Syllabus for SMGT 305 Climate Change and Sustainability

Course Description

Prerequisite: College Math

This course focuses on climate change science and greenhouse gases, natural and human impacts of climate change, and sustainable and efficient strategies to limit carbon emissions. The course is divided into three major areas: 1) climate science and measured impacts, 2) modeled predictions and mitigation/adaptation strategies, 3) sustainable and carbon neutral practices. This course will emphasize not only the economics of carbon budgeting and increasing efficiency but also the human role in creating and solving climate change and the discrepancies in who, where, and what will be impacted by both climate change and the necessary solutions.

The course consists of six modules, and each module has a number of lessons. Most of these lessons will have a quiz to check your content knowledge. Additionally, there will graded discussion posts and papers where you will apply your knowledge to real issues. The final will be an essay or presentation that should tie together the material covered in the course.

Course Learning Outcomes

At the end of this course, you will be able to:

- Identify and describe the anthropogenic drivers of climate change, particularly carbon emissions, within a systems context.
- Evaluate the relative uncertainties in past, current, and predicted states of the climate, and identify observed and predicted impacts.
- Identify and evaluate the environmental, social, and economic impacts of different adaption/mitigation and policy strategies.
- Use a sustainability framework to critically analyze these strategies.
- Describe examples of more efficient and lower emission industrial adaptations and their role in a sustainable economy.

Course Materials

Information on course materials can be found in the <u>textbook section</u> of the SMGT website.

Grading Policy

Assignment	Possible Points
Quizzes (12 total w/ 2 dropped; 20 points each)	200 (20%)
Discussions (5 total w/ 1 dropped; 75 points each)	300 (30%)
Papers (2 at 150 points each; 1 final paper @ 200)	500 (50%)
Total	1000

Grading Scale

Percent Letter Grade

93-100% A 90-92.5% A-87-89.5% B+ 83-86.5% B 80-82.5% B-77-79.5% C+ 73-76.5% C 70-72.5% C-67-69.5% D+ 63-66.5% D 60-62.5% D