

Jordan University of Science and Technology Faculty of Institute Of Nanotechnology Water, Energy And Food Nexus Department

WEF701 Introduction In Wef Nexus - JNQF Level: 9

First Semester 2024-2025

Course Catalog

3 Credit Hours. The Water-Energy-Food (WEF) Nexus course introduces the principles of the Water-Energy-Food (WEF) interlinkages and their implications on the security and sustainability of WEF systems at different levels. The course provides a basic understanding of the interconnectedness of WEF by focusing on the sustainable management of such resources. It explores how these critical systems interact and the challenges posed by the population growth, climate change and scarcity of resources. The course will teach the students the development of customized holistic science-based solutions and strategies for achieving sustainable and integrated resources management. It will also learn how to critically evaluate policies and strategies for sustainable WEF governance.

Teaching Method: Blended

Text Book				
Title	Lazaro, L.L.B., Giatti, L.L. and de Macedo, L.S.V. eds., 2022. Water-energy-food nexus and climate change in cities. Springer. file:///C:/Users/user/Downloads/978-3-031-05472-3.pdf			
Author(s)	Lazaro, L.L.B., Giatti, L.L. and de Macedo, L.S.V. eds			
Edition	1st Edition			
Short Name	1			
Other Information				

Instructor		
Name	Prof. Hani Abu Qdais	
Office Location	C1 L3	
Office Hours	Sun: 10:30 - 12:00 Mon: 11:00 - 13:00 Tue: 10:30 - 12:00 Thu: 11:00 - 13:00	
Email	hqdais@just.edu.jo	

Class Schedule & Room

Section 1:

Lecture Time: Sun: 13:00 - 14:30

Room: NANO 1

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Explain the concept of the Water-Energy-Food (WEF) Nexus and its importance in addressing global sustainability challenges. [1L9S2]	20%	
Identify and describe the interdependencies among water, energy, and food systems. [1L9K1]	20%	
Evaluate the impact of various policies and interventions on the WEF Nexus. [1L9C4]	20%	
Analyze the complex relationships between water, energy, and food systems. [1L9K2]	20%	
Design and propose solutions that integrate water, energy, and food systems to address real-world problems. [1L9S3]	20%	

Relationship to NQF Outcomes (Out of 100%)							
L9K1	L9K2	L9S2	L9C4	L9S3			
20	20	20	20	20			

Policy	
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Generative AI Course Policy

Policy Guidelines

Permissible Uses of Generative Al:

Generative Al tools (e.g., ChatGPT, DALL·E, or similar) may be used for:

Brainstorming ideas for projects or assignments.

Drafting preliminary content or research questions.

Summarizing complex topics related to the WEF Nexus.

Visualizing concepts or systems for presentation purposes.

Prohibited Uses of Generative Al:

Submitting Al-generated content as original work without proper acknowledgment.

Using Al tools to fabricate data or manipulate findings in research.

Misrepresenting Al contributions as personal insights or analysis.

Citing Al Contributions:

Any use of AI tools must be transparently acknowledged in assignments, presentations, or discussions. For example:

"This summary was generated using [Al Tool Name] as a basis, with subsequent edits by the author." Visual outputs (e.g., diagrams, images) created with Al tools should be labeled accordingly. Academic Integrity:

The course adheres strictly to institutional policies on plagiarism and ethical conduct. Improper use of AI tools that undermines the authenticity of a learner's contributions will be subject to review.

Critical Evaluation of AI Outputs:

Learners are expected to critically evaluate and refine Al-generated content to ensure accuracy, relevance, and alignment with course objectives.

Al tools should not replace foundational learning activities, such as reading core texts or engaging in discussions.

Ethical Considerations:

Learners must ensure Al usage respects intellectual property, avoids biases, and aligns with ethical principles.

Support and Resources

Workshops and Guidance: Periodic workshops will be provided to help learners use generative AI effectively and responsibly in the WEF Nexus context.

Consultation: Students are encouraged to consult instructors for guidance on appropriate Al usage in their coursework.

Policy Acknowledgment

By participating in the WEF Nexus course, learners agree to abide by this Generative Al Policy and uphold the principles of academic integrity and ethical conduct.

For any questions or clarifications, please contact the course coordinator.

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