

## **Global Sustainable Development**

INTR 205.1

University of Rochester

Fall 2021

Thursdays 2:00-4:40 pm

Morey Room 205

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Office Hours:

Thursdays at 1:00 pm, Harkness 307

or immediately following class or by appointment  
(Feel free to contact me to make an appointment!)

### Course Description

With world population of nearly 8 billion and global GDP of \$85 trillion, human impacts on the environment have already reached dangerous levels. By 2050, world population could reach 9 billion and global GDP \$200 trillion. Despite unprecedented growth in countries such as China and India, over 700 million people still live in extreme poverty—concentrated especially in South and Central Asia and Africa. The central challenge for humanity in the 21<sup>st</sup> century is the triple endeavor of ending extreme poverty, improving social inclusion, and achieving sustainability for the planet. Any effort to address these three complex, interlinked challenges must be interdisciplinary. Policies at the local, national and global level will need to draw on the best of our knowledge and innovation across sectors such as energy, biodiversity and conservation, health, sustainable business practices, food and nutritional security, social service delivery, and good governance. Interventions and policies in these sectors must be gender sensitive, address racial inequalities and discrimination, and be in keeping with international standards of human rights. They must involve governments, the private sector, and civil society. In September 2015, the world adopted the Sustainable Development Goals (SDGs) for 2015 to 2030 at the UN General Assembly while the historic Paris Climate accord was also reached under the UN Framework Convention for Climate Change.

The 13 weeks of the course include a significant practical element – students will work in small groups with a partner organization (a business or non-profit) focused on an aspect of sustainable development to complete a project that is of importance to the organization. Projects will be identified in advance by the professor through collaborative arrangements with the organizations. Course requirements include weekly readings, a weekly writing assignment, class discussion, a mid-term exam, and the final group project.

**CREDIT HOURS:** 4 credit hours. This course follows the College credit hour policy for 4-credit courses. This course meets once weekly for 140 minutes per week (including short breaks). The course also includes independent out of class assignments and group work for at least 1 hour per week, including using assigned readings and other class materials (as noted in the syllabus

assignments) as well as occasional in person or online small group meetings with the professor. These activities include preparation to lead or participate in group case discussion, work on group projects, and assignments. Students are expected to spend at least 8 hours per week on assigned reading and assignments as discussed below. Length of reading assignments will vary given the complexity of the material assigned.

**ACADEMIC SUPPORT SERVICES:** Students are encouraged to utilize academic support services: the Writing Speaking and Argument Program, <https://writing.rochester.edu>; Center for Excellence in Teaching and Learning (CETL), [www.rochester.edu/college/cetl/](http://www.rochester.edu/college/cetl/)

**ACADEMIC HONESTY:** All assignments and activities associated with this course must be performed in accordance with the University of Rochester's Academic Honesty Policy. More information is available at: [www.rochester.edu/college/honesty](http://www.rochester.edu/college/honesty)

**DISABILITY RESOURCES:** The University of Rochester respects and welcomes students of all backgrounds and abilities. In the event you encounter any barrier(s) to full participation in this course due to the impact of disability, please contact the Office of Disability Resources. The access coordinators in the Office of Disability Resources can meet with you to discuss the barriers you are experiencing and explain the eligibility process for establishing academic accommodations. You can reach the Office of Disability Resources at: [http://disability@rochester.edu](mailto:http://disability@rochester.edu); (585) 276-5075; Taylor Hall.

<https://www.rochester.edu/college/disability/faculty/syllabus-statements.html>

### Learning Objectives

The course learning objectives focus on substantive knowledge, critical thinking, practical project work, and project management and completion skills.

By the end of the semester, students should:

- Be familiar with thematic and conceptual debates on sustainable development
- Understand basic issues, trends, and concepts in the field of international economic and sustainable development
- Be familiar with current and emerging global issues related to the Sustainable Development Goals in fields such as energy and climate, agriculture, global health and education
- ♦ Have a greater understanding of some of the strategies and examples of ways in which government, the private sector and citizens can contribute to a sustainable society and economy
- Have a greater awareness of how and why sustainable development is important and how we as a society and global community can work to attain it

- Learn and practice professional skills of time management, project management, professional communication by email, phone and Zoom/video conference with an employer/partner
- Engage in self-reflection regarding the course, your experience and what you have learned through working with your partner organization/company

Aug 26  
(Week 1)

Introductory Session: Sustainable Development Goals (SDGs)

***Note: The assignment for the first class is to do the readings below and watch a pre-recorded introductory lecture posted on Blackboard (Learning Module 1) on the Sustainable Development Goals. This is REQUIRED before class because we will discuss the lecture in detail.***

### Readings

[Transforming Our World: The 2030 Agenda for Sustainable Development](#), Finalized text for adoption by the UN General Assembly in September 2015. Read pages 3-28; **25 pages**.

