

GEOG 1116 / NR 1116: SEEKING SUSTAINABILITY 2

Stuff to Understand, Examine, Change and Create, if you're going to Save the World

COURSE INFORMATION

Credit Hours: 3

Primary Audience: All students

Prerequisites: GEOG/NR 1115 (Seeking Sustainability I) is required for this course

Location: New Classroom Building 130A

Meeting Times: 9:30am – 10:45am / T, Th

INSTRUCTOR CONTACT INFORMATION

Name: Dr. Tim Baird

Office Location: Creativity and Innovation District LLC, Room 207

Zoom Office Hours: By appointment

Email address: tbaird@vt.edu (THIS IS THE BEST WAY TO GET IN TOUCH WITH ME – please put “GEOG 1116” in the subject line of your email – this way it won’t get lost)

TEACHING ASSISTANT CONTACT INFORMATION

Name: Paramita Chakraborty

Office Location: Zoom

Zoom Office Hours: By appointment

Email address: cparamita23@vt.edu (CONTACT PARAMITA WITH YOUR QUESTIONS ABOUT READING AND READING NOTES)

COURSE DESCRIPTION & GOALS

Sustaining the world’s interconnected environmental, social, and economic systems is arguably the most pressing concern that humans now face. All sectors of our economies and all aspects of our lives are engaged in a grand struggle with the environment and yet “Sustainability” is still quite a mysterious enterprise. In the **second semester or this two-semester course** we will critically and constructively examine “Sustainability.” We begin by examining foundational perspectives on how humans view the world and how the human mind operates. Next, we will discuss the dawn of the sustainability movement the role that education (broadly conceived) has played and can play in the future. In the three sections that follow, we explore contemporary sustainability concerns from each of the major system spheres (i.e., environmental, social, and economic). Finally, we discuss green strategies and pathways forward. Lastly, this course seeks to broaden our conceptualizations of what sustainability is (and importantly, what it could be) within the context the most relevant issues facing humans today. We will discuss the relevance of philosophy, psychology, marketing, ecosystems and their services, cities, population, health, conservation, development, football, immigration, and business. Examples will be drawn from Europe, Africa, East Asia, Central America, and North America. Finally, space has been created within the course for students to determine their own content for themselves based on their own sustainability related interests.

By the end of the course, students should be able to:

- (1) identify key concepts of the social sciences (e.g. human nature, decision-making, demography, poverty, and public health;
- (2) identify interconnections among and differences between components and interactions within and across systems, including interconnections between social institutions, groups, and individuals (19th century Londoners, conservation refugees, football enthusiasts, Mexican immigrants, Chinese urbanites, early agriculturalists, Virginia conservation planners, college students and their families);
- (3) identify and apply systems thinking
- (4) identify and apply self-regulated learning
- (5) collaborate in small groups
- (6) analyze the ways in which values and beliefs relate to human behavior;
- (7) interpret an intercultural experience both from one's own and another's worldview; and
- (8) create and support arguments related to pressing sustainability challenges; and
- (9) think critically

And, once again, I also think becoming a peace-loving troublemaker would be a positive outcome.

COURSE MATERIALS

No Required Text

INSTRUCTIONAL METHODS

Class periods will include discussion of readings, small in-class group projects, videos, music, self-driven activities, and interactive lecture.

READING & CLASS PARTICIPATION

For this course, reading and class participation are inextricably related. One of the primary forms of participation will be discussion. To reinforce this course objective, guiding questions will be provided for each reading (and in some cases, students will be asked to provide the questions!). These questions will form the basis of our in-class discussion. Students are expected to do the required reading and answer the reading questions before the appropriate class period. Questions **should be uploaded to Canvas in advance of class** and are evaluated on a 100-point scale. Students are expected to make an earnest effort to respond thoughtfully to each question. Evaluation is not based on correct answers. Answers do not need to be long – a few sentences will suffice for full credit. **11 points will be deducted for each day that questions are handed in late.** Exceptions can be made on a case-by-case basis. This is intended to encourage timely completion of the reading and quality preparation for class discussion.

In order to create a good climate for everyone to participate, please follow these discussion guidelines:

- *Be ready to share and explain your opinions. Feel free to disagree with others, but be specific in your own assertions and back them up with evidence.*
- *Listen carefully and respond to other members of the group. Be willing to change your mind when someone demonstrates an error in your logic or use of facts.*
- *Do not hesitate to ask for clarification of any point or term that you do not understand.*
- *Make your point succinctly, avoid repetition, and stick to the subject.*

The materials for this course will include magazine and journal articles, book chapters, selections textbooks, websites, and videos. **It is important that you do the readings before the appropriate class periods.** Plan ahead so that you will not get behind. PDFs of readings or links to sources on the internet can be found at canvas.vt.edu. Also links to internet readings are provided on the syllabus.

