

COURSE NAME: Sustainability Decision Tools

COURSE NUMBER: 11:373:202

INSTRUCTOR: Serpil Guran

MEETING DAYS, TIMES, AND PLACE: Online only

PREREQUISITE: 11:373:101 or any 100-level Course in Microeconomics

COURSE WEBSITE, RESOURCES AND MATERIALS:

Berners-Lee, *How Bad are Bananas? The Carbon Footprint of Everything*. Vancouver, Canada: Greystone Books, 2011. ISBN 978-1-55365-831-3

Baumann and Tillman, *The Hitch Hiker's Guide to LCA: An Orientation in Life Cycle Assessment Methodology and Application*. Malmo, Sweden: Studentlitteratur, 2004. ISBN 978-91-44-02364-9

Course is conducted entirely on Rutgers Canvas.

COURSE DESCRIPTION:

This course will introduce students to the day-to-day tools of sustainability management for corporations, government, and nonprofits. Primary emphasis will be on the tools used to measure the environmental and resource impacts of industrial processes: life cycle analysis, carbon footprint analysis, and their variants. Corporate responsibility and internal management processes used within firms for achieving sustainability objectives will be discussed. Other topics cover sustainability history and theory, especially the consideration of equity and economic welfare goals in addition to environment. Finally, we will talk about sustainability professions, existing laws and policies, and media strategies. In addition to the two required paperbacks, many readings will consist of professional consulting reports—the kind of research and communication products that are actually read and used by sustainability practitioners.

LEARNING GOALS:

- To engage students around practical and theoretical aspects of "sustainability," which has been an influential organizing principle for public and private-sector decision-making for more than 25 years.
- To help students integrate sustainability thinking into their individual consumption decisions and those they will make on behalf of future employers in the private, public, and nonprofit sectors.
- To introduce, explain, and give examples of the primary sustainability decision tools, *life-cycle analysis* and *carbon footprint analysis*.



• To provide a foundation for careers in this growing field, such as corporate sustainability officer, green supply chain manager, environmental policy analyst, energy or materials accountant/auditor, etc.

ASSIGNMENTS/RESPONSIBILITIES, GRADING & ASSESSMENT:

Four course components will contribute to your semester grade as follows:

One-page papers 30%
Quality and regularity of online discussion 20%
Midterm take-home exam 20%
Final life cycle project 30%

Your final grade is determined using the following scale:

A: 90% and above

B+: 87-89.9%
B: 80-86.9%
C+: 77-79.9%
C: 70-76.9%
D: 50-69.9%
F: below 50%

ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Please follow the procedures outlined at https://ods.rutgers.edu/students/registration-form. Full policies and procedures are at https://ods.rutgers.edu/

ABSENCE POLICY

Not applicable to an online course. Class participation will be graded on the basis of online activity.

COURSE SCHEDULE:

Week One Introductory case study: "Paper or plastic?"
Week Two Sustainability: History, concepts, needs
Week Three Corporate responsibility; more ethics

Week Four Life cycle analysis, part 1 Week Five Life cycle analysis, part 2

Week Six Life cycle analysis within the context of traditional decision-making tools of

economics and business

Week Seven Carbon footprint analysis as subset of LCA Week Eight Carbon footprint analysis as subset of LCA

Week Nine SPRING BREAK

Week Ten Energy efficiency and alternative technologies

Week Eleven Sustainability assessment of a project or instrument and role for innovation

Week Thirteen Existing policies and laws; where to find information

Week Fourteen Basic skills/roles of a sustainability officer or small business owner

Week Fifteen Spreading the message: Marketing and social media

Week Sixteen Finish work on case study project



FINAL EXAM/PAPER DATE AND TIME

Online Final exam Schedule: http://finalexams.rutgers.edu/ Final paper is due on the last official day of classes.

ACADEMIC INTEGRITY

The university's policy on Academic Integrity is available at http://academicintegrity.rutgers.edu/academicintegrity-policy. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others.
- the academic and ethical development of all students is fostered.
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.





STUDENT WELLNESS SERVICES

Just In Case Web App http://codu.co/cee05e

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / https://ods.rutgers.edu/

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.

Scarlet Listeners

(732) 247-5555 / https://rutgers.campuslabs.com/engage/organization/scarletlisteners

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.