Course Specification
(Bachelor)

Course Title:	Environmental Impact Assessment
Course Code:	CE 4506
Program:	Bachelor of Science in Civil Engineering
Department:	Civil Engineering Department
College:	College of Engineering and Architecture
Institution:	Umm Al Qura University
Version:	1
Last Revision Date:	31 January 2025

Table of Contents

A. General information about the course: 3

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods 4

C. Course Content 5

D. Students Assessment Activities 6

E. Learning Resources and Facilities 6

F. Assessment of Course Quality 7

G. Specification Approval 7

A. General information about the course:

1. Course Identification

1. Credit hours: (3)					
2. Course type					
A.	☐University	☐College	☒ Department	☐Track	Others
B.	☐ Required		☒ Elective		
3. Level/year at which this course is offered: (level 9 or 10/5th year)					
4. Course General Description:					
Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse. EIA is basically a tool used to assess the positive and negative environmental, economic and social impacts of a project. This is used to predict the environmental impacts of a project in the pre-planning stage itself so that decisions can be taken to reduce the adverse impacts					
5. Pre-requirements for this course (if any)**:**					
Environmental Engineering					
6. Co-requisites for this course (if any)**:**					
Not Applicable					
7. Course Main Objective(s):					
The goal of environmental impact assessment is students will develop basic understanding of the history, need, structure, process, involved methods and challenges. Students will also learn criteria for selecting method for impact assessment, overview of methods, parameters for public participation ad technique for writing reports.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	3	100%
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	3
2.	**Laboratory/Studio**	
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	
Total		45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	demonstrate fundamental knowledge of environmental impact assessment.	K.2	Through lectures, module notes, tutorials, coursework, and project	Assignments, quizzes, and written exams.
1.2	Identify EIA Procedure - Scoping & Screening and Establishing Baseline Conditions	K.2	Through lectures, module notes, tutorials, coursework, and project	Assignments, quizzes, and written exams.
1.3	describe the Decision Making & Project Management	K.2	Through lectures, module notes, tutorials, coursework, and project	Assignments, quizzes, and written exams.
2.0	**Skills**			
2.1	Professionally apply the preliminary studies of environmental impact assessment	S.3	Through lectures, module notes, tutorials, coursework, and project	Assignments, quizzes and written exams.
2.2	Learn new theories, concepts, methods, etc and how to apply them	S.3	Through lectures, module notes, tutorials,	Assignments, quizzes and

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
	in environmental impact assessment.		coursework, and project	written exams, term project.
2.3	Apply analytical skills to a wide variety of environmental impact assessment.	S.2, S.3	Through lectures, module notes, tutorials, coursework, and project	Assignments, quizzes and written exams, term project.
2.4	Assess and compare the appropriate alternative solutions of the environmental problems.	S.2, S.3	Through lectures, module notes, tutorials, coursework, and project	Assignments, quizzes and written exams, term project.
3.0	Values, autonomy, and responsibility			
3.1	Function effectively in modes of independent learning and multi-disciplinary teams related to environmental impact assessment.	V.2	Lectures and training tutorials	Project and reports
3.2	Comply with code requirements for the environmental impact assessment.	V.1	Lectures and training tutorials	class works, project and reports

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Environment Management & EIA	3
2	Legal, Policy & Regulatory Framework	3
3	EIA Procedure - Scoping & Screening and Establishing Baseline Conditions	6
4	EIA Methodologies	6
5	EIA Methods, Tools and Techniques	6
6	Impact Management - Mitigation & Preparation of Environment Management Plans (EMP)	9
7	EIA Reporting & Review of EIA Quality	3
8	Decision Making & Project Management	3
9	Implementation & follow up	3
10	EIA Case Examples	3
Total		**45**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Assignments	Weekly	5%
2.	Quizzes	3 & 6 & 9,12	15%
3.	Group project	13	5%
4.	Mid-Term Exam	8	25%
5.	Final-Term Exam	16/17	50%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Wathern P., "Environmental Impact Assessment: Theory and Practice",Routledge Publishers,1990
Supportive References	• Marriott B., "Environmental Impact Assessment: A Practical Guide",McGraw-Hill Publication,1997 • Shrivastava A.K., Baxter Nicola, Grimm Jacob, "Environmental Impact Assessment", APH Publishers, 2003 • Anjaneyulu Y., Manickam Valli, "Environmental Impact Assessment Methodologies", CRC Press 2011 • Glasson J., Therivel Riki, Chadwick Andrew, "Introduction to Environmental Impact Assessment", Oxford Brookes University 2012/ 4th edition
Electronic Materials	• Institution of Civil Engineers
Other Learning Materials	None

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	White board needs to be replaced with a bigger one with all writing and other accessories.
Technology equipment (projector, smart board, software)	Computer with multi-media, a printer, internet connection, and data show.
Other equipment (depending on the nature of the specialty)	Non

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	• Students • Instructor • Program leader	• Indirect • Direct • Direct
Effectiveness of Students assessment	• Independent member teaching staff	• Direct
Quality of learning resources	• Students • Instructor	• Indirect • Indirect
The extent to which CLOs have been achieved	• Instructor • Students • Program leader	• Direct • Indirect • Direct
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**CIVIL ENGINEERING COUNCIL**
REFERENCE NO.	**THE FIFTEENTH SESSION OF THE ACADEMIC YEAR 1446**
DATE	**30 APRIL 2025**

