

New Summer 2019 Course

ME 360D

Sustainability and Technology

This course is designed primarily for students outside of Engineering (*but all are welcome!*) who may be interested in finding out more about our “carbon footprint” and what roles **humans** play in **climate change** and what we can do to reduce our impact on our environment.

Beginning with a scientific explanation of **global warming**, we will consider the human activities that lead to **carbon emissions**, look at how to quantify such emissions, and explore our options for reducing the same. Included in these will be **alternative technologies** for generation of **electricity**, **transportation**, **waste reduction** and **recycling** in manufacturing of the products and goods, **conservation of energy** in residential as well as commercial buildings. We will also look at the challenges in adopting new solutions!

Catalog Description: Introduces students to the concept of sustainability and sustainable practices in light of anthropogenic accelerated climate change. Explores life cycle analysis in engineering design and innovation. Specific topics include electricity generation for commercial, industrial and residential use as well as energy use in transportation; estimation of our carbon footprint; alternative resources for energy; generation and disposal as well as recycling of waste. Students work in groups on specific design projects and present their results to an open audience. Prerequisite: PHYS 313.

Questions? Email the instructor at ikram.ahmed@wichita.edu or call WSU-6292.