



Course Syllabus
According to JORDAN National Qualification
Framework (JNQF)

Course Name: Environmental Impact Assessment

Course Number: 4035174

General Course Information:

Course title	Engineering Statistics
Course number	04033272
Credit hours	Three Credit hours (Theory)
Education type	[Face-to-Face]
Prerequisites/corequisites	04033131- 04033271
Academic Program	Civil engineering
Program code	403
Faculty	Engineering
Department	Civil engineering
Level of course	3 rd year
Academic year /semester	First Semester 2021-2022
Awarded qualification	B.Sc
Other department(s) involved in teaching the course	Non
Language of instruction	English
Date of production/revision	3/01/2022

Course Coordinator:

Coordinator's name	Eng. Dua'a Almajali
Office No	4249
Office Phone extension number	2662
Office Hours	Sun, Tue, Thu (12:00-01:00)
Email	Duaa.almajali@iu.edu.jo

Other Instructors:

Instructor name	
Office No	
Office Phone extension number	
Office Hours	
Email	

Course Description(English/Arabic):

English	Environmental risk assessment process; environmental auditing. Procedures including an introduction to ISO14000 and its impact on the environmental auditing process; legal requirements relating to environmental assessments and impact assessments; strategies for waste minimization and pollution prevention. This course also includes a project involving the conducting of an actual environmental audit of a facility.
Arabic	عملية تقييم الخطر البيئي، طرق الرقابة البيئية ومن ضمنها طريقة ISO14000 وتأثيرها على عملية الرقابة البيئية، المتطلبات القانونية المتعلقة بالتقييم البيئي وتحديد الأثر، استراتيجيات تقليل النفايات ومنع التلوث. المادة تتضمن مشروع فصلي يتضمن الرقابة البيئية على بعض المرافق

Textbook: Author(s), Title, Publisher, Edition, Year, Book website.

John Glasson, Riki Therivel and Andrew Chadwick, Introduction to Environmental Impact Assessment
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References: Author(s), Title, Publisher, Edition, Year, Book website.

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Course Educational Objectives (CEOs):

1.	Understand the concept and basic process of Environmental Impact Assessment
2.	Familiarity with specific models and methodologies used for impact prediction on the physical-chemical (air, surface water, soil and ground water, noise), biological (habitat and nonhabitat), cultural (historic, archaeological, visual), and socioeconomic (traffic, jobs, housing) components of the environment..
3.	Carry out simple EIA

Intended Learning Outcomes (ILO's):

1.	Subject Intended learning outcomes (ILOs) describe what students are expected to know and be able to do at the end of the course. These outcomes are related to the knowledge, skill and competence that students acquire:	Relationship to CEOs	Contribution to PLOs	Bloom Taxonomy Levels*	Descriptors**
A	Knowledge and Understanding:				
A1	To be able to calibrate the pressure gauge	1	6	3	K
B	Intellectual skills:				
B1	To be able to determine the center of pressure	2	6	3	K
B2	Analyse and solve problems related to fluid dynamics and its application	3	6	3	S
B3	To be able to measure flow over wier				
B3	To know the buoyancy parameters of floating objects	4	6	3	S
C	Subject specific skills:				
C1	To be able to know the fundamental aspects related to the orifice and water jet	5	6	3	S
C2	To be able to measure Head Loss due to Friction in a Smooth Pipe				
D	Transferable skills:				

D1					
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***Bloom Taxonomy Levels**

Level#	1	2	3	4	5	6
Level Name	Knowledge	Comprehension	Application	Analysis	Evaluation	Synthesis

**** Descriptor (National Qualification Framework Descriptors): K : Knowledge, S: Skill, C: Competency.**

Program Learning Outcome (PLOs):

Program Learning Outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviours that students acquire as they progress through the program. A graduate of the (CE) program will demonstrate:		Descriptors**		
		K	S	C
1.	2. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.	√		
2.	3. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.			√
3.	4. An ability to communicate effectively with a range of audiences.		√	
4.	5. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.			√
5.	6. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.		√	
6.	7. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.		√	
7.	8. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	√		√

**** Descriptors according to the national qualifications framework (K: knowledge, S: skill, C: Competency)**

Weekly Schedule

✓ Face to Face

Week	First Hour + Second Hour + Third Hour	Ach. ILOs	Ach. PLOs	Descriptors*
1	Calibration of a Bourdon Pressure Gage	A1	6	S
2	Centre of Pressure on Submerged Plane Surface	A1	6	S
3	Centre of Pressure on Submerged Plane Surface	C1	6	K
4	Impact of Jet	A1	6	S
5	Flow over Weirs I	A1	6	k

6	Flow over Weirs II	A1	6	S
7	Flow Through Small Orifice	A1	6	S
8	Flow Meter Demonstration	A1	6	S
9	Head Loss due to Friction in a Smooth Pipe	A1	6	S
10	Pressure Measurement	C2	6	K
11	Stability of Floating Bodies	A1	6	S
12	Med Exam	A2	6	S
Final Exam				

* K: Knowledge, S: Skills, C: Competency

Teaching Methods and Assignments:

<p>Development of ILOs is promoted through the following teaching and learning methods:</p> <p>Interactive videos</p> <p>Practice Labs</p> <p>Discussion Forums</p> <p>Quizzes</p> <p>Other Interactive online activities</p> <p>Reports</p>
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Course Policies:

<p>A- Attendance policies: The maximum allowed absences is 15% of the lectures.</p> <p>B- Absences from exams and handing in assignments on time: Midterm exam can be retaken based on approval of excuse by the instructor's discretion. Not handing assignment on time will incur penalties.</p> <p>C- Academic Health and safety procedures</p> <p>D- Honesty policy regarding cheating, plagiarism, and misbehaviour: Cheating, plagiarism, misbehaviour will result in zero grade and further disciplinary actions may be taken.</p> <p>E- Grading policy:</p> <ul style="list-style-type: none"> • All homework is to be posted online through the e-learning system. • Exams will be marked within 72 hours and the marked exam papers will be handed to the students. • Online Activities (Course Videos, Practice labs, Discussion Forums, Quizzes) 20% • Midterm 30% • Final Exam 50% <p>F- Available university services that support achievement in the course: E-Learning Platform, Labs, Library.</p>
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Required equipment:

- PC / Laptop with webcam and mic
- Internet Connection
- Access to the IU E-Learning Platform at:<https://elearn.iu.edu.jo/course/view.php?id=2105>
- E-learning plan
- Satisfaction questionnaires for online and face-to-face learning
- Software for e-learning
- Training

Assessment Tools implemented in the course:

- ✓ Final Exam
- ✓ Midterm Exam
- ✓ Homework
- ✓ Discussion Forums
- ✓ Periodic reports for learning assessment
- Improvement plans for online or face-to-face teaching
- Others: Quiz

Responsible Persons and their Signatures:

Course Coordinator	Eng. Dua'a Al-Majali	Completed Date	13/ 2/ 2022
		Signature	
Received by (Department Head)	Dr. Ibrahim Varooqa	Received Date	15/ 2 / 2022
		Signature	