[“The Sustainable Development Goals Report 2020,”](#) United Nations, 2020, Pages 1-26 only. 26 pages

Economist Jeffrey Sachs, United Nations Advisor on the SDGs, [Video](#), 10 min 44 sec, August 3, 2021.

### Discussion Questions

Be ready to discuss the following questions during class. This will require careful reading. It will be helpful to review these questions before completing the readings.

1. What are the Sustainable Development Goals (SDGs) and how were they created (by whom, when, why, where, and through what process)?
2. The *Transforming Our World* document is official UN text resulting from very lengthy negotiations with all members of the UN General Assembly – 193 nations – as well as the broadest consultative process in history. It was then adopted by all the nations of the General Assembly, representing nearly every nation in the world. How is this document different than a research report or academic article? Where do you see evidence in the document of the framers’ intentions to address/balance the needs and priorities of the world’s wealthiest and poorest nations? Please think of direct examples from the text. What are two of the principles and aspirations it refers to, before laying out the SDGs?
3. The SDGs are interdependent and indivisible. Explain how one of the SDGs impacts other SDGs and vice versa. For example, how will meeting one SDG of your choice help us to attain some of the other SDGs? Use your knowledge, imagination, common sense, and if necessary, research.

4. What are three of the main points made by economist Jeffrey Sachs in the video?

### **Week 1 Assignment (During Class)**

1. Be ready to discuss in class: Choose 1 SDG of interest to you. Why is it important? What are some of the targets for reaching that SDG (give 2 examples of targets for each) and what is an example of an indicator under each target? Go to [SDG Tracker](#) to research this. Examine at least one country (through the SDG Tracker and/or your own Internet research). How has this country done on making progress toward your chosen SDG?
2. To discuss in class in small groups (don't need to do this before class): Turning to the topic of tracking progress and enforcing the SDGs, choose one country and look at one of the [Voluntary National Reviews](#) reports submitted to the UN by that country (scroll down on the website to see the individual country reports). What is one SDG/area where that country has made progress, and what is the progress cited? What is one area where that country has faced challenges? Describe.

### **Module 1 Learning Objectives**

1. Know the definition of sustainable development and its three pillars.
2. Understand what the Sustainable Development Goals (SDGs) are and how they were created (by whom, when, why, where, and through what process).
3. Understand how the SDGs evolved from the Millennium Development Goals (MDGs), and how they aim to address some of the shortcomings of the MDGs.
4. Be familiar with how the SDGs are measured, in particular through the targets and indicators under each SDG.
5. Be familiar with at least two of the SDGs---why they are important, the targets for reaching those SDGs and how they relate to the other SDGs (for example, will meeting those SDGs help us to attain any of the other SDGs)?
6. Understand how the SDGs are operationalized. How do countries take these goals on and try to achieve them? Through what processes in general? What is a Nationally Determined Commitment?
7. Is achievement of the SDGs a legally binding obligation? How is the commitment to countries meeting the SDGs enforced?
8. How has the coronavirus pandemic impacted our progress toward meeting the SDGs globally? What are some of the challenges it has posed in specific areas/SDGs? To the global economy and to individual wellbeing as a whole?

## PART I: The ECONOMICS OF SUSTAINABLE DEVELOPMENT

Sept 2  
(Week 2)      **Economic Development: Determinants and Measures**

Robert J. Barro, "[Determinants of Economic Growth: A Cross-Country Empirical Perspective](#)," NBER Working Paper 5698, 1996. **Pages 1-53 only**

"Growth: Building Jobs and Prosperity in Developing Countries,"  
DFID <https://www.oecd.org/derec/unitedkingdom/40700982.pdf> Read pp. 1-14.

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### *Collaborative Projects – Week 1*

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- *We will discuss how we will go about working on the collaborative projects in this course.*
  - *We will introduce the organizations/companies with which you will be working this semester.*
  - *We will briefly define the potential projects to be completed with each partner organization/company.*
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### **Learning Objectives and Discussion Questions**

Be ready to discuss these questions in class—and use them as a guide when you do your readings.

1. Understand the definition of economic growth and inequality (Gini Coefficient - lecture)
2. Understand thinking in the field of economics, as described by Barro, regarding the main determinants of economic growth. What contributes to growth? What detracts from it?
3. Be familiar with some of the critiques of Barro's model/theory in terms of whether economic growth contributes to poverty reduction.

- *Students will express their preferences for which organizations/companies they would like to work with.*
  - *We will assign students to small groups with a particular organization/company.*
  - *Students should identify one person in the group who will be the contact point for the group with your partner organization—this person will be in charge of communications by email with the partner organization.*
  - *The student contact point should reach out to the partner organization to schedule a first meeting for the group with your partner organization.*
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4. Under what circumstances can economic growth contribute to poverty reduction? What types of policies might be needed to ensure that economic growth reduces poverty (is pro-poor)?
- 5.
6. Understand if economic growth necessarily leads to reductions in inequality in a society/economy (lecture). Analyze the relationship between income inequality and poverty reduction. For example, do highly unequal societies have more poverty? Is it harder to reduce poverty in highly unequal societies? Does inequality help, hurt, or neither?
7. Be aware of some of the policy levers and factors needed to ensure that economic growth helps to reduce poverty (DFID article). How can growth be "pro-poor"?
8. What is the relationship between growth and inequality (DFID article). In what instances does inequality reduce growth rates? Give an example of a country and describe the relationship between growth and inequality over time there. For example, have both economic growth (change in the size of the economy) and a reduction in inequality occurred over the period you are considering?

