CE 432 – Environmental Impact Assessment

Code and Name: CE 432 – Environmental Impact Assessment

Credit Hours: 3 (Lecture: 3, Tutorial: 1)

Textbook:
- Environmental Impact Assessment by Canter L., 2nd Ed., McGraw-Hill, 1995

Other References:
- *Course handouts: distributed on a regular basis to provide more information on the topic.*

Course Description:
Study of environmental impacts of engineering projects on the environmental components of water, air, and soil. Social, economic and cultural impacts. Identification and prediction of various impacts and mitigational measures

Pre-requisites: CE 331 Environmental Engineering Processes
Co-requisites: None

Course Learning Outcomes:
With relation to ABET Student Outcomes (From Fall 2019-SOs: 1-7)
1. Describe the elements of environmental impact assessment(1)
2. Write environmental impact assessment report writing(3)
3. Justify and predict the environmental impacts caused due to civil engineering construction projects(4)
4. Analyze environmental impacts and find the remedial solution(2)
5. Demonstrate the problem and illustrate the results in a logical order(1)
6. Interpret the elements of environmental impact assessment and reporting in chronological order with remedy of the related impacts (3)

Topics to be covered:
- Functional elements of EIA (Screening, Scoping)
- Impact assessment technique (Simple Methods for Impact Identification Matrices, Networks and Checklists)
- Prediction and mitigation measures
- Decision Methods for Evaluation of Alternatives
- Public Participation in Environmental Decision Making
- Environmental Monitoring
- Environmental impacts of engineering projects on social, cultural and economic aspects
- Environmental impacts of engineering projects on water, air and soil

Grading Policy:
The grading for the course is: 60% coursework and 40% Final Exam. The course work consists of two Midterm Exams, where each midterm exam is worth 20%. It also includes quizzes, and/or projects for the remaining 20% that is modified by the course instructor.