BSc. Civil Engineering (Session – 2016)

8th Semester

Course Time table										
Course: Hazard and Disaster Management (CE-409)	Name of Instructor: Engr. Aisha Butt	Class 2016	Semester 8 th	Duration Jan 2020 to May 2020						
Credit hours:	(Theory)	Class Timings: Thursday 8:00 am – 10.00 am								

Course Outlines

Objectives:

- To familiarize students with the basic concepts of natural and human induced hazards
- To enable students to learn the techniques for pre and post-disaster management.

Introduction to Hazards and Disasters (earthquakes, floods, droughts, landslides, cyclones, etc.), Social & Economic Aspects of Natural and human induced hazards, Hazard and Disaster Investigation, Disaster Management, Pre-Disaster Phase (Prevention, Mitigation & Preparedness), Disaster Phase (Response, relief and recovery), Post-Disaster Phase (Rehabilitation, Development), Damage assessment, Disaster management policies and institutional infrastructure from national to local level Monitoring of Infra-structure facilities; strategies for protection against possible damages; maintenance for different infrastructure facilities. Rehabilitation and repair strategies, Predictions and preparedness strategies for natural disasters such as Earthquakes etc; Emergency management; Awareness Programs; Follow-on Disasters; Recovery plans; Strategies for protection, Risk and Vulnerability Analysis; Disaster Mitigation

Recommended Books:

- Thomas D. Schneid, Disaster Management and preparedness, CRC Press; 1st Edition (2000)
- David Alexander, Principles of Emergency planning and Management, Published in the United State of America by Oxford University Press Inc. (1998)
- Timothy Beatley, Philip Berke, David J. Brower (1999) Natural Hazard Mitigation: Recasting Disaster Policy and Planning Island Press.
- Charlotte Benson, Edward J. Clay (2004) Understanding the Economic and Financial Impacts of Natural Disasters World Bank Publications.
- Mr. Aloysius J. Rego Director of Knowledge Sharing and partnerships and Co-Team Leader of Disaster management System team Asian Disaster preparedness Center (ADPC) 2003.

Course Learning Outcomes									
Sr. No	CLO	Domain	Taxonomy Level	PLO	Assessment				
1.	Explain hazards and disasters and their management phases	Cognitive	2	PLO-1					
2.	Value the different phases of disaster management	Cognitive	4	PLO-2					
3.	Debate on sustainability after disaster occurrence	Affective	3	PLO-7					
4.	Develop emergency preparedness plan for different disasters	Affective	4	PLO-12					

	Mapping of CLOs with PLOs													
Sr. No.	Course Learning Outcomes		Program Learning Objectives (PLOs)										Assessment	
	Course Learning Outcomes	1	2	3	4	5	6	7	8	9	10	11	12	Assessment
1.	Explain hazards and disasters and use their management for different scenarios	1												
2.	Value the different phases of disaster management		1											
3.	Debate on sustainability after disaster occurrence							1						
4.	Develop emergency preparedness plan for different disasters												1	