## **Week 2 Assignment**

Post on Yellow Dig – In a blog post of up to 250 words, reflect upon and comment on the readings. What did you find particularly interesting? Explore one or more of the concepts presented. To the extent possible, try to integrate concepts and reflections from each of the readings into your response. Feel free also to draw on your own personal life experience as you reflect on the readings. Posts are due by midnight on Tuesday before our Thursday class. On the Wednesday prior to class, comment on at least two of your classmate's blogs.

Sept 9  
(Week 3)      **New Measures of Wellbeing and Development**

["Report by the Commission on the Measurement of Economic Performance and Social Progress,"](#) Joseph E. Stiglitz, Amartya Sen, Jean-Paul Fitoussi, Executive Summary, pages 1-12, 2009. **12 Pages**

[Measuring Well-Being and Progress,](#) OECD, November 2017, **12 Pages**

[\*World Happiness Report 2020\*](#), Eds. John Helliwell, Richard Layard, and Jeffrey Sachs, Overview and Chapter on Sustainable Development, pp. 1-12 and 113-128 only **27 pages**.

### Learning Objectives and Discussion Questions

1. Understand the rationale (and benefits) for developing alternative measures of economic progress.
2. What does the Commission on Measurement of Economic Performance argue for? What measure of economic performance do you feel best helps us to measure progress toward sustainable development?
3. Understand some of the main components of alternative measures of economic progress.
4. Be aware of the extent to which countries have shifted toward using these new measures.
5. What are some of the drawbacks to using GDP and the growth rate of GDP (economic growth) as the sole measure of a country's economic health and wellbeing?
6. Be familiar with the rationale for using happiness as a measure of well-being and understand how happiness is measured within a country and compared across countries.
7. What factors are most associated with the level of a country's happiness rating, according to authors of the *World Happiness Report*? Does measuring happiness help us to measure progress toward sustainable development? Why or why not?
8. What do the authors of the *World Happiness Report* chapter on Sustainable Development argue are the links between sustainable development and human well-being? What are two of their main recommendations?

### Weekly Assignment 3

- Try the OECD Compare Your Income survey by going to the [www.compareyourincome.org](http://www.compareyourincome.org).
- Post on Yellow Dig – In a blog post of up to 250 words, reflect upon and comment on the readings and the Compare Your Income exercise. Did anything surprise you? If not, why? What did you find particularly interesting? Explore one or more of the concepts presented. To the extent possible, try to integrate concepts and reflections from each of the readings into your response. Feel free also to draw on your own personal life experience as you reflect on the readings. Posts are due by midnight on Tuesday before our Thursday class. On the Wednesday prior to class, comment on at least two of your classmate's blogs.

Sept 16      **New Models of Doing Business and the New Economy**  
(Week 4)

[“The Need and Rationale for the Benefit Corporation”](#) White paper, William H. Clark, Jr., Drinker Biddle and Reath, LLP; Larry Vranka, Canonchet Group LLC, pp. 1-21 (Exec Summary, Parts I-III), 2013. **21 Pages**

[“Towards a Circular Economy: Business Rationale for an Accelerated Transition,”](#) Ellen MacArthur Foundation, 2015. **19 pages**

Derek Miller, [“The Sharing Economy and How it is Changing Businesses,”](#) The Balance Small Business, June 25, 2019. **3 pages**

Additional reading on one or more case studies TBD

Case Studies:

- Headwater Food Hub and the Good Food Collective (B Corps)
- Sustainable Harvest (B Corps)
- Google and Ellen MacArthur Foundation, Hewlett Packard –plastic waste from oceans used in printers

**Learning Objectives and Discussion Questions**

Be ready to discuss the following questions in class and use them as a guide when you do your readings.

1. Understand the definition of a B-Corporation and how they are this different from a regular for-profit company. What are three business cases (rationales) for a company becoming a B-Corp? What is one disadvantage?
2. How do B-Corps can contribute to sustainable development?
3. What is the circular economy? What are three examples of the circular economy in practice?

**Weekly Assignment 4**

Post on Yellow Dig – In a blog post of up to 250 words, choose one company you are interested in that is a B-Corps. Go online and look up its most recent annual report and review its website. How is being a B-Corps reflected in its practices? Provide examples. Posts are due by midnight on Tuesday before our Thursday class. On the Wednesday prior to class, comment on at least two of your classmate’s blogs.