COURSE EVALUATION

The best evaluation is personal. “Did I learn anything in this class? Did I get better at learning? At thinking?! Was it worth the effort?” An inquiring attitude and an active imagination will help you to recognize the relevance of the course topics to your life and will enhance your enjoyment of, and success in, this class.

Instructor evaluation will reflect performance on:

Reading Questions:	40%
Final Exam	20%
Midterm Exam	20%
Pink Time:	10%
NAPs	10%
Final Grade	100%

Reading Notes: please see *READING & CLASS PARTICIPATION* section above.

Exams: Exams will aim to evaluate critical thinking skills. Questions for the midterm and final will be drawn from the class discussions and reading notes. Exams will be open book and open notes. This does not mean that the exams will be easier – it means that I will be looking for thoughtful application of examples and ideas from the course to address broad sustainability issues and challenges in an organized and convincing manner. One more thing – **you have to be in a group of 3 or 4**. It sucks – I know.

Pink Time: Based on research compiled by Daniel Pink (see *Drive*, 2011) we will be conducting a bit of an experiment in this course. For a portion the course (essentially 2 weeks including personal time and class time) I will be giving you the authority and the freedom to pursue anything that interests you; that you want to learn about; that you want to develop – with the only caveat being that you will need to share what you’ve done with the group. My goal here is to encourage you to become more of an active leader in your own education. This is how it will work: **skip class, do anything you want, and give yourself a grade**. Let me explain. On 2 days that we would normally have regular reading assignments, we won’t. Instead, you will have free days to pursue your own learning. My expectation is that you take the class time (1.25 hours) and homework time (1.75 hours) totaling approximately 3 hours and do something – either by yourself or in groups (with classmates or others). It’s totally your call. On the day following each of the “PINK TIME” days we will return to class to share what we did. These efforts will constitute 10% of your final grade and you will be given the authority to grade yourselves.

Nudge Attendance Pop-Quizzes (NAPs): In the spirit of promoting class-based community and a robust learning environment, **attendance is required** and will be evaluated using about **6-7 pop quizzes** over the course of the semester. These quizzes will be conducted in-person, in-writing, and will be very low-stakes, where those in attendance can be assured of high marks.

GENERAL EDUCATION - PATHWAYS ASSESSMENT GOALS & PLAN

And another thing: This course is part of the general education (GenEd) curriculum at Virginia Tech. GenEd programs are meant to promote broad learning across disciplines. This is meant to compliment deep disciplinary learning (e.g., majors). At Virginia Tech, this curriculum is called Pathways. To track the efficacy of the Pathways curriculum, all approved GenEd courses focus on specific learning outcomes (e.g., scientific reasoning, critique and practice in arts and design, etc.) and indicators of those outcomes. Instructors will report on measures of student learning according to these outcomes and indicators. A full list of these outcomes and indicators can be found here. THIS COURSE addresses two specific learning outcomes: (1) Reasoning in the Social Sciences, and (2) Intercultural and Global Awareness. Here are the indicators associated with those outcomes:

Outcomes

Reasoning in the Social Sciences

Indicators

1. Identify fundamental concepts in social sciences
2. Identify interconnections among and differences between social institutions, groups, and individuals
3. Analyze the ways values and beliefs relate to human behavior and social relationships

Intercultural and Global Awareness

1. Interpret an intercultural experience from one's own and another's world view.
2. Address significant global challenges and opportunities in the natural and human world.

The instructor and teaching assistant will assess students' competencies (e.g., below competent, competent, above competent) for these indicators based on students' completed work on reading notes and exams, specifically work related to these specific indicators. This assessment will be relayed to the VT Office of Assessment & Evaluation, which will compile data for all courses contributing to each learning outcome. Student identities will not be known by anyone besides the instructor and teaching assistant.

HONOR CODE

The undergraduate Honor Code pledge that each member of the university community agrees to abide by states: "As a Hokie, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do."

Students enrolled in this course are responsible for abiding by the Honor Code. A student who has doubts about how the Honor Code applies to any assignment is responsible for obtaining specific guidance from the course instructor before submitting the assignment for evaluation. Ignorance of the rules does not exclude any member of the University community from the requirements and expectations of the Honor Code. Academic integrity expectations are the same for online classes as they are for in person classes. All university policies and procedures apply in any Virginia Tech academic environment. For additional information about the Honor Code, please visit:

<https://www.honorsystem.vt.edu/>

SERVICES FOR STUDENTS WITH DISABILITIES

Virginia Tech welcomes students with disabilities into the University's educational programs. The University promotes efforts to provide equal access and a culture of inclusion without altering the essential elements of coursework. If you anticipate or experience academic barriers that may be due to disability, including but not limited to ADHD, chronic or temporary medical conditions, deaf or hard of hearing, learning disability, mental health, or vision impairment, please contact the Services for Students with Disabilities (SSD) office (540-231-3788, ssd@vt.edu, or visit www.ssd.vt.edu). If you have an SSD accommodation letter, please meet with me privately during office hours as early in the semester as possible to deliver your letter and discuss your accommodations. You must give me reasonable notice to implement your accommodations, which is generally 5 business days and 10 business days for final exams.

