Course Description: Introduces students to introductory as well as more specific issues related to sustainability. Topics include review and discussion of historical readings that define the world movement towards a more sustainable society, international issues related to sustainable development, corporate leadership in the area of sustainability, and social issues.

Students registered for this course must maintain a course journal/notebook. This resource will be reviewed by instructors at the end of the semester and can be electronic or hand written. It should convey to the instructors that a student is not only critically reviewing speakers and materials discussed in class, but they have also critically explored other readings and internet based sites related to the course topics.

In order to reduce use of paper, all readings will be provided electronically as pdf files at the following web site http://www.me.mtu.edu/~jkgershe/sustainability/sustainable_topics.html

Time & Location
Friday, 12 noon to 1 pm
Room: Room 214 EERC (except as noted for distance education linkage to Southern University)

Michigan Tech Instructors:
James R. Mihelcic, Professor, Civil & Environmental Engineering
805 Environmental Science & Engineering Building
jm41@mtu.edu

John K. Gershenson, Associate Professor, Mechanical Engineering & Engineering Mechanics
936 ME-EM Building
jkgershe@mtu.edu

List of Topics/Reading Materials:

September 3  Seminar Introduction

Chronology of Modern Sustainability (Provides background information on how we have moved from pollution prevention to sustainability; the history of life cycle assessment, and the global movement towards a more sustainable world that highlights issues at the United Nations level.

Students will be emailed a pdf file of Mihelcic, JR, et al. “Sustainability Science and Engineering: Emergence of a New Metadiscipline,” Environmental Science & Technology, 37(23), 5314-5324, 2003. They are to read before the next class.

September 10 (K-day on Michigan Tech campus, no class)

September 17
Meet in Room  B11 EERC (Link to Southern University)
Primary purpose is for sustainability graduate scholars at both universities to meet one another, as well as interested faculty/staff.
Students are to read before class, 

September 24
Background material from the Author’s Preface (page ix –xxii) (*Limits to Growth: The 30-year Update*).

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October 1
*Beyond Growth*, Herman E. Daly, Beacon Press, Boston, 1996.
Chapter 8. “Carrying Capacity as a Tool of Development Policy: The Ecuadoran Amazon and the Paraguayan Chaco.”

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October 4 (Monday), 2-3 p.m. U-115 (Mineral & Materials Bldg) Note Date/Time Change

Professor Michael Kraft, Ph.D.
Professor of Public and Environmental Affairs (Political Science)
Director, Center for Public Affairs
Herbert Fisk Johnson Professor in Environmental Studies
University of Wisconsin-Green Bay

October 15
**Meet in Room B11 EERC (Link to Southern University)**
“Metrics for Sustainable Water Use”
David Watkins, Ph.D.
Assistant Professor
Civil & Environmental Engineering
Michigan Technological University

October 22  Sustainable Transportation
Katie Alvord
Author of *Divorce Your Car!: Ending the Love Affair with the Automobile*, New Society Publishers, 2000
(Combined with Environmental Engineering Graduate Seminar, Meet at 3 p.m. in 642 Environmental Science & Engineering Building)

October 29
**Meet in Room B11 EERC (Link to Southern University)**
“Land as an Integrating Concept for Organizations and the Natural Environment”
Christa L. Walck, Ph.D.
Professor of Organizational Behavior
School of Business
Michigan Technological University

November 6
Sustainable Consumption, What does it Mean?
http://www.unep.org/themes/consumption/
http://www.sierraclub.org/sustainable_consumption/

November 13
Natalie Jeremijenko, Sustainability and Information Technology

November 19
Meet in Room  B11 EERC (Link to Southern University)
Emergence of a corporate movement towards sustainability
Review video Invitation to a Revolution: The Next Industrial Revolution
Narrates by: Susan Sarandan, (55 minutes)

November 26 (Thanksgiving Recess)

December 3
Topic TBA

December 10
Developing sustainability indicators for the Michigan Tech Campus
Students from SS5400 (Kristine Bradof, course instructor)
(Combined with Environmental Engineering Graduate Seminar, Meet at 3 p.m. in 642
Environmental Science & Engineering Building)