Course Description

The objective of this course is to arouse students’ interest in protecting the environment through the understanding of the relationship among water, you and the environment. It intends to give our students some basic concepts of water cycle & resource, water and you, water and the environment, and sustainable development via environmental impact assessment for mitigation of impacts on water and ecological system.

Topics

1. Water Cycle and Water Resource
2. Water, Contaminants and Human Health
3. Water Standard Development
4. Water Treatment
5. Water and Wastewater
6. Environmental Impact Assessment - Basic Concepts
7. Environmental Impact Assessment of Infrastructure on Water and Ecological System

Grading Scheme

- Project Report (40%)
- Presentation (40%)
- Course Participation (20%)

[Topics and grading schemes are subject to change as deemed appropriate. Students will receive information and guidelines in class on how they will be assessed for the course.]

Instructor

Prof. Irene LO

Prof. Lo is currently a Chair Professor in the Department of Civil and Environmental Engineering at The Hong Kong University of Science and Technology (HKUST) and has been joining HKUST since 1992. Prof. Lo is an elected Academician of the European Academy of Sciences and Arts (EASA). She received Michael Gale Medal for Distinguished Teaching award and Distinguished Teaching award twice at HKUST. She is the first Hong Kong scholar inducted into the EASA. She is an elected Fellow of the Hong Kong Institution of Engineers (FHKIE), and elected Fellow of the American Society of Civil Engineers (FASCE), She received her Ph.D. degree in Civil (Environmental) Engineering from the University of Texas at Austin. She is also Adjunct Professor of Tongji University, Tianjin University, Jilin University and Harbin Institute of Technology in China. She had been Visiting Professor of Technical University of Denmark and the University of Wisconsin at Madison. Prof. Lo was the recipient of the 2004 ASCE James Croes Medal, the 2007 ASCE Samuel Arnold Greeley Award, the 2008 EWRI Best Practice-Oriented Paper Award, the 2009 ASCE Wesley W Horner Award, and the 2012 ASCE EWRI Best Practice-Oriented Paper Award. Prof. Lo has held 2 Patents, edited 7 technical books, and published over 300 SCI journal articles and conference papers with citation of 9470+ and H-index of 48. Her research areas include biomass waste treatment and management; remediation technologies for river sediment, contaminated soils and groundwater; magnetic nano- and micro particles for environmental pollution control; and pollutant migration in soils.