

# ENST 499: Operations and Impacts of Zero Waste Events

**Instructor:** Dr. Monalisa Chatterjee

**Office Hours:** *By Appointment*

**Email:** monalisc@usc.edu

**Wednesdays:** 4-4:50pm

**Location:** GFS 217

**Course Description:** This 2-unit course will provide an overview of the importance and meaning of zero waste in an era of global change as well as hands-on experience in the operation of zero waste events using the LA Coliseum and USC Football Games as a living laboratory. Zero waste is the: *“Conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.”* Zero Waste International Alliance

## Course Learning Objectives:

Learning objectives in this course are aligned with those of the Environmental Studies Program: <https://dornsife.usc.edu/environmental-studies/learning-objectives/>

- Understand the importance and meaning of zero waste and the processes involved
- Demonstrate the ability to critically think and solve problems in the realm of waste issues and processes
- Contextualize how waste issues affect the environment, society, and the economy
- Learn about and apply solutions that reduce waste through law, policy, science and technology, and human behavior
- Utilize a life cycle analysis to evaluate the impacts of a given product
- Learn about waste diversion, human awareness and behavior related to recyclable material and waste disposal during Coliseum events

## Course Text & Readings:

1. **Collegiate Zero Waste (CZW) Playbook** by L. Anast and E. Mullen (*on BB*)
2. **Cradle to Cradle: Remaking the Way We Make Things** by Michael Braungart and William McDonough
3. **Los Angeles and USC Zero waste policies and news articles** (*on BB*)

**Course Expectations:** *\*See expanded classroom ground rules at the end of this syllabus*

- **Come to class prepared and engage in discussions, individual and group work\***
  - Take pair work or small group work seriously.
  - Make an effort to get to know other students.
  - Share responsibility for including all voices in the conversation.
  - Understand that others will come to these lectures and discussions with different experiences from yours.
- **Leave cell phones off during the lecture and stay engaged**
- **Be respectful of instructors and other students in class\***
  - Listen respectfully
  - Be open to changing your perspectives based on what you learn from others.
  - Understand that we are bound to make mistakes in this space.
  - Understand that your words have effects on others.
  - Understand that there are different approaches to solving problems.
- **Notify the instructor before missing a class. Makeup activities within 48 hours.**

**Online Course Portal, Blackboard:** This course will use Blackboard for communication, information and submitting assignments. You are responsible for all notifications and

assignments posted online via BlackBoard (*Let me know by the first lecture if you have trouble accessing BlackBoard*). Students are encouraged to email the instructor with questions, or to set up an office hour appointment. **Please contact the instructor with any issues that are impacting your ability to learn and they will try to help or will refer you to someone that can.**

<b>Grade Breakdown</b>	<b>Points</b>
In-Class Activities	20
ZW Event Participation	100
Quizzes	20
Waste Log Assignment	30
Life Cycle Analysis (Group Final Project)	80
<b>TOTAL</b>	<b>250</b>

### **Grading Scale**

A	93-100	B-	80-82	D+	67-69
A-	90-92	C+	77-79	D	63-66
B+	87-89	C	73-76	D-	60-62
B	83-86	C-	70-72	F	59 and below

### **Academic Integrity**

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the [USC Student Handbook](#). All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage. The impact of academic dishonesty is far-reaching and is considered a serious offense against the university and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see the [student handbook](#) or the [Office of Academic Integrity's website](#), and university policies on [Research and Scholarship Misconduct](#).

### **Policy on Graded Assignments and Activities**

Late Assignments will have 20% deducted each 24 hours, with the first 24 hour deduction starting 5 min after the deadline. Instructions for all assignments are on Blackboard (BB).

Regarding in-class activities (including quizzes): If you cannot make it to a class, please

email the professor ahead of time so that you can make up any associated in-class activities or quizzes (5-15 pts each) within 48 hrs. Assignments and activities will be graded and posted on blackboard ~ within two weeks after the due date.

**Overview of Assignments: All due by 4 pm (California Time) via (BB)\***

*Each of the below assignments are described in more detail on blackboard.*

**In-Class Activities/Discussions/Reflections (5 pts each):** Throughout the course you will be exposed to data-based activities and in-depth discussions in class. Points are awarded via question worksheets or via activity-based discussions. In-class activity worksheets/reflections will need to be turned in within ~48 h (by 4pm).