1. How would having more companies as B-Corps contribute to sustainable development? Provide clear examples.
2. Choose one company you are interested in that is a B-Corps. Go online and look up its most recent annual report. How is being a B-Corps reflected in its practices? Give two examples.



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## *Collaborative Projects – Week 4*

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- *Your group should begin work on your project.*
  - *You may want to divide up tasks among members of your group.*
  - *Be sure you have the information and data you need from your partner organization to complete your work. If not, reach out for clarification and the resources/information you need.*
  - *We will conduct weekly check-ins with your group and the professor to chart progress, ensure you are on track, and getting the support you need to do your best work.*
  - *You are strongly encouraged to conduct weekly check-in calls with your partner organization—it works well to have a set time each week for this.*
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## **PART II: SOCIAL INCLUSION**

This part of the course examines the second pillar of sustainable development, social inclusion. Social inclusion means including everyone in the benefits and work of sustainable development, and creating a more just and equitable world. In part this can be achieved by ensuring everyone has access to a quality education, health care, nutritional food, and dignified work. But how do we do that?

Sept 23  
(Week 5)      **Education – Primary and Secondary**

[\*Learning to Realize Education's Promise\*](#), World Development Report 2018, World Bank, Forward (by Kim) and Overview, xi and pp 1-27. **28 pages**

M. Baxter, K. Kerr, R. Marcus, and M. Novy-Marx, [\*Secondary Education in Africa: Preparing Youth for the Future of Work\*](#), “Executive Summary and Chapter 1,” pp 7-41, Mastercard Foundation, Toronto, 2020. **34 pages**

[\*Skills Balancing Act in Sub-Saharan Africa\*](#), World Bank, 2020.

[\*Global Education Monitoring Report on Gender and Education\*](#), 2020, UNESCO.

[\*Case study: Sistema de Aprendizaje Tutorial \(SAT\)\*](#) – An innovative, alternative secondary level educational system completed to date by over 300,000 students throughout the Americas—mostly in areas where traditional secondary schools are not available. Pioneered in Columbia, this model has been implemented in over a dozen countries and has been shown to boost learning and life outcomes for students not able to access traditional schools.

Read blog from link above – **3 pages**

### Optional

Evaluation of the SAT Program in Honduras

<http://academics.wellesley.edu/Economics/mcewan/PDF/sat.pdf>

(19 pages)

“Designing Effective Cash Transfer Programs to Boost Schooling Among Young Women in Africa.” World Bank working paper 5090, October 2009.

### Discussion Questions:

- What progress has been made in enrolling girls and boys in primary, secondary, and for women and men, tertiary education worldwide?
- Where are there the greatest gaps?
- What are the social and economic “returns” to increasing education, especially girls’ education?
- Why the concern with “quality” education and learning? (Learning to Realize Education’s Promise)
- Why is secondary education especially important in Africa right now?
- How is the nature of work changing, and how can secondary education help youth access jobs or better livelihoods?
- What were the key factors that led to the success of the SAT program in Latin America? How is this success measured (success in terms of *what?*). What are some of the weaknesses of the program?

### Weekly Assignment 5

Post on Yellow Dig – In a blog post of up to 250 words, reflect upon and comment on the

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#### *Collaborative Projects – Week 5*

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- *Continue to work on your project.*
  - *Conduct weekly check-in with your organization and professor.*
  - *What if any issues need to be resolved?*
  - *Are you on track to meet deadlines?*
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readings. What did you find particularly interesting? Explore one or more of the concepts presented. To the extent possible, try to integrate concepts and reflections from each of the readings into your response. Feel free also to draw on your own personal life experience as you reflect on the readings. Posts are due by midnight on Tuesday before our Thursday class. On the Wednesday prior to class, comment on at least two of your classmate’s blogs.

Sept 30  
(Week 6)

## **Gender, LGBTQ+ and Sustainable Development**

[Global Gender Gap Report 2020](#), World Economic Forum, pp. 5-26. Key Findings and Chapter 1. **21 pages**

[“The Sustainable Development Goals and LGBT Inclusion,”](#) Stonewall International, 2020. Read whole document (**10 pages**)

Rosamund Hutt, [“This is the state of LGBTI rights around the world in 2018,”](#) World Economic Forum, June 14, 2018. Blog - **4 pages**

Human Rights Watch, “Audacity in Diversity: LGBT Activism in the Middle East and North America,” [Report](#) April 16, 2018. Read pp.6-23. **17 pages**

### **Learning Objectives and Discussion Questions:**

1. How is the Global Gender Gap measured? Along which four dimensions?
2. On which of the four dimensions does the world have the least gender inequality? In which dimension the most?
3. Which countries have the greatest gender gaps? What countries have the smallest gaps? Why?
4. Looking at the state of LGBTQ+ rights around the world, what are some of the forms of discrimination and human rights abuses faced by LGBTQ+ people?
5. What impact does discrimination against LGBTQ+ and gender inequality have on sustainable development? Be specific. How does violation of some aspects of human rights or discrimination affect our ability to achieve sustainable development in various areas, such as economic well-being, health, environment, etc?
6. In the middle east, what are some of the forms of legal discrimination against LGBTQ+ people? Do you see signs of improvement and progress?