HOW TO SUCCEED IN THIS COURSE

- *Attend class and participate in discussion.*
- *Keep up with the readings.*
- *If something is not clear, ask a question.*
- *Clarify expectations with the Professor.*

VIRGINIA TECH PRINCIPLES OF COMMUNITY

Virginia Tech is a public land-grant university, committed to teaching and learning, research, and outreach to the Commonwealth of Virginia, the nation, and the world community. Learning from the experiences that shape Virginia Tech as an institution, we acknowledge those aspects of our legacy that reflected bias and exclusion. Therefore, we adopt and practice the following principles as fundamental to our on-going efforts to increase access and inclusion and to create a community that nurtures learning and growth for all of its members:

- ***We affirm*** the inherent dignity and value of every person and strive to maintain a climate for work and learning based on mutual respect and understanding.
- ***We affirm*** the right of each person to express thoughts and opinions freely. We encourage open expression within a climate of civility, sensitivity, and mutual respect.
- ***We affirm*** the value of human diversity because it enriches our lives and the University. We acknowledge and respect our differences while affirming our common humanity.
- ***We reject*** all forms of prejudice and discrimination, including those based on age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, and veteran status. We take individual and collective responsibility for helping to eliminate bias and discrimination and for increasing our own understanding of these issues through education, training, and interaction with others.
- ***We pledge*** our collective commitment to these principles in the spirit of the Virginia Tech motto of *Ut Prosim (That I May Serve)*.

COURSE SCHEDULE

SECTION 1: BUILDING KNOWLEDGE; CREATING PERSPECTIVE

1. JAN 21 (T): WHAT ARE HUMANS LIKE?

2. JAN 23 (Th): HUMAN NATURE: HALF EMPTY OR HALF FULL?

Readings:

- Thomas Sowell, *A Conflict of Visions* (2007). The Role of Visions & Constrained and Unconstrained Visions, pp. 3-35.

3. JAN 28 (T): TO[R]ward MENTORS

Readings:

- Robert Sapolsky, *A Primate's Memoir*, (2001). Zebra Kabobs and a Life of Crime & The Revenge of the Liberals, pp. 25-45
- Ryszard Kapuscinski, *The Soccer War* (1986). The Soccer War, pp. 157-184.

4. JAN 30 (Th): HEAD CASES

Readings:

- Daniel Kahneman, *Thinking Fast and Slow* (2011). The Characters of the Story, Attention and Effort & The Lazy Controller, pp. 17-49.

5. FEB 4 (T): ME vs. US, US vs. THEM

Readings:

- Joshua Greene, *Moral Tribes* (2013). The Tragedy of Common Sense Morality & The Tragedy of the Commons, pp. 1-27.

SECTION 2: SELLING OUT OR BUYING IN: EDUCATION AND MARKETING

6. FEB 6 (Th): WHY YOU LOVE VT FOOTBALL (and why we should talk about it)

Reading:

- Rich Cohen, *The Atlantic* (Oct. 2012). They Taught America How To Watch Football, pg. 38-49.
- Jacquelyn Ottman, *The New Rules of Green Marketing* (2011). The New Green Marketing Paradigm, pp. 43-55.

7. FEB 11 (T): YOU SAY YOU WANT A REVOLUTION. WELL, YOU KNOW...

Reading:

- Andres Edwards, *The Sustainability Revolution* (2005). Portrait of the Sustainability Revolution & The Birth of Sustainability, pp. 1-27.

8. FEB 13 (Th): PINK TIME (No. 1) Skip

Reading/Discussion/Activities:

- You tell me

9. FEB 18 (T): PINK PARTY (No. 1) Share

Reading/Discussion/Activities:

- You tell us / You grade yourself

10. FEB 20 (Th): WE DON'T NEED NO EDUCATION

Reading:

- David Orr, *Earth in Mind* (2004). The Problem of Education, pg. 5-40.
- Jacquelyn Ottman, *The New Rules of Green Marketing* (2011). The New Green Marketing Paradigm, pp. 43-55.

