University of Florida

M.E. RINKER, Sr. SCHOOL OF CONSTRUCTION MANAGEMENT

BCN 1582 International Sustainable Development, 3 Credits

Summer 2024 | Syllabus

Instructor: Eileen Pesantes- Tavares, PhD

Office: 313 Rinker Hall

Office hours: Via appointment conducted via Zoom

Email: Mail tool in e-Learning (preferred method)

Prerequisites: None



COURSE DESCRIPTION: Understanding key concepts related to sustainable development worldwide, gain familiarity with key environmental and resource issues and the effects on humankind if present population and consumption trends remain unchanged.

CURRENT GENERAL EDUCATION AREA: GE-S (link: https://undergrad.aa.ufl.edu/general-education/gen-ed-program/subject-area-objectives/)

MINIMUM GRADE REQUIRED: A minimum grade of C is required for General Education credit.

INSTRUCTIONAL METHODS: Class lectures, guest lectures, videos, discussion assignments, exams, and term paper.

PURPOSE OF COURSE: To teach the student on the importance of sustainable development and related concepts including key international plans and sustainable community movements worldwide, prepare a paper to report either water or climate change issues for the selected country or continent as assigned.

COURSE LEARNING OUTCOMES (CLOs):

Upon completion of the course students will demonstrate their ability to:

- □ Describe how sustainable development is changing humankind's interaction with the planet (ACCE SLO 18)
- ☐ Explain the basic concepts of sustainable development (ACCE SLO 18)
- □ Discuss the ethical foundation for sustainability and sustainable development (ACCE SLO 6)
- □ Identify key environmental and resource issues that threaten quality of life and the environment for present and future generations (ACCE SLO 18)
- □ Identify and contrast key international sustainability initiatives (ACCE SLO 18)
- □ Explain how various industries and organizations are adopting strategies to function in a sustainable manner (ACCE SLO 18)
- \Box Indicate how sustainable development concepts can be applied to the creation of a sustainable built environment (ACCE SLO 18)

ACCE: American Council for Construction Education; SLO = Student Learning Outcome; ACCE SLO 6: Analyze professional decisions based on ethical principles; ACCE SLO 18: Understand the basic principles of sustainable construction;

ASSESSMENT METHODS

Assessment	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5	CLO 6	CLO 7	Target
Exam 1	X		X		x			At least 80% receive a B- or better
Exam 2		X		X		X		At least 80% receive a B- or better
Exam 3	X	X	X	X	X	X	X	At least 80% receive a B- or better
Term paper				X				At least 80% receive a B- or better

REQUIRED TEXTBOOKS

- State of the World 2017, EarthEd: Rethinking Education on a Changing Planet. The Worldwatch Institute, Washington, DC. ISBN: 9781610918428.
- Sustainability: A Comprehensive Foundation, Collection Editors: Tom Theis and Jonathan Tomkin, CONNEXIONS, Rice University, Houston, Texas, 2012. For free download, click here.

SUPPLEMENTAL READINGS

- Hoffert et al., Advanced Technology Paths to Global Climate Stability: Energy for a Greenhouse Planet. Science, Vol. 298, No. 5595, 2002. Link.
- Hoffert et al., Energy Implications of Future Stabilization of Atmospheric CO₂ Content. Nature, Vol. 395, 1998.
 Link.
- Garrett Hardin, Living Within Limits: Ecology, Economics, and Population Taboos. New York: Oxford University Press, 1993.
- Brian Tokar, Earth for Sale: Reclaiming Ecology in the Age of Corporate Greenwash Boston: South End Press, 1997.
- E. F. Schumacher, Small is Beautiful: Economics as if People Mattered. NY: Harper & Row, 1973.
- Christopher L. Lant, J.B. Ruhl, and Steven E. Kraft, The Tragedy of Ecosystem Services. BioScience, November 2008.
- Michael Heller, Tragedy of the Anti-Commons. William Davidson Inst. Working Paper Series, 1997.
- Lawrence Lessig, The Comedy of the Commons. SDForum Distinguished Speaker Series; website.