Oct 7  
(Week 7)

## **Mid-term Exam 1**

Mid-term 1 covers material from Module 1 (SDGs) through Module 6 (Gender and LGBTQ+). A good way to review for the exam is to go through the learning objectives for each module and be sure you understand them, review your notes, and refer back to the readings and lectures.

### PART III: ENVIRONMENTAL SUSTAINABILITY

Oct 14      **Conservation & Biodiversity**

(Week 7)      “[Ecosystems and Human Well Being, Synthesis](#): Summary for Decision Makers,” Millennium Ecosystem Assessment. Read Preface (p. iii) until p.19. **22 pages**

“[Greener, Healthier, More Sustainable: Why cities of the future need more biodiversity](#),” Article on increasing biodiversity in cities, Viktor Weber, World Economic Forum, January 6, 2020.

Watch [video](#) by Greta Thunberg and George Monbiot, **3 min 40 sec**

Watch [video](#), How Wolves Change Rivers, **4 min 33 sec**

Watch [video](#) How Beavers Engineer the Land, **6 min 46 sec**, George Monbiot, Sustainable Human.

Optional: Listen to [Podcast](#) on Beaver reintroduction in Scotland, Living on Earth, NPR, **6 min**

Optional: [Case of Hadza People in African Rift Valley](#), Tanzania, Nature Conservancy

#### **Case Study: Posada Amazonas Eco-lodge and the Ese Eja indigenous community in Peru**

“Commons Management and Ecotourism: Ethnographic Evidence from the Amazon,” Amanda Stronza, *International Journal of the Commons*, Vol. 4, no. 1, 2010, pp. 56-61. **5 pages**

<http://www.thecommonsjournal.org/index.php/ijc/article/view/137/128>

“Communities and Conservation,” Case study of Posada Amazonas Ecolodge, Peru, Texas A & M University, 2011. **5 pages** [http://people.tamu.edu/~j-packard/cases/ANA01\\_PosadaAmazonas\\_Vargas&Vigo.pdf](http://people.tamu.edu/~j-packard/cases/ANA01_PosadaAmazonas_Vargas&Vigo.pdf)

Read the case materials carefully; we will divide up into groups and act out roles to decide the future of the Amazonas Lodge during class.

This week allows for time to reflect on what you have done and learned so far through your collaborative project, and to continue your project work.

#### **Discussion Questions**

- What are eco-system services? And How is Biodiversity defined?
- Why is biological diversity important for sustainable development?

- What is the Convention on Biological Diversity? Has it been effective? How can one measure the impacts?
- What was the model used in the joint venture with the Amazonas Lodge?
- Who are different stakeholders in the Lodge and surrounding ecosystem, and how do their interests and priorities differ?

## **Weekly Assignment: Blog Post - Project Reflection**

### Reading

Patti Clayton and Sarah Ash (2009), “Schematic Overview of the DEAL Model for Critical Reflection.” **3 pages**

After reading the DEAL Schematic Overview, complete the three steps of the DEAL Model: 1) Describe, 2) Examine, and 3) Articulate Learning, by writing out your answers. Under Examine, choose just one of the categories of learning; personal growth, community engagement, or academic enhancement. Your answers should be thoughtful and draw on specific examples from your work. Please write at least 4 to 6 well composed sentences for each of the three steps.

You may complete this assignment together in discussion with other members of your collaborative working group, if it is helpful to reflect together, but please write out your answers individually based on your own unique perspective and experience.

Oct 21  
(Week 11)

### **Energy and Climate Change 1**

Re Advocacy, see [Citizens' Climate Education](#), **NEW**

Recent [articles](#) on climate change **NEW**

NASA, Evidence of Climate Change, Read website, evidence tab:  
<https://climate.nasa.gov/evidence/> (**3 pages**)

Paul Hawken, Editor, *Project Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming*, “Forward and Refrigeration” reading (**3 pages**) and “Wind Turbines” reading (**3 pages**) posted on Blackboard.

Paul Hawken Interview ([video](#)) – (**8 min**)

Reading Packet, “Paris Agreement and Carbon Markets,” (**15 pages**). Posted on Blackboard.

Review [EN-ROADS climate model](#) developed with MIT scientists; Simulator that shows relative impacts of different solutions and policies toward reducing climate change.

[Climate Solutions Accelerator](#) for the Fingers Lakes Region; local environmental organization.