**Quizzes (5-10 pts each):** In lieu of a midterm or final, you will be given quizzes throughout the semester that pertain to the course readings. These quizzes may or may not be announced ahead of time. Quizzes will include multiple choice, T/F and short answer questions and will be aligned with the assigned course readings.

**Zero-Waste Log assignment:** For one week, keep a written log of everything that you put in the trash, recycling and/or compost. During this time, implement several of the zero-waste tips in the instructions for this activity.

**Zero-Waste Event Participation & Group Final Project Activities:** A large part of this course is the hands-on experience that students will gain by participating in and helping with the management of the zero-waste game day events at the Los Angeles Coliseum. **To get full event participation credit, you are expected to attend the introduction field trip on August 30<sup>th</sup> (during class), and actively participate in implementing and monitoring of zero waste events and data collection in two of the six weekend events (one in September/October and one in November)** with each weekend event including the pre-game day set-up activities (Fridays, for September and October weekends) and the game day (Saturdays, for all weekends) and post games activities (on Sundays, only during November weekends).

**Shortlisted Weekends for participation:**

September 1-2<sup>nd</sup>  
September 8-9<sup>th</sup>  
October 6-7<sup>th</sup>  
October 20-21<sup>st</sup>  
November 4-5<sup>th</sup>  
November 18-19<sup>th</sup>

**You will be able to sign up for event dates on first Friday of the semester.**

**Final project - Life Cycle Analysis:** You will select a product category which has 2/3 products from a list of items used or considered at the LA Coliseum. You will use a life-cycle analysis spreadsheet to determine the most sustainable product and write a 1-page reflection on your decision (*further details are in the instructions on BB*). The last class of the semester you will present the findings of your life cycle analysis and submit a short report.

## 2023 Fall Course Schedule (tentative)

Date	Topics/Daily Activities	Readings	Notes/ Due Dates
Aug. 23	<b>L.1. ZW Introduction and Course Overview</b> Monalisa Chatterjee	CZW Playbook	(Read pgs.8-32)
<u>Aug. 30</u>	<b>L.2. Zero Waste Operations at the Coliseum- Introduction field trip</b> <i>Guests- Chris +Joshua Sierra + Nichelle (?)</i>	CZW Playbook	(Read pgs. 33-54)
<i>Sept. 1</i>	<i>Pre- Game Zero-Waste Efforts</i>		<i>Meet at the coliseum</i>
<i>Sept. 2</i>	<i>LA Coliseum Football Game – Nevada</i>		<i>Meet at the coliseum</i>
Sept. 6	<b>L.3. A Systems Perspective on Waste for Environmental and Social Change</b> <i>Guest: Prof. Josh Goldstein</i>	Cradle to Cradle	<i>Read pgs.3-17</i>
<i>Sept. 8</i>	<i>Pre- Game Zero-Waste Efforts</i>		<i>Meet at the coliseum</i>
<i>Sept. 9</i>	<i>LA Coliseum Football Game – Stanford</i>		<i>Meet at the coliseum</i>
<u>Sept. 13</u>	<b>L.4. Behavioral Science and Waste: Applications for Change</b> <i>Guest: Prof. Victoria Campbell-Arvai</i>	Cradle to Cradle	<i>Read pgs 18-45</i>
Sept. 20	<b>L.5. Cradle to Cradle -Introduction &amp; Perspectives</b> <i>Dr. Monalisa Chatterjee</i>	Cradle to Cradle	<i>Read pgs 46-68</i>
Sept. 27	<b>L.6. Life Cycle Analyses &amp; Implementations</b> <i>Guest Speaker: Dr. Robert Vos</i>	Cradle to Cradle	<i>Read pgs 69-92</i>
Oct. 4	<b>L.7. Waste Policies: LA Strategies &amp; Solutions</b> <i>Guests: Josh Sierra, Gina Whisenant, Josh Rebello, Nick Belgrave</i>	ZW Policies	<i>LA ZW Policy &amp; USC Plastic Bottle Policy (on BB)</i>
<i>Oct. 6</i>	<i>Pre- Game Zero-Waste Efforts* (or Game Day)</i>		<i>Meet at the coliseum</i>
<i>Oct. 7</i>	<i>LA Coliseum Football Game - Arizona</i>		<i>Meet at the coliseum</i>
Oct. 11	Life Cycle Assessment Project Time		No Class meeting
Oct. 18	<b>L.8. Five R's Case Studies</b> <i>Dr. Monalisa Chatterjee</i>	Cradle to Cradle	<i>Read pgs 93-118</i>
<i>Oct. 20</i>	<i>Pre- Game Zero-Waste Efforts</i>		<i>Meet at the coliseum</i>
<i>Oct. 21</i>	<i>LA Coliseum Football Game - Utah</i>		<i>Meet at the coliseum</i>
Oct. 25	<b>L.9. Circular Economy</b> <i>Dr. Monalisa Chatterjee</i>		
Nov.1	<b>L.10. Waste Policies: Global Strategies &amp; Solutions</b> <i>Guest: Prof. Josh Goldstein</i>	Cradle to Cradle	<i>Read pgs 119-157</i>
<i>Nov. 4</i>	<i>Pre- Game Zero-Waste Efforts</i>		<i>Meet at the coliseum</i>
<i>Nov. 5</i>	<i>LA Coliseum Football Game - Washington</i>		<i>Meet at the coliseum</i>
Nov. 8	<b>L.11. Waste Data Analysis and Visualization</b> <i>Dr. Monalisa Chatterjee</i>		
Nov. 15	<b>L.12. Life cycle analysis time + feedback</b>		

