BEE 3299 Sustainable Development

1/23 Class Introductions

Please briefly introduce yourself to the class and instructors. Feel free to share your college/major/year, why you are taking this course, and what you are hoping to gain out of this course. Mention any previous background or involvement you have in sustainability. Respond to at least two other posts to receive full credit. Your introduction is due on Friday, January 23rd by 11:59:59 PM and your responses no later than Sunday, January 25th

Hi everyone. My name is Max Brown and I am a sophomore studying Environmental Engineering and minoring in Engineering Business. I am taking this course to enhance my understanding of sustainable development. I hope to learn about the variety of sustainability issues our world is facing and discuss potential solutions for those problems. With regards to my involvement in sustainability, I am a member of the ESW Biofuels team. I also keep up to date with renewable energy development and environmental issues. I look forward to conversing with you all!

Hi Michelle Bowman! I am also an Environmental Engineering major and am taking this class for many of the same reasons you are. The internship you had at Shoals Marine Lab last summer sounds fascinating, specifically your work with water / wastewater systems. I am certain your experience with sustainability practices will add a lot to the class discussion. I may take you up on your offer and reach out to you to discuss your Shoals internship. I look forward to your insight this semester!

Hi Deborah! I am an Environmental Engineering major and am looking forward to seeing a Government Major’s point of view on sustainability. It takes the efforts of environmentalists, engineers, economists, lawyers, government officials (I can go on and on) to enact meaningful environmental change. By discussing sustainability with a variety of different people, it will give us all insight and essentially practice communicating and working with people from different occupations. I look forward to hearing your insight on sustainability!

1/25 Assignment 1A

**What kinds of problems do you see in your community, your region, the nation, and the world as a whole?**

Community Problems: high stress environment, alcohol abuse, drug abuse, sleep deprivation, anxiety, depression, littering, excess waste

Regional Problems: poverty, overall lack of high paying jobs, air pollution, water pollution, light pollution (NYC), high carbon emission, racial issues

National Problems: police brutality, inefficient energy production, acid rain, political issues,

World Problems: war, terrorism, animal extinction, lack of clean water, lack of food, lack of shelter, over population

**Your categories of problems and a few problems for each category, along with a description of the problems**

The problems I identified above fall within the following new categories: social, political, economic, and environmental.

Social:

* Alcohol and Drug Abuse = Increasingly, individuals have been turning to drugs and alcohol to escape their high stress environment. This not only has adverse affects on their health but decreases productivity
* Sleep Deprivation = Individuals have been working longer hours than ever in order to “make ends meet”. This has adverse effects on health and productivity
* Racial Inequality = Racial inequality has plagued our country since its inception. The civil rights movement and affirmative action has made some progress yet many problems still exist. This results in violence and protest

Political:

* Corruption = Office holders sometimes conduct their job in an unethical manner
* Unfair Policies = Policy makers, in some cases, create policies that either favor one demographic or are entirely useless and bring on no social or economic change
* War = Wars are waged and thousands die due to a small group of individuals voting. War destroys infrastructure, environments, destroys lives, and costs billions of dollars

Economic:

* Income Inequality = Many people tend to be stuck in the social class they are born into (relative mobility). This creates a society where the poor stay poor and the rich stay rich. It is difficult to increase ones socioeconomic class.
* Lack of opportunity = Education is becoming increasingly expensive and thus exclusive to those who can afford it. There is a lack if high paying jobs. Many people in our nation are food insecure. Developing countries around the world lack the funds for food, clean water, and shelter

Environmental:

* Air Pollution = Carbon emission and green house gases and resulted in global warming and poor air quality which as a negative effect on the environment and human health.
* Water Pollution = Improper disposal of garbage and sewage waste has resulted in availability of clean drinking water
* Resource Depletion = Forests are cut down subsequently increasing the carbon in the air. Urbanization decreases land for growing food
* Plant and Animal Extinction = Increased extinction of certain plants and animals could fall under resource depletion for they are essentially resources that play a role in sustaining our world

**A summary regarding area specificity and the similarity & differences among categories/problems (i.e. how many problems are specific to one category? how many cross categories? how are the categories/problems similar and different?)**

With regards to the initially given categories (community, regional, national, world), the category “world” encompasses all of the other categories. Essentially, all of the issues at the “lowest” level affect the levels above it. Our world is interconnected and subsequently our problems are too.