## Learning Objectives and Discussion Questions

1. What are the five key economic systems and how does the Commission on Climate and the Economy's report propose to change them in order to address climate change?
2. What is the Paris Agreement? How many nations signed on? What are NDCs and how are they enforced?
3. Why is destroying refrigerants (and changing the types we use) the number one way to reduce GHG and climate change according to *Drawdown*? Why are wind turbines considered the number two way to reduce GHG?
4. What most resonates with you about Paul Hawken's video? If it does not resonate with you, explain why.
5. How do carbon markets work? What are two advantages and two disadvantages of using them to reduce greenhouse gas emissions (GHG)?

## Weekly Assignment

Post on Yellow Dig – In a blog post of up to 250 words, reflect upon and comment on the readings. What did you find particularly interesting? Explore one or more of the concepts presented. To the extent possible, try to integrate concepts and reflections from each of the readings into your response. Feel free also to draw on your own personal life experience as you reflect on the readings. Posts are due by midnight on Tuesday before our Thursday class. On the Wednesday prior to class, comment on at least two of your classmate's blogs.

Note: One of the organizations we are working with this semester, Tradewater, has as its main mission tracking down and destroying harmful refrigerants around the world, and selling the resulting carbon offset credits on carbon markets to fund even more collection. This stuff is really happening, and it works!

Oct 28  
(Week 12)

## Global Health

Visit [SDG Tracker for SDG 3: Health and Wellbeing](#), United Nations. Ritchie et al, "Measuring Progress Toward the Sustainable Development Goals," SDG-Tracker.org website, 2018. [Review all of the targets](#) under SDG 3 and progress to date-some great graphics here. **Graphics. Review and critically read charts.**

["State of World Population 2019,"](#) UNFPA, Read Forward and Ch 1, pp 3-21,. **18 pages.**

“Adding it Up: Investing in Contraception and Maternal and Newborn Health,”  
[Guttmacher Institute](#), 2017 (4 pages)

Paul Pronyk, Mortality Mortality, Global Health Lecture Series, Columbia University, [Video](#), Vimeo (21 minutes)

### Learning Objectives and Discussion Questions:

1. How is the world doing in terms of meeting the SDG 3 – Global Health and Wellbeing targets? Examine at least 2 targets, including progress and gaps. Choose one country or region for each target and discuss their progress (or lack thereof)?
2. Are women having their choices and needs met when it comes to contraception? Do they have access to safe contraception? If so, where and where not? What are the benefits to women themselves of meeting their needs for contraception? What are other benefits to society? In terms of costs?
3. What was the importance of the International Conference on Population and Development in 1994? What was the shift in thinking at that time about how to address population growth? What are some other major milestones in global reproductive rights since that time?
4. How is access to Sexual and Reproductive Health addressed (or not) in the SDGs? Is recognition of sexual and reproductive rights a part of the SDGs? Are there specific targets in the SDGs for access to contraception?

### Weekly Assignment

Post on Yellow Dig – In a blog post of up to 250 words, reflect upon and comment on the readings. What did you find particularly interesting? Explore one or more of the concepts presented. To the extent possible, try to integrate concepts and reflections from each of the readings into your response. Feel free also to draw on your own personal life experience as you reflect on the readings. Posts are due by midnight on Tuesday before our Thursday class. On the Wednesday prior to class, comment on at least two of your classmate’s blogs.

### Optional Readings

Universal Health Care and [Philips Case Study: Community Life Centers](#), 2019. 11 pages; lots of graphics.

Watch: [Video](#) on Philips Community Life Centers

“[Maternal Health in Nigeria: Facts and Figures](#),” African Population and Health Research Center, June 2017.

“[A Milestone in Africa: No Polio Cases in a Year](#),” *New York Times*, August 11, 2015.

Nov 4  
(Week 12)

## **Agriculture, Nutrition, and Food Security**

WATCH FILM Michelle Aguilar, Director, created comprehensive study guides for each film and is also available for a video Q & A in most cases. Both films are available through New Day as well as Kanopy - [El Cacao](#), [No Place to Grow](#).

### Hunger and Malnutrition:

“[The first 1,000 days: No time for malnutrition](#),” Mercy Corps, Accessed 2019. **5 pages including pictures/graphics.**

“[Quick Facts: What you need to know about global hunger](#),” Mercy Corps, Accessed 2019. **6 pages including pictures.**

### Regenerative Agriculture:

Jack Kittredge, “[Soil Carbon Restoration: Can Biology do the Job](#)”? Northeast Organic Farming Association, Massachusetts, 2015 (**14 pages**).

### Optional:

Homi Karas and Lorenz Noe, “[Are we reducing hunger in the world?](#)” Brookings Institution, April 2019.

Article on carbon loss in soil, see <https://www.carbonbrief.org/worlds-soils-have-lost-133bn-tonnes-of-carbon-since-the-dawn-of-agriculture>

## **Weekly Assignment**

Post on Yellow Dig – In a blog post of up to 250 words, reflect upon and comment on the readings. What did you find particularly interesting? Explore one or more of the concepts presented. To the extent possible, try to integrate concepts and reflections from each of the readings into your response. Feel free also to draw on your own personal life experience as you reflect on the readings. Posts are due by midnight on Tuesday before our Thursday class. On the Wednesday prior to class, comment on at least two of your classmate’s blogs.

