

Department: Civil & Environmental Engineering
 Rowan Core Literacy: Global Literacy
 Course Facilitator: Crystal Leavey (leaveyc0@rowan.edu)
 Assignment Date: February 28, 2020

Assignment:

Prepare and submit a research paper that is not more than eight double-spaced pages, not including figures, tables, reference list, and appendices. Use APA format for citations and references. The paper must address Parts 1 and 2 below. Obtain approval of your chosen technology (suggestions on Page 2) before proceeding.

Part 1. Describe a sustainable building technology and how it will reduce the impact on people, planet and prosperity.

Part 2. Reflect on how your culture eases or impedes implementation of a sustainable building technology. Contrast this with one or more other culture(s).

Final Report Assessment Method:

Part 1

Category	Inadequate	Needs Improvement	Adequate	Good	Excellent
Design	Does not address this topic	Is missing many key elements of a sustainable building design	Describes a sustainable building design, but misses or misunderstands some key features	Gives full description of a sustainable building design	Thoroughly defines a sustainable building with a highly lucid account
Impacts	Does not address this topic	Explains impacts incorrectly or with poor reasoning	Explains impacts but with some errors or missing key claims	Gives full and very good explanation of impacts	Thoroughly and insightfully explains impacts

Part 2

Category	Inadequate	Needs Improvement	Adequate	Good	Excellent
Personal cultural	Does not address this topic	Missing many key impacts of personal culture	Describes effect of personal culture, but missing or misunderstanding some key effects	Gives full description of cultural effects	Thoroughly describes cultural effects with a highly lucid account
Cultural differences	Does not address this topic	Missing many key features of cultural differences	Describes cultural differences, but missing or misunderstanding some key features	Gives full description of cultural differences	Thoroughly describes cultural differences with a highly lucid account

Course Objectives and Outcomes

Triple Bottom Line

Objective: Students will be able to: design a sustainable building; describe its features; and describe how the features reduce its impact on people, planet and prosperity.

Outcome: Students can communicate their understanding of sustainability in social, cultural, ecological and/or economic milieus, both locally and globally

Culture and Sustainability

Objective: Students will be able to describe how culture can affect the implementation of a sustainable building technology, for their own culture and one other significantly different culture.

Outcome: Students will reflect critically on their own cultural experiences, cross-cultural interactions, and the diverse cultural experiences of others.

Suggested Student Topics: *(Not an exhaustive list – other topics in the realm of sustainability welcome)*

- Agricultural (permaculture, organic, biodynamic, genetically modified plants, fossil fuel based,...)
- Composting
- Energy from Biomass
- Hydro Power
- Climate Change Mitigation - Geoengineering
- Climate Change Mitigation - Fuels
- Transportation - Train, Trolley or Bus
- Transportation - Auto
- Transportation - Bike
- Transportation - Walkable Communities
- Green Buildings
- Waste Water Treatment
- Water and Sanitation in the Developing World
- Gray Water
- Bioreactor Landfills
- Green Building Materials (Low-carbon Concrete, Low-energy Concrete, aggregates,...)
- District Heating

Schedule:

Milestone	Due Date
Topic Selection (Submittal Via Email)	Thursday, March 5, 2020 - 11:00 PM
Good Rough Draft (Submittal Via Email)	Friday, March 21, 2020 - Midnight
Rough Draft Comments (Returned Via Email)	Sunday, March 29, 2020
Final Report (Submittal Via Turnitin)	Friday, April 10, 2020 - Midnight
Draft Presentation (Submittal via Email)	Friday, April 17, 2020 - Midnight
Draft Presentation Comments (Returned Via Email)	Sunday, April 19, 2020
Final Presentation (Submittal via Email)	Thursday, April 23, 2020 - 5:00 PM
Student Presentations	Friday, April 24, 2020 (both classes) Friday, May 1, 2020 (first class)

Note:

Send draft report in editable format (Word, Google Document)

Presentation guidelines will be issued by Friday, April 10, 2020