

Construction & Building Engineering Courses (CB)

Environmental Engineering Courses Group

CB 534 – Special Topics in Environmental Engineering

COURSE INFORMATION

Course Title: Special Topics in Environmental Engineering

Code: CB 534

Hours: Lecture – 2 Hrs. Tutorial – 2 Hrs. Credit –3.

Prerequisite: CB 532

GRADING

Class Performance/Attendance: 10%

Midterm # 1/Assignments – (7th Week): 30%

Midterm # 2/Assignments – (12th Week): 20%

Final Exam: 40%

COURSE DESCRIPTION

Ecological perspective, water cycle, ecosystems, environmental regulation and legislation, Origin of environmental impact assessment, Sources of pollution, Air pollution and indoor air quality, Water quality management, Industrial wastes, Solid waste management, collection and disposal, Marine pollution, Noise pollution, Traffic noise prediction, Contribution of civil engineer in environmental control.

TEXT BOOK

Introduction to environmental Engineering by M.L. Davis and Cornwell Publisher: PWS Publishers Boston, 1985.

REFERENCE BOOKS

Environmental Engineering by H.S. Peavy, D.R. Rowe and G. Tchobanoglous Publisher: Mc Graw-Hill Co., New York, 1987.

Air pollution assessment and control by Schmidt Publisher: Wiley, 1998.

Ecological issues and environmental impact assessment by Cheremisinoff, Paul N. Publisher: Gulf Publishing Company, 1997.

APPENDIX A-160

COURSE AIM

The course aims at introducing the student to the main sources of pollution and the different pollution control systems.

SPECIFIC OUTCOMES OF INSTRUCTION

- The student should be aware with various types of pollutants and it's source, and understand the procedures for the control of each one.
- The student should be able to understand the effect of pollution on air, water and soil, the contribution of civil engineer in environmental control.

COURSE OUTLINE

Week Number 1: Environmental legislation and regulations

Week Number 2-3: Environmental legislation in Egypt

Week Number 4: Environmental impact assessment for civil engineering projects

Week Number 5-6: Air pollution standard, control and modeling

Week Number 7: Indoor air pollution

Week Number 8-9: Noise pollution standard, control and modeling

Week Number 10: Solid waste management

Week Number 11-12: Land fills design and solid waste recycling

Week Number 13: Hazardous and industrial waste management

Week Number 14-15: Water pollution standard, control and modeling

Week Number 16: Final Exam.

COURSE COORDINATOR AND DEMAND

Course Coordinator: Dr. Ola Diaa El Monayeri.

Course Demand: *Elective*