

Course Number and Title: CEE 240L Soil Mechanics Lab

## **Course Description** (*Catalog Description*):

Laboratory Tests of Soil on: Field identification; Specific gravity of soil solids; Sieve analysis; Hydrometer analysis; Atterberg Limits; Compaction; Maximum density and minimum density of sandy soil; Unconfined compression; Direct shear; Permeability by constant head and falling head methods; Consolidation.

#### **Course Objective:**

The objective of this course is

To conduct a series of experiments in the laboratory to understand soil type and strength.

#### **Course Outcomes (COs):**

Upon successful completion of this course, students will be able to

CO 1. To be able to conduct experiments and evaluate generated data to understand the types of soil available, how to identify sand and clay, what are the experiments to evaluate the soil strength and to find parameters for engineering calculation.

## Mapping of CO-PO

Sl.	CO Description	Program	Bloom's	Delivery	Assessment
		Outcome	taxonomy	methods	tools
			domain/level	and activities	
			(C: Cognitive		
			P: Psychomotor		
			A: Affective)		
CO1	To be able to conduct experiments and	Po 4	P2	Lectures and	Viva &
	evaluate generated data to understand the			Experiments	Exam
	types of soil available, how to identify sand				

	and clay, what are the experiments to evaluate the soil strength and to find		
	parameters for engineering calculation		

## **Mark Distribution**

Total	100%
Final Written Exam	40
Lab Report	40
Attendance	20%

# **Course Plan**

Week	Task	Assessment Tool
1-10	Lab work	Report
Week 12	Written Final Exam	Exam