STUDENT REQUIREMENTS: Student grades will be based on exams, quizzes, a term paper and discussion assignments. Optional extra credits are available for this course. There are **no make-ups** for missed quizzes, exams, term paper, and optional extra credit activities unless UF attendance policy applies (link to UF attendance policies: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/)

COURSE GRADING:

- Exams: Three computer-based exams, 50 points each, 150 total points.
- **Discussions and assignments:** 175 total points.
- **Term Paper:** 150 total points:

Each group of students is required to submit a 4-page (no more, no less) research paper. A template will be provided on e-Learning in Canvas. The paper will be a "state of the country report" on either climate change, water resources, food security, energy resources and/or population growth issues within that country. The research paper should (1) outline the country's major climate change or water resource issues, and (2) clearly define and explain the environmental, social, and economic aspects.

- **Group 1:** select a country in Europe.
- **Group 2:** select a country in South and Central America.
- **Group 3:** select a country in Africa or a country other than in a region above and other than China and the USA.

To find out which group you belong to, go to Canvas and check under the People tab. Look for Term paper group. You need to either choose a country of those available under People tab/Country tab or ask instructor if you want to choose a different country. No more than 2 group per country is allowed. Grading criteria for term paper:

- 1. Selection of Country (10 points): Selection of country including at least two complete sentences about reason for selection.
- 2. Annotated Bibliography (40 points): Submit at least three references that you will use in your paper. Follow the procedure of the annotated bibliography.
- 3. Structure and formatting (30 points): (a) Spelling and grammar, sentence structure, and general writing; (b) Whether the template and format were followed; and (c) Appropriate use of citations and formatting.
- 4. Content (70 points): (a) At least three data points from legitimate sources (10 points); and (b) The appropriateness and meaningfulness of the data points for the purposes of this paper (20 points); and (c) Discussion of the data and the thoughtful analysis that include, but not limited to, challenges faced by the country; initiatives the country has started; reporting the progress, if available (40 points).

- **Optional Extra Credits:** There will be optional extra credits available throughout the term. Check emails and announcements for further details.
- Total number of points available in the class is 475 + extra credits

Grading based on points earned as a percentage of total points.

A=93-100; A-=90-92.9; B+=87-89.9; B=83-86.9; B-=80-82.9; C+=77-79.9; C=73-76.9; C-=70-72.9; D+=67-69.9; D=63-66.9; D-=60-62.9; E<60.

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES: Students

requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments (discussion, term paper, extra credit) or taking the quizzes or exams. Accommodations are not retroactive; therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at http://www.dso.ufl.edu/students.php. The Honor Code will be applied in the class. We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the university, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is Rinker School policy that any incident of cheating, copying, or other attempts to deceive will be penalized by course failure.

NETIQUETTE, COMMUNICATION COURTESY POLICY: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Detailed guide is available at http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

GETTING HELP WITH E-LEARNING WEBSITE: In the case you have technical difficulties with e-Learning in Canvas, please contact the UF Help Desk at: Learning-support@ufl.edu; (352) 392-HELP - select option 2; https://lss.at.ufl.edu/help.shtml. If your technical difficulties will cause you to miss a due date/time, you MUST report the problem to the UF Help Desk **before** the due date/time.

CELLPHONES. Cellphone use is not allowed in classrooms. Use of cellphones during class will discount attendance. Use of cellphones during an exam will result in failing the exam.

LAPTOPS & TABLETS. These devices should only be used to take notes related to lectures. Use of these devices for social media or any other unrelated purposes during class hours will result in a penalty of 10 points for every incident.