### **Discussion Questions:**

1. Why are the first 1000 days a crucial time for a child’s development? If lacking in nutrition during this time, what are the results then and later in life?
2. What are the main causes of hunger worldwide? How can it be addressed according to Mercy Corps?



3. What is regenerative agriculture and what are the specific practices that foster soil's ability to sequester and keep carbon within it?
4. How does soil absorb and retain carbon? Why is this important for climate change?

Nov 11  
(Week 12)

## **Climate Change & Environmental Justice - 2**

*Guest Lecture: Tim Brown, Founder and CEO, Tradewater*

Go online and calculate your carbon footprint using [Tradewater's calculator](#). Click the green "Take Action" bottom on the main web page and follow the directions. You don't have to purchase carbon offsets (but you can if you want!). Please share in class your experience, your total emissions, and the cost to offset them each month.

Charles Lee "[Confronting Disproportionate Impacts and Systemic Racism in Environmental Policy](#)" (Environmental Law Reporter, vol. 51, no. 3, March 2021), is now available. Published by the Environmental Law Institute.

A note on this reading: Understanding and operationalizing the concept of disproportionate impacts are critical to the next generation of environmental justice (EJ) practice. The article charts a pathway to better define, articulate, and analyze disproportionate impacts in a manner that is empirically based, analytically rigorous, and has an evidentiary link to systemic racism and the roots of the inequitable distribution of environmental burdens and benefits. It offers a framework for integrating these concepts into environmental decision-making, which can help overcome the current stagnation in EJ practice. The article also links future EJ practice to the national conversation about systemic racism, and discusses how conditions for making progress have never been better in 40 years, at a time when this issue that did not even have a name.

The Environmental Law Institute makes law work for people, places, and the planet. With its non-partisan, independent approach, ELI promotes solutions to tough environmental problems. The Institute's research and respected publications inform the public debate and build the institutions needed to advance sustainable development.

Lara Cushing et al, "[Carbon trading, co-pollutants and environmental equity: Evidence from California's cap-and-trade program \(2011–2015\)](#)," *PLOS Medicine*, July 10, 2018 (**12 pages, dense**).

Nicky Sheats, "[Achieving Emissions Reductions for Environmental Justice Communities through Climate Change Mitigation Policy](#)," The New School, Tishman Environment and Design Center (**19 pages**)

Brad Plumer and Nadia Popovich, “[How Decades of Racist Housing Policy Left Neighborhoods Sweltering](#),” *New York Times*, August 24, 2020 (7 pages).

Optional:

Hiroko Tabuchi, “[Oil and Gas May be a Far Bigger Emitter than We Know](#),” *New York Times*, February 19, 2020. Article about a study by U. of Rochester scientist.

Consider Environmental Defense Fund Case studies on carbon markets: Brazil--  
[https://www.edf.org/sites/default/files/brazil\\_case\\_study.pdf](https://www.edf.org/sites/default/files/brazil_case_study.pdf)

Frances Seymour and Jonah Busch, [Why Forests: Why Now](#), Center for Global Development, 2016. Executive Summary

In class, watch documentary film [The Sacrifice Zone](#) (32 min), Talking Eyes Media, 2020.

**Case Study: IDEAAS – Solar electricity to the Brazilian Amazon**

“IDEAAS and PSA: Replication in the Amazon,” Stanford Business School Case Study, 2007, pages 1-25.

<http://www.ideaas.org/admin/editor/imagensUpload/File/IDEAAS%20and%20PSA%20-%20Replication%20in%20the%20Amazon%20E-264%20July%20262007.doc>

**Learning Objectives and Discussion Questions:**

1. How does carbon trading work? What about carbon offsets?
2. What are greenhouse gas emission co-pollutants and why do they disproportionately affect poor and minority communities? What should be done about this?
3. Based on the articles by Lara Cushing and Nicky Sheats, how does reducing GHG through carbon trading affect low income communities, given early evidence from California? Why?
4. What impact has redlining had on temperature in historically black neighborhoods, and how does this affect these communities? How does it impact climate change?
5. What are disproportional impacts and how are they measured?

Nov 18

**Mid-term 2**

Mid-term exam 2 covers material from Module 7 (Biodiversity) through Module 12 (Climate Change and Environmental Justice) A good way to review for the test is to go through the learning objectives for each module and be sure you understand them, review your notes, and refer back to the readings and lectures.

Nov 25

THANKSGIVING BREAK – No class

Dec 2  
(Week 13)

### **Guest Lecture on International Environmental Treaties**

*Guest lecture: Terry Noto, Environmental Lawyer and Visiting Professor, U of R*

Reading: We will have a short reading on international treaties, TBD.

#### Optional:

World Wildlife Fund, *Living Blue Planet Report: Species, habitats and human well-being*, 2015 (pp 3-61) Glossy report.