Problems are predominantly not specific to one category. For example, economic issues are sometimes caused by and cause social issues. Not making enough money to provide for ones family can lead to sleep deprivation, thus making it an economic issue. Political issues cause protests and disagreement by the public; the action of the public would fall under the category of social issues. Littering is not only a social issue but an environmental issue as well. All of the categories are interconnected and an event in one category can manifest into a chain reaction thus affecting all of the other categories.

**A summary regarding impacts on you specifically and on society if these problems remain unaddressed**

I believe I will be affected by many of the problems I stated earlier in my lifetime. Global warming is expected to continue and the smallest variation in temperature can have a great effect on our planet. Natural disasters will increase thus affecting the safety and sustainability of where I am from. Flooding and volatile weather can destroy infrastructure and energy production plants, which can cause extensive environmental damage. Protests and rioting due to inequality may also cause issues.

If the problems stated above are not addressed in a timely manner, I believe humanity will cease to exist. I don’t mean to sound dramatic but if global warming, resource depletion, social issues, and the potential of nuclear war continue to persist, our world will drastically change or cease to be habitable.

**Identify the problem areas most critical to you and explain why they are critical**

The problem area I deem to be most critical are environmental issues. Pollution of all types has been causing great damage to our planet. Rising sea levels threaten some of the world’s most important cities (NYC for example). Water has become more and more valuable (Liquid Gold) due to its increasing scarcity. Over population has reduced viable farmland. Our world faces many issues and with regards to the environment, we are running out of time before our damage is irreversible.

**List three steps (continue, start, stop) you will take in the next month to address one or more of the problems you have identified.**

Continue = I will continue to be conscious of my water use / use my water bottle as opposed to plastic bottles

Start = I will start looking for internship opportunities that have to do with sustainable development to not only benefit my career but aid in the conversation of our world

Stop = I will stop taking the bus and walk more often in order to reduce my carbon footprint

Hi Julie!

We selected many of the same categories. I strongly agree with your opinion regarding environmental issues being the most critical. I believe we are approaching a point where the damage we have caused will be irreversible. I consider environmental issues to be the most critical because they are an issue that will eventually affect everyone. Some people are unwilling to go about making change unless it directly affects them. Because the destruction of our environment is an issue that can affect all, it is my opinion an issue most people can comfortably rally behind. I also agree with many of the social issues you mentioned and they align with what I learned in a sociology class.

[**World Resources Institute**](https://blackboard.cornell.edu/webapps/blackboard/content/contentWrapper.jsp?content_id=_2449430_1&displayName=Linked+File&navItem=content&attachment=true&course_id=_61802_1&tab_group=courses&href=http%3A%2F%2Fwww.wri.org%2F)Look around the website and spend at least an hour on this site. It contains a wealth of information. This page includes links to topical areas including  Climate, Energy, Food, Water,Transport, Governance, Markets, Enterprises, Business,and Finance. The articles here are changing almost daily so you’ll want to check back frequently to see the latest. Also, EarthTrends is a comprehensive online database, maintained by the World Resources Institute, that focuses on the environmental, social, and economic trends that shape our world. Information for many research topics are found there. For example, click on agriculture and food and then maps.  This will connect you to maps such as the global livestock density or crop area by river basin.

[**Worldwatch Institute**](https://blackboard.cornell.edu/webapps/blackboard/content/contentWrapper.jsp?content_id=_2449430_1&displayName=Linked+File&navItem=content&attachment=true&course_id=_61802_1&tab_group=courses&href=http%3A%2F%2Fwww.worldwatch.org%2F) This site is much like the one above with a mission that focuses on the 21st-century challenges of climate change, resource degradation, population growth, and poverty by developing and disseminating data and innovative strategies for achieving a sustainable society. Make sure to check out State of the World 2011. There are other featured publications such as: Land Use Report; Vital Signs 2011 and Climate Change Reference Guide. Other content on the site addresses: Climate and Energy; Food and Agriculture; Green Economy; China Program; India Program (a favorite of mine) and Transforming Cultures.