

The **Foundation Principles of Sustainability** course will cover the history of the sustainability concept beginning with the Brundtland Commission of the United Nations (1987) through to the Rio+20 Summit (2012). This course requires critical thinking and intellectual rigor to build a comprehensive understanding of the new sustainability paradigm through these five key topics:

1. **History:** Student groups will review and present key points from the major conferences, treaties and governmental actions that advanced sustainability. They will demonstrate their understanding of events such as Stockholm Conference, UN General Assemblies, the Brundtland Commission, the Rio Declarations, Agenda 21, Johannesburg Plan through to Rio+20, and the continued development of the UN Millennium Assessments.
2. **Research:** Lectures discuss acclaimed sustainability authors such as Pollan, McDonough, Hawken, McKibben, Friedman, Daly, Carson, and Ostrom. Student class discussions will be expanded by selected readings provided from *Cradle to Cradle*, *The Tragedy of the Commons*, *The Ecology of Commerce* and Rockstrom's *Planetary Boundaries* followed by an online test on these first two topics covering the history of sustainability and this research literature.
3. **Applications:** Lectures will link the critical elements from the literature for continued sustainability understanding including areas such as climate change, water, food, land, pollution, biodiversity and/or energy. Students will write short papers to identify the current trends of an approved sustainability topic within their selected city or country.
4. **Measurements/Parameters:** Course demonstrations will explore the methods of sustainability indicators beyond the Millennium Assessments by finding data such as the Environmental Performance Index, the UN System of Integrated Environmental and Economic Accounting, Sustainable Society Index, and the Dow Jones Sustainability Indexes. Student assignments will require sample data collection to define individual system impacts as discussed within their selected city or country.
5. **Summary, Analysis and Interpretation:** The four previous topics are combined through the review of the concept of the "three-legged stool" of sustainability. Students may develop their thesis and internship concepts aligned with these economic, environmental and social parameters by resubmitting a more detailed analysis from the earlier Research and Measurement assignments completed previously (5000 word min).

Sustainability is represented as a broad array of economic, environmental and social issues. Each has a variety of severity, urgency, and uncertainty concerns; visible within the dimensions of our current communities and world. This course gives a broad overview to represent the vast opportunities for engaging in sustainability actions, which may avoid (i) danger to humans, (ii) human health impacts, (iii) human rights violations, (iv) species extinctions and/or (v) other detrimental environmental effects, which may reduce the quality of life. This overview will conclude with the methods to hypothesize problems and identify measures of actions with direct consequences to the built and natural environment within their selected city or country.

