

**M.E. Rinker, Sr. School of Building Construction
University of Florida**

BCN 1582 International Sustainable Development

3 Credits

Prerequisites: None

Description: This course covers the worldwide trend known as sustainable development, which may be described as a means toward providing resources and environmental quality for both present and future generations. Sustainable development includes reducing the impacts of the human activities on natural ecosystems and understanding the role these ecosystems have in the economy and on human welfare. It involves understanding the lessons that human society can learn from natural systems and how these lessons can help provide a good quality of life for the planet's population. Many countries around the world have developed policies on sustainable development and a few have either included it in their constitutions or have passed laws requiring its consideration in all activities. Organizations and businesses worldwide are beginning to shift their thinking and behavior using the principles of sustainability. This course will cover the fundamental concepts of sustainable development; international, regional and national movements and policies; and the implementation of sustainable development by various sectors of human activity: agriculture, forestry, manufacturing, construction, government, and higher education. As an integral part of international sustainable development and its practices, a portion of the course will also cover the notion of social sustainability, including the impact of consumptive human activities and globalization. Understanding the policies and practices of sustainability are taken as fundamental to the long-term survival of our planet.

Keywords: Sustainable development, green building, construction ecology, resource efficiency, ecology

Methods: Three hours of lecture per week, guest lectures, field trips, videos

Objective: The main objective of this course is to provide a picture of how sustainable development is changing humankind's interaction with the world and their place in that world, including its effects on the economic system, its effects on society, and its impacts on the survival of critical socio-ecological systems. The basic concepts of sustainable development, from the 1987 Brundtland Commission Report to their further development in countries around the world, will be discussed. The key environmental and resource issues and the effects on humankind if present population and consumption trends remain unchanged will be examined. Students will learn how various industries and organizations are adopting strategies to transform their activities to function in a sustainable manner. Finally they will understand how technical, environmental and social systems interact in a globally consumptive economy.

Texts: The State of the World, The Worldwatch Institute, current edition

<u>Topic</u>	<u>Description</u>	<u>Readings</u>
1	Introduction to Sustainable Development Environmental and Resource Issues Worldwide	State of the World and other assigned readings
2	Environmental Ethics Concepts The Rights of Natural Systems	State of the World and other assigned readings
3	Ecological Economics Alternatives to GNP as a Measure of Progress	State of the World and other assigned readings
4	Tools and Frameworks for Achieving Sustainability Eco-Capacity and Ecological Footprint <i>Exam 1</i>	State of the World and other assigned readings
5	United Nations Programs Introduction to Sustainable Development at International Level UN Activities in Sustainable Development	State of the World and other assigned readings
6	Tragedy of the Commons	State of the World and other assigned readings
7	Climate change	State of the World and other assigned readings
8	<i>Exam 2</i>	State of the World and other assigned readings
9	Local issue in climate change	State of the World and other assigned readings
10	Energy	State of the World and other assigned readings
11	Global water issues	State of the World and other assigned readings
12	Regional water issues <i>Exam 3</i>	State of the World and other assigned readings
13	Built environment Construction materials	State of the World and other assigned readings

14	Sustainable communities	State of the World and other assigned readings
15	The Greening of Organizations and Universities <i>Exam 4 (Final)</i>	State of the World and other assigned readings