SECTION 3: ECOSYSTEMS, SERVICES & BIODIVERSITY PROTECTION

11. FEB 25 (T): UP-ERS & DOWN-ERS

Reading:

- Paul Andersen, *BozemanBiology* (Nov., 2011). Biology Essentials – 047: Ecosystems, http://www.youtube.com/watch?v=Ot_KmOTYfRA
- MEA, *Millennium Ecosystem Assessment Summary* (2005). How have ecosystem services and their uses changed?, pp. 39-49.

12. FEB 27 (Th): TROPHIC CASCADES: NEVER FORGET

Reading:

- Carl Zimmer, *Scientific American* (Oct. 2012). Ecosystems on the Brink, pp. 60-65.
- Margaret Peters, *Conserving the Commonwealth* (2008). The Historical Backdrop & The Vision and the Beginning, pp. 1-22.

13. MAR 4 (T): BOARDWALKS AND PARK PLACES

Reading:

- Dennis Bartels, *Scientific American* (Mar. 2013). What is Your Question? pg. 12.
- Mark Dowie, *Conservation Refugees* (2009). A Word about Terms, Enemies of Conservation & Maasai, pp. xi-xxix, 23-43.

14. MAR 6 (TH): WORK DAY FOR EXAM – DUE 3/7 at 11:52am

---SPRING BREAK---

SECTION 4: POPULATION, POVERTY & AFFLUENCE

20. MAR 18 (T): THE GRASS IS GREENER (so is the green)

Reading:

- Hannah Gill, *Going to Carolina del Norte* (2006) pg. 25-49.
- Joseph Stiglitz, (2011) *Of the 1%, by the 1%, for the 1%* in Vanity Fair <http://www.vanityfair.com/society/features/2011/05/top-one-percent-201105>

21. MAR 20 (Th): TO FEED, OR NOT TO FEED (that is the question)

Reading:

- David Bloom, *Science* (July 2009). 7 Billion and Counting, pp. 562-569.
- Hans Rosling. TED (2010). Global population growth, box by box. <http://www.youtube.com/watch?v=fTznEIZRkLg>

22. MAR 25 (T): **MOVIE: THE END OF POVERTY**

Reading:

- See reading notes on canvas

23. MAR 27 (Th): PINK ON YOUR OWN (No. 2) – Skip

Reading/Discussion/Activities:

- You tell me

24. APR 1 (T): PINK PARTY (No. 2) - Share

Reading/Discussion/Activities:

- You tell us / You grade yourself

SECTION 5: CITIES, HEALTH & POLITICS

15. APR 3 (Th): CITIES: LET'S GO BACK and then TO THE FUTURE

Reading:

- Steven Johnson, *The Ghost Map* (2006) Introduction & The Night-Soil Men, pp. 1-22.

16. APR 8 (T): URBAN PLANET

Reading:

- Jane Jacobs, *The Death and Life of Great American Cities* (1961) The Kind of Problem a City Is, pp. 428-448.
- David Owen, *Green Metropolis* (2009) The Shape of Things to Come, pp. 265-324.
- Melena Ryzik, *the New York Times* (July, 2012). Virginia Developer Is on a Mission to Revive His Town,
<http://www.nytimes.com/2012/07/25/us/in-virginia-developer-is-on-a-mission-to-revive-his-town.html?pagewanted=all&r=0>

17. APR 10 (Th): THE WORLD AS IT IS

Reading:

- Barack Obama, *A Promised Land* (2020) Chapter 21, pp. 486-515.

SECTION 6: BUSINESS, GREEN BUSINESS & DESIGN

23. APR 15 (T): A "SPEAR IN THE CHEST"

Reading:

- Paul Hawken, *The Ecology of Commerce* (1993, 2010). Preface & Restoring the Guardian, pp. ix-xv, 137-150.

24. APR 17 (Th): GUEST SPEAKER: Dr. Jennifer Russell on Circular Economy

Reading:

- See reading notes on canvas

25. APR 22 (T): MONKEY SEE, MONKEY DO

Reading:

- Janine M. Benyus, *Biomimicry* (1997). How Will We Make Things?, 95-145.
- http://www.ted.com/talks/janine_benyus_biomimicry_in_action.html

26. APR 24 (Th): GUEST SPEAKER: Cedric Shannon on Sustainable Agriculture

Reading:

- See reading notes on canvas

27. APR 29 (T): WHAT YOU NEED IS LOVE, LOVE (love is all you need)

Reading:

- Ray Anderson, *Business Lessons From A Radical Industrialist* (2011). The Circle of Influence, or Love on the Factory Floor, pp. 151-171.

- http://www.ted.com/talks/ray_anderson_on_the_business_logic_of_sustainability.html

28. MAY 1 (Th): REVIEW DAY

29: MAY 6 (T): FINAL CLASS & EXAM WORK DAY