COMMUNICATION

- Use the e-Learning in Canvas environment to send an email to the instructor and teaching assistant. Do not e-mail the course instructor and teaching assistant outside of the e-Learning in Canvas system because emails received outside of e-Learning will not receive a response. Please allow 36 hours for a response to your email. The instructor and teaching assistant reserve the right not to respond to course inquiries on the weekend.
- You are responsible for addressing grades/omissions within one week of the grade being posted on e-Learning in Canvas. After one week, the grade/input stands for the class regardless of cause or circumstance.

COURSE EVALUATION

"Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/https://gatorevals.aa.ufl.edu/public-results/."

SOFTWARE USE

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as

appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

STUDENT PRIVACY

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

CLASS SCHEDULE

Date	Topic	Things to do before	Exams	Assignments/Due	
		coming to class			
Week 1 – July 1 29	Module 1 - Section 1.1 Introduction Dr. Kibert Find your team members in canvas > people	EarthEd: Foreword Chapter 1		Module 1.1 discussion – due: July 5	
	Module 1 - Section 1.2 Environmental Ethics & Justice	Sustainability - A Comprehensive Foundation Chapter 10.1. Chapter 10.8.		Module 1.3 Assessment framework assignment - Due: July 9	
W2- July 8	Section 1.3 Assessment Frameworks Exam review	Chapter 6 - 6.1 Article "Wealth vs. Well- Being: How Do We Measure Prosperity?" EarthEd. State of the World (2017): Chaper 6.	Exam 1 (module 1) – Due: July 12		
W 3- July 15	Module 2 - Section 2.1 Global Warming & Climate Change	Read: Sustainability - A Comprehensive Foundation: Chapter 3.1. Chapter 3.2. State of the World: Chapter 10 Watch: Required videos in this module		International sustainability comic strip assignment – due: July 17	
	Module 2 - Section 2.2 Energy Resources	Sustainability - A Comprehensive Foundation Textbook: Chapter 8.4.1.2. Chapter 8.4.1.3. Chapter 8.4.2.1. Watch: Required videos in this module		Renewable energy resources – due: July 21	
W 4 – July 22	Module 2 - Section 2.3 Renewable Energy Resources	Sustainability - A Comprehensive Foundation: Chapter 8.4.1.3 8.4.1.4. Chapter 8.4.2.2 State of the World: Chapter 11			

W4: July 22		Watch: Required videos in this module		
	Module 2 - Section 2.4 Water Resources	Sustainability - A Comprehensive Foundation Chapter 5.2. State of the World: Chapter 11 - Deeper Watch: Required videos in this module		Discussion: water issues– due: July 24 Final paper Group 1 – Due July 26
	Module 2 - Section 2.5 Material Resources – Exam review	Sustainability - A Comprehensive Foundation Chapter 7.2 State of the World (2017) Chapter 13 Chapter 18 Watch: Required videos in this module	Exam 2 (module 2) – Due: July 26	
W 5 – July 29	Module 3 - Section 3.1 Sustainable Built Environment Term Paper - Checklist, Template, Example, Links	Sustainability - A Comprehensive Foundation Chapter 11.3 Chapter 11.4 State of the World (2017): Chapter 18 Chapter 25 Watch: Required videos in this module		Green and NET-Zero buildings assignment – due: August 2 Final paper Group 2 – Due: August 2
	Module 3 - Section 3.2 Low / Net Zero Energy Buildings	Sustainability - A Comprehensive Foundation Chapter 8.4.3.1. Chapter 11.7 State of the World (2017): Chapter 20 Watch: Required videos in this module		
W 6– August 5	Module 3 - Section 3.3 Sustainable Communities	Sustainability - A Comprehensive Foundation Chapter 8.3. Chapter 11.2 Chapter 11.5 State of the World (2017): Chapter 22 Watch: Required videos in this module		Final paper Group 3 – Due August 9
	Module 3 - Section 3.3 Sustainable Communities Module 3 - Section 3.4 Greening of Universities Term Paper Q/A		Exam 3 (module 3) – Due: August 9	

Note from the instructor: The syllabus and schedule represent my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.