	<i>Dr. Monalisa Chatterjee</i>		
<i>Nov.18</i>	<i>Pre- Game Zero-Waste Efforts</i>		<i>Meet at the coliseum</i>
<i>Nov.19</i>	<i>LA Coliseum Football Game - UCLA</i>		<i>Meet at the coliseum</i>
Nov. 22	<b>Thanksgiving Break</b>	--	<b>No Class- Thanksgiving</b>
Nov. 29	<b>L.13 Life cycle analysis presentation time + feedback</b> <i>Dr. Monalisa Chatterjee</i>		
Dec. 8	<b>Final Projects Due via Blackboard by 11:59 PM</b>		

### Expanded ENST classroom ground rules and Etiquette

- **Share responsibility for including all voices in the conversation.** If you tend to have a lot to say, make sure you leave sufficient space to hear from others. If you tend to stay quiet in group discussions, challenge yourself to contribute so others can learn from you.
- **Listen respectfully.** Don't interrupt, turn to technology, or engage in private conversations while others are speaking. Use attentive, courteous body language. Comments that you make (whether asking for clarification, sharing critiques, or expanding on a point) should reflect that you have paid attention to the previous speakers' comments.
- **Be open to changing your perspectives based on what you learn from others.** Try to explore new ideas and possibilities. Think critically about the factors that have shaped your perspectives. Seriously consider points-of-view that differ from your current thinking.
- **Understand that we are bound to make mistakes in this space, as anyone does when approaching complex tasks or learning new skills.** Strive to see your mistakes and others' as valuable elements of the learning process.
- **Understand that your words have effects on others.** Speak with care. If you learn that something you've said was experienced as disrespectful or marginalizing, listen carefully and try to understand that perspective. Learn how you can do better in the future.
- **Take pair work or small group work seriously.** Remember that your peers' learning is partly dependent upon your engagement.
- **Understand that others will come to these discussions with different experiences from yours.** Be careful about assumptions and generalizations you make based only on your own experience. Be open to hearing and learning from other perspectives.
- **Make an effort to get to know other students.** Introduce yourself to students sitting near you. Refer to classmates by name and make eye contact with other students.
- **Understand that there are different approaches to solving problems.** If you are uncertain about someone else's approach, ask a question to explore areas of uncertainty. Listen respectfully to how and why the approach could work.

### **Students and Disability Accommodations:**

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [osas.usc.edu](https://osas.usc.edu). You may contact OSAS at (213) 740-0776 or via email at [osasfrontdesk@usc.edu](mailto:osasfrontdesk@usc.edu).

### **Support Systems:**

[\*Counseling and Mental Health\*](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[\*988 Suicide and Crisis Lifeline\*](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[\*Relationship and Sexual Violence Prevention Services \(RSVP\)\*](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[\*Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)\*](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[\*Reporting Incidents of Bias or Harassment\*](#) - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[\*The Office of Student Accessibility Services \(OSAS\)\*](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[\*USC Campus Support and Intervention\*](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[\*Diversity, Equity and Inclusion\*](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[\*USC Emergency\*](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety,

including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call

Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or [otfp@med.usc.edu](mailto:otfp@med.usc.edu)

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.