



University/Academy: Arab Academy for Science, Technology & Maritime Transport
Faculty/Institute: College of Engineering & Technology
Program: B.Sc. Architectural Engineering and Environmental Design

Form no. (12): Course Specification

1- Course Data

Course Code: AR 524	Course Title: Environmental Impact Assessment in Urban Planning	Academic Year/Level: 5th year / 9th semester
Specialization: Architecture	No. of Instructional Units Credit 2 Lecture 1 Tutorial 3	Prerequisite AR441

2- Course Aim

<p>In this course, students will:</p> <ul style="list-style-type: none"> • Explore the importance of Environmental Impact Assessment (EIA) in environmental management; • Develop an introductory understanding of EIA processes and methodologies; • Apply techniques to implement EIA.

3- Intended Learning Outcomes

a- Knowledge and Understanding	<p>Through knowledge and understanding, students will be able to:</p> <ul style="list-style-type: none"> • Examine and apply the general principles, applications, processes and methodologies of environmental impact assessment (EIA) in development projects. • Explain the approach and benefits in socio-economic impact, ecological impact and environmental risk assessments. • Analyze cases and/or projects related to EIA. • Critically evaluate the problems, limitations and future trends in implementation of EIA.
b- Intellectual Skills	<p>Through intellectual skills, students will be able to:</p> <ul style="list-style-type: none"> • In large and small group activities students will examine various principles, applications, processes and methodologies of EIA and apply these processes to examples of development projects. • Students in large and small group sessions will investigate and explain the approach and benefits in socio-economic impact, ecological impact and environmental risk assessments. Complementary guest presentations will promote analysis of real-life situations. • Students will learn through analysis of EIA case studies via individual/group work. • In large and small group critical evaluation tasks students will discuss the problems, limitations and future trends in implementation of environmental impact assessment.
c- Professional Skills	<p>Through professional and practical skills, students will be able to:</p> <ul style="list-style-type: none"> • In tutorial assignments and end-of-course examination students will apply the range of principles, applications, processes and methodologies to EIA examples. • Tutorial assignments, discussion and end-of-course examination will enable students to apply EIA concepts to evaluate the socio-economic impact, ecological impact and environmental risks and benefits. • In a case report and end-of-course examination students will analyze cases, apply knowledge to conduct EIA and communicate effectively in writing and about the complex issues in EIA. • Discussion and end-of-course examination, using problem-based questions which require students to critically evaluate problems, limitations and future trends in implementation related to EIA and environmental management.

d- General Skills	<p>Through general and transferable skills, students will be able to:</p> <ul style="list-style-type: none"> • Collect, analyze and present projects • Use different presentation methods through all possible sources including web-based ones. • Share the work with other members of An urban planning team. • Recommend best alternatives and strategy moving forward.
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4- Course Content

Week No.1	Introduction to EIA Principles, objectives and application
Week No.2	EIA processes
Week No.3	Methodologies in the identification, prediction and assessment of specific and cumulative impacts: overlay, checklist, matrices, sequences flow diagram, network and other systems
Week No.4	Identification and evaluation of mitigation measures.
Week No.5	Risk characterization, assessment and management.
Week No.6	Content, preparation and review of environmental impact statements.
Week No.7	Continuation of the previous lecture and evaluation.
Week No.8	Monitoring and auditing of environment impacts.
Week No.9	Case studies from developed and developing countries. Specific socio-economic impacts and limitations of EIA in developing countries.
Week No.10	Problems and constraints of EIA.
Week No.11	The nature of urban and regional planning and the environmental impacts
Week No.12	Continuation of the previous lecture and evaluation.
Week No.13	Research Project: Case Study Selection, data collection and analysis
Week No.14	Research Project: Case Study Presentation – Semi Final Presentation
Week No.15	Research Project: Final presentation and review of final term paper

5- Teaching and Learning Methods

<ul style="list-style-type: none"> • Lectures • Tutorials • Reports & sheets • Laboratories • Seminars

6-Teaching and Learning Methods for Students with Special Needs

- Consulting with lecturer during office hours.
- Consulting with teaching assistant during office hours.
- Private sessions for redelivering the lecture contents.
- For handicapped accessibility, please refer to program specification.

7- Student Assessment

a-Procedures used	1-Written Examinations to assess The Intended Learning Outcomes.	
	2-Class Activities (Reports, Discussions, -----) to assess The Intellectual Skills.	
b- Schedule:	Assessment 1	7 th Week Written Exam
	Assessment 2	12 th Week Written Exam
	Assessment 3	Continuous Assessments
	Assessment 4	16 th Week Final Written Exam
c- Weighing of Assessment	Exam	30 %
	Exam	20 %
	Final-term Examination	40 %
	Oral Examination	00 %
	Practical Examination	00 %
	Semester Work	10 %
	Total	100%

8- List of References:

a- Course Notes	Online notes will be distributed to students by e-mail.
b- Required Books (Textbooks)	• Canter L (1996) Environmental Impact Assessment (Second Edition). McGraw Hill Publishing Company. New York, USA
c- Recommended Books	<ul style="list-style-type: none"> • Donnelly A, Dalal-Clayton B and Hughes R (1998) A Directory of Impact Assessment Guidelines (Second Edition). International Institute for Environment and Development (IIED). Russell Press, Nottingham, UK. • IAIA/IEA (1999). Principles of Environmental Impact Assessment Best practice. International Association for Impact Assessment (IAIA) in cooperation with Institute of Environmental Assessment (IEA). USA/UK.
d- Periodicals, Web Sites, etc.	N/A