full accounting, because they are partially outsourced to Less Developed Countries.

Embodied Water. People and the Planet 2012, 51. Virtual or **embodied water** refers to the amount of freshwater (including soil water) used during the production process of a good or service. Producing goods and services generally requires water (Hoekstra 2003). For example, it requires about 1,000 cubic meters of water to produce a ton of grain (Hoekstra and Hung 2003). Countries limited in available freshwater rely on importing food to compensate for lack of production ability (Brown and Matlock 2011).

Embodied energy is an accounting method which aims to find the sum total of the energy necessary for an entire product life-cycle. Determining what constitutes this life-cycle includes assessing the relevance and extent of energy into raw material extraction, transport, manufacture, assembly, installation, disassembly, deconstruction and/or decomposition as well as human and secondary resources. Different methodologies produce different understandings of the scale and scope of application and the type of energy embodied.

Embodied Energy

(4) Synthesis paper: Analysis of my role in ecological and economic flows and my power to influence global value chains

Write a paper that synthesizes aspects of research and thought from steps 1, 2 and 3. Identifies some forces and relations of power that influence value chain dynamics. Show how the value chains and power dynamics might be changed in positive ways. The essay of 2000-3000 words may include excerpts from your earlier writing projects, in text or as appendices.

The paper should focus on one item or instance of your consumption diary. Build on your embodied material consumption work to develop a life cycle of the item from its roots in natural resources to its consumption and waste disposal. Identify several dimensions of the process that involve exchanges (economic or ecological) that are conditioned by relations of power. Discuss ways in which those relations work: did a powerful corporation get the rights to extract valuable resources from a poor country? Did certain actors perform under-paid and dangerous labor? Or exhaust their local soils and ecosystems intensifying agricultural production? Did lobbyists pressure for lower regulations or government subsidies?

For inspiration check out this amazing presentation of commodity chain around cotton produced in India with emphasis on power dynamics over time and space. The story map involves contributions from a number of researchers at different parts of the cotton supply chain, in attempts to convey aspects and impacts across time and space. From Andrew Flachs, Purdue University.

Look at Juliet Schor's Ecological Economics article, finding inspiration in the ways that she analyzes power relations in the value chains of bananas and clothing. Note her identification of **precise** salary and benefit advantages obtained through off-shore labor, **specific** expressions of military and political power (invasion of Guatemala), **particular** manipulation of international convention (WTO), etc. Note that sources of this information are carefully documented.

Stuff: The Secret Lives of Everyday Things

The Secret Life of Your COMPUTER. This article was extracted with permission from *Stuff: The secret lives of everyday things* by J. Ryan and A. Durning. Published by Northwest Environment Watch, Seattle WA, 1997.

Best Practice Guideline for Agricultural and Value Chains. International Federation of Organic Agriculture Movements.

Gary Gereffi, John Humphrey, Raphael Kaplinsky, and Tim Sturgeon (2001) "Globalisation, Value Chains and Development." ***IDS Bulletin*** 32 (3).

Check out papers in the Special Section on "Ecologically unequal exchange and ecological debt," edited by Alf Hornborg and Joan Martinez-Alier.

TED Talk by A.J. Jacobs. My journey to thank all the people responsible for my morning coffee.

Thanks a Thousand: A Gratitude Journey.

(5) Presentation

The last step requires portraying your analysis visually in a couple slides, and conveying it to the group in a 3 minute presentation. A key part of this challenge is finding ways to present complex systemic research in concise clear messages. Practice timed presentations! Study examples and hints for 3 minute thesis presentations.

UF POLICIES

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies behaviors that violate this code and possible sanctions. You are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled, and publication without permission of the instructor is prohibited. Please consult UF regulations.

COVID-19 Protocols and Resources

UF practices and resources are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones. Regularly visit coronavirus. UFHealth.org and coronavirus.ufl.edu for up-to-date information about COVID-19 and vaccination.

CAMPUS RESOURCES

Students experiencing crises or personal problems are encouraged to utilize the university's confidential counseling resources. Resources are also available for students seeking to clarify career and academic goals and to deal with academic challenges.

U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: counseling.ufl.edu/cwc, and 392-1575.

University Police Department: 392-1111 or 9-1-1 for emergencies.

Student Mental Health, Student Health Care Center, 392-1171, personal counseling.

Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Student Complaints