Course title: Field Trip							
Course code: WSW 103	No. of credits: 1	L-T-P: 2-2-20	Learning hours: 14				
Pre-requisite course code and title (if any): NA							
Department: Coca-Cola Department of Regional Water Studies							
Course coordinator: Dr. Fawzia Tarannum							
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Course type: Core	Course off	ered in: Semester 1					

Course description

The course is designed to provide the students an exposure to selected live examples of water resources conservation techniques and management through field/organization visits. The course includes visiting operational water and wastewater treatment plants, successful sustainable water conservation practices in both rural and urban contexts, attending expert lectures, and visiting state of the art technologies in water and disaster management.

Course objectives

- To provide exposure to the design, infrastructure and conservation capacities of water and wastewater management projects.
- To help the students develop a thorough understanding of the various field level factors to be considered in implementing a successful project.
- To introduce the students to the latest developments in technology and governance relevant to water resources management.

Course contents

Module	Topic	L	T	P
	Introduction to various sites/organizations chosen (before visit)			
1		2	0	0
	Briefing on the purpose of the site/organization visit, scope, and the			
	expected outcomes from the visit.			
	Details of the presentation to be delivered by the students post-trip.			
	Field visit and discussion (one or more of the items below)		0	1.4
	a. Site visit	0	0	14
	Hydro meteorological and geological characteristics of the site visited			
	Existing best practices in water conservation and management within the			
	site			
	Socioeconomic status of the community			
	Status of existing technologies			
	Operation and maintenance of an existing project			
	Socio-environmental benefits			
2				
	b. Organization visit			
	Technological and governance capabilities relevant to water management			
	and disaster mitigation			
	Demo of technologies relevant to water discipline			
	c. Water/Wastewater Treatment plant visit			
	Status of existing technology			
	Operation and maintenance of plant and monitoring			
	Performance of the plant from a sustainability perspective			
	Analysis and reporting (after visit - a combination of two or more items			
3	below)	0	2	6

Total	2	2	20
management			
Socioeconomic analysis of the community within the context of water			
mitigation of the site visited			
Application of computational technology in water management or disaster			
practices			
Challenges and scope of improvement in existing technologies and			
Performance evaluation of a treatment plant			
Hydrological analysis of the site with maps using GIS			
Background study			

Evaluation criteria

Presentation: 50%
Report: 40%
Interaction during visit: 10%

Learning outcomes

- Students understand the various factors to be considered in a water management project.
- Students learn to appreciate the state-of-the-art technologies in water and disaster management.
- Students get exposed to live projects through field level data collection, methodology formulation and analysis.
- Students are equipped to take up dynamic challenges in the field as water professionals.

Pedagogical approach

Class-room interactions; Field study; Group discussion

Materials

- Available project report or annual reports of the respective plants/projects/organizations
- Reports available with MoEFCC, CPCB, CGWB, CWC and other national and state level reports and policies

Additional information (if any)

Student responsibilities

Attendance; discipline; Q&A with the experts during field visit

Course Reviewer: MPEC