Spring 2023

CIVL4430 Environmental Impact Assessment

Instructor: Prof. Xiangru ZHANG
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Course Description:
Relationship of environmental impact assessment (EIA) and national/regional environmental policy act; Planning and management of EIA; Methods for impact identification; Description of environmental setting; Prediction and assessment of air impact, water impact, noise impact, biological impact, and visual impact; Environmental monitoring; Preparation of EIA Reports according to the EIA Ordinance by the Hong Kong Environmental Protection Department; Case studies of EIA for several types of civil engineering projects.

Course Objectives:
Environmental impact assessment (EIA) has been mandated by legislation in over 100 countries/regions including Hong Kong. The objectives of this course are to encourage consideration of the environment in the planning and decision-making process so that adverse impacts on the environment can be avoided, minimized or mitigated; to introduce the conceptual framework of EIA planning and management, the methods for impact identification, and the contents of environmental setting description; to illustrate in detail the quantitative/qualitative methods for prediction, assessment and mitigation of air impact, water impact, noise impact, biological impact, and visual impact; and to provide guidance for preparing EIA reports according to the EIA Ordinance by the Hong Kong Environmental Protection Department.

Reference book:
Environmental Impact Assessment, 2nd Edition
by Larry W. Canter
ISBN: 0-07-114103-0
McGraw-Hill, Inc.

Mark Allocation:

Attendance	5%
Homework	15%
Exam	80%

Course Outline:
Week1: EIA and national/regional environmental policy act;
Week2: Planning and management of EIA;
Week3: Methods for impact identification; Description of environmental setting;

Week4-6: Prediction and assessment of air impact;
Week7-8: Prediction and assessment of water impact;
Week9: Prediction and assessment of noise impact;
Week10: Prediction and assessment of biological impact;
Week11: Prediction and assessment of visual impact;
Week12-13: Environmental monitoring; Preparation of EIA reports according to the EIA Ordinance by the Hong Kong EPD; Case studies of EIA for several types of civil engineering projects;
Week14-15: Help session.

Exclusion(s): CENG 4720 Prerequisite(s): CIVL 1140 or CIVL 2410