

# Syllabus for MSMGT 785 Waste Management and Resource Recovery

**NOTE:** This syllabus document contains the basic information about this course. The most current syllabus is available in the course.

## Course Description

The topics included in this course include the generation, processing, and disposal of municipal, industrial, and agricultural waste materials, along with emerging issues like zero waste, producer responsibility and life cycle assessment. These topics are addressed from a technical, economic and environmental perspective, with an emphasis on beneficial reuse and resource recovery as opposed to traditional waste management. The interdisciplinary nature of this field, as well as its increasing emphasis on sustainability, will also be addressed through discussions, exercises and projects.

## Prerequisite(s)

None

## Course Outcomes

1. Develop an understanding of the generation, treatment, and disposal of municipal, industrial, and agricultural wastes.
2. Critically evaluate waste management and resource recovery processes and policies in the United States and other developed and developing countries.
3. Understand the critical linkage that waste management and resource recovery have in achieving sustainability, particularly as it relates to resource efficiency, energy, climate change and human health.
4. Develop communication skills necessary to effectively convey technical, economic, and social information related to waste management.

## Course Requirements/Components

### Class Participation/Discussions

You are expected to be prepared for class by reading the assigned materials and being an active participant in the discussions. You are expected to make an initial post on the topic as well as respond to at least two other posts.

### **Homework Assignments**

Homework assignments will be given periodically throughout the semester. Some homework assignments may be sequential. Therefore, it will be necessary to correct any errors on previous assignments to complete those that come later.

### **Research Paper and Presentation**

Over the course of the semester, you will work on an individual research project focused on a topic closely related to waste management or resource recovery. Examples of research topics, formatting details, and grading specifics can be found in the course. Based on your instructor's comments and feedback on your paper, you will develop and submit a presentation.

### **Peer Review of Presentation**

Your presentation will be reviewed and evaluated by the instructor as well as your peers. The peer review is a great opportunity for you to see the other projects and learn about a more diverse set of waste management topics.

### **Quizzes**

Some of the lessons include a short quiz.

### **Exams**

The two exams in this course will consist of short-answer and essay-type questions that reflect the materials covered in lectures and class discussions.

### **Grading**

Class Participation/Discussions	10%
Homework Assignments	25%
Research Paper and Presentation	25%
Peer Review of Presentation	5%
Quizzes	5%
Exam 1	15%
Exam 2	15%

A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79

C	74-76
C-	70-73
D+	67-69
D	64-66
D-	60-63
F	<60