[http://assets.wwf.org.uk/downloads/living\\_blue\\_planet\\_report\\_2015.pdf](http://assets.wwf.org.uk/downloads/living_blue_planet_report_2015.pdf)

Reading on water scarcity (TBD)

### **Case Study: The Marine Stewardship Council (MSC)**

Sustainably harvested fish and eco-labeling.

MSC Annual Report 2014-15 (pp 1-31) Glossy Report

<https://www.msc.org/documents/msc-brochures/annual-report-archive/annual-report-2014-15-english>

Critical Review by NPR

<http://www.npr.org/2013/02/11/171376509/is-sustainable-labeled-seafood-really-sustainable>

MSC's Response

<http://media.npr.org/documents/2013/feb/MSCresponse.pdf>

#### Discussion Questions

- What are the major threats to the world's fresh and salt water according to WWF?
- What are our current water resources and what contributes to water scarcity?
- What are the major stresses faced by oceans? How is this measured?
- How does eco-labeling like that of the MSC work? Is it effective in promoting sustainable fisheries? Do companies have an incentive to do it? Why?
- What are its weaknesses? What was NPR's critique?

### **Dec 2 – Weekly Assignment – Project Reflection**

#### **Reading:**

Review Patti Clayton and Sarah Ash (2009), "Schematic Overview of the DEAL Model for Critical Reflection." **3 pages**

This week allows for time to reflect on what you have done and learned so far through your collaborative project, and to continue your project work.

After rereading the DEAL Schematic Overview, complete the three steps of the DEAL Model: 1) Describe, 2) Examine, and 3) Articulate Learning, by writing out your answers. Under Examine, choose just one of the categories of learning; personal growth, community engagement, or academic enhancement. This category should be different from the one you picked last time. Your answers should be thoughtful and draw on specific examples from your work. Please write at least 4 to 6 well composed sentences for each of the three steps.

You may complete this assignment together in discussion with other members of your collaborative working group, if it is helpful to reflect together, but please write out your answers individually based on your own unique perspective and experience.

## **Dec 9 - Final Presentations of Student Projects and Class Celebration**

Each group will present their project to the class and we will celebrate your accomplishments. Food and refreshments will be served. Let's celebrate all that you have done and learned, and the impacts you have made through your projects.

## **Course Requirements**

### Assessments

2 Mid-term exams

### Readings, Lectures, and Participation

All students are expected to complete all of the readings every week and to be familiar with the arguments made. Learning objectives and discussion questions are provided on the syllabus to help guide your reading. Be prepared to discuss these questions in class.

All students are expected to attend class each week.

Class discussion is an important part of the course. I expect all students to participate actively in our class discussions. Even if you are uncomfortable speaking in class, I urge you to step out of your comfort zone as much as possible. I pledge to try to create a supportive classroom environment in which everyone's comments are welcomed and valued. Developing confidence in public speaking is a crucial skill and is important for the overall quality of our joint learning. I also encourage you to share any personal and life experiences you have that may help us all reflect on and understand the topic at hand.

All readings are available online and/or via electronic reserves on Blackboard.

### Weekly Assignments

Most weeks, students will complete a blog post on Yellow Dig. You are required to post by midnight the Tuesday before our Thursday class. On Wednesday, each student should comment

on at least two blog posts of your fellow students. These posts are an important part of your class participation grade.

### Collaborative Projects for Organizations

Each student will work with a small group of other students from the course to complete a project for an organization (business or non-profit) involved in some aspect of sustainable development. This will be a key part of the course and require significant outside work. It will be a great opportunity to gain work experience in the real world with an organization or company committed to sustainable development, and to meaningfully contribute to their efforts.

Each group will also make a final presentation (12-15 minutes) to the class about their organization, its relationship to sustainable development, and their final project. These presentations will be given during our last class session.

### **Grading**

Class Discussion & Participation, Blog Posts	30%
(Weekly assignments are graded check, check minus and check plus)	
Mid-term 1	20%
Mid-term 2	20%
Final Project	30%

I will drop participation in one blog post and will also provide opportunity to earn up to 2 points of extra credit for the course.

### **EXTRA CREDIT**

[Watch Film](#), David Attenborough, *A Life on Our Planet*, Netflix, 1 hr 23 min

You can earn 2 points of extra credit that will be added to your grade at the end of the course by watching the film and writing a one-page analysis of it. Due December 13, 2021.

**Written Assignment: Analysis of the Film:** Your 1-page, single spaced analysis should briefly summarize the film and present the arguments that Attenborough is making regarding biodiversity and sustainable development. What is the importance of biodiversity to our sustainable survival on this planet? How does Attenborough illustrate this? Do you agree with his argument and methods? Why or why not? What could have been improved/what was particularly effective? (How the extra credit works: if you have a 89 average, for example, you would bump up to a 91 average for the course if you adequately complete the assignment). Note: If you are not able to access Netflix or this film, please let me know and I can suggest an alternate film.