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EU clim
Erasmus+ Jean Monnet Module

EU climate change Adaptation (EU- Clim)

ERASMUS Jean Monnet Module – Zarqa University

Objectives of the EU-Clim Project

- **Transfer of EU Dynamics:** Elaborating on how the module intends to transfer knowledge about the European Union's dynamic approaches to climate change.
 - **Empowering Local Stakeholders:** Detailing how the module aims to empower local stakeholders and decision-makers with insights from EU regulations and remedial actions.
 - **Advancing European Regional Climate Change Response:** Emphasizing the role of the module in advancing the regional response to climate change in Jordan by incorporating European best practices
-

Modules Objectives

- Goal is to promote the European Union's experience to combating climate change, featuring
 - Regulations
 - Environmental Impacts
 - Economic Impacts
-

Project Team

- Coordinator: Dr. Ashraf Shaqadan
- Teachers:
 - Dr. Ashraf Shaqadan – Engineering Faculty
 - Dr. Omar Almakhzoumi – Law Faculty
 - Dr. Abeer Braim – Law Faculty



EU-Clim Logo



EU-Clim Poster



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Jean Monnet module European Experience in Climate Change Mitigation

Project # 101126457 EU clim
Coordinator: Dr. Ashraf Shaqadan

The EU is a key factor in the international arena. The project will strive to promoting EU values and present its actions and regulations frameworks towards global climate change.

The project aim is to advance European regional climate change response and transfer European expertise to inform students, local stakeholders and decision - makers.



Project Aims and Objectives

- * Create a Jean Monnet module about climate change mitigation, Laws and regulations and impacts integrated in engineering and law faculty programs in Zarqa University.
- * A new elective course added to engineering bachelor program called "EU Climate Change Adaptation".
- * A new elective course added to law bachelor program called "EU Climate Change Adaptation -Legal Perspective" in law faculty.
- * Three workshops conducted by experts focusing on EU climate change perspectives in international legislation and policy, environmental adaptation, and impacts on economy and society.
- * Dissemination of teaching material in local community and relevant institutions, with the aim to expand horizontal dimension of awareness.



Youtube Channel

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Your channel

ashraf shaq

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Channel content

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Video	Visibility	Restrictions	Date ↓	Views	Comments	Likes (vs. dislike...)
<input type="checkbox"/> <p>Green House Gases part2 Green House Gases part2</p>	Public	Copyright + 1 more	Apr 11, 2024 Published	0	0	-
<input type="checkbox"/> <p>GreenHouse gases part1 GreenHouse gases part1</p>	Public	Copyright + 1 more	Apr 11, 2024 Published	0	0	-
<input type="checkbox"/> <p>Energy Balance and Climate Energy Balance and Climate</p>	Public	Copyright + 1 more	Apr 11, 2024 Published	0	0	-
<input type="checkbox"/> <p>Welcome to EU-Clim Introduction to EU-Clim Module</p>	Public	Copyright + 1 more	Jan 8, 2024 Published	6	0	-

Newsletter



NewsLetter
14/11/2023

حصلت جامعة الزرقاء، الأحد 24/12/2023 على دعم من الاتحاد الأوروبي ضمن المشاريع البحثية لمشروع ايراسموس - فئة "جون"، وحمل عنوان "تجربة الاتحاد الأوروبي في معالجة التغير المناخي"، وضم الفريق البحثي للمشروع مدير وحدة التعاون الدولي الدكتور أشرف شقدان وعميد كلية الحقوق الدكتور عمر المخزومي.

ويهدف المشروع لتعريف طلبة الجامعة والمجتمع المحلي بسياسات وأنظمة الاتحاد الأوروبي المتعلقة بالتغير المناخي وأثاره، بالإضافة إلى الاتفاقيات الدولية ومعالجة أسبابه، والذي يستمر إلى ثلاث سنوات. وسيدأ العمل في المشروع باستحداث مساقين دراسيين في كليتي الهندسة والحقوق، الأول في كلية الهندسة بمسمى (تجربة الاتحاد الأوروبي في معالجة التغير المناخي)، ومساق (التجربة القانونية للاتحاد الأوروبي في معالجة التغير المناخي) في كلية الحقوق. وتضمن الفريق البحثي الدعم المتميز الذي تقدمه إدارة الجامعة ممثلة برئيس مجلس إدارة شركة الزرقاء للتعليم والإستثمار الدكتور محمود أبو شعيرة ورئيس الجامعة الأستاذ الدكتور نضال الرمحي في دعم المشاركة في المشاريع الدولية.





NewsLetter #2 03/13/2024

EU underprepared as climate change risks mount, draft report says

BRUSSELS, March 7 (Reuters) - Europe is in urgent need of stronger measures to prepare healthcare systems, farming and critical infrastructure for increasingly severe climate change, a draft report by the European Environment Agency (EEA) said. As the hotter planet unleashes more heatwaves, drought and flooding, the European Union is developing its first Europe-wide analysis of climate-related risks to try to ensure future EU policies and spending take them into account.



<https://www.reuters.com/sustainability/eu-underprepared-climate-change-risks-mount-draft-report-says-2024-03-07/>

Lake Geneva's water temperatures are rising at an unprecedented pace

Marie-Elodie Perga, a leading authority on lake studies at the University of Lausanne, underscores the gravity of the situation. Urgent action is needed to address global warming by curbing CO₂ emissions is imperative. Experienced fishermen are witnessing firsthand the repercussions, noting a significant uptick in perch catches compared to historical norms. Typically, perch spawning commences in May. While certain species may seem to benefit from the warming temperatures, others are facing imminent threats. The ecosystem of Western Europe's largest freshwater reserve is undergoing profound transformations. Scientists, deeply concerned by these developments, took proactive measures five years ago by installing a sophisticated platform equipped with hundreds of sensors on the lake, facilitating comprehensive analyses.



<https://www.autonews.com/tag/climate-change>

Brussels warns of water conflict danger in EU

BRUSSELS — Water scarcity risks sparking conflict among European Union countries unprepared for a warming world. The stark message is part of a European Commission communiqué imploring EU governments to pick up the pace in their preparations to counter climate change, arguing they have fallen well short of what is necessary — a blunt warning that will serve as the EU's last major climate initiative ahead of June's bloc-wide elections. In an undated draft of the text seen by POLITICO, the Commission identifies water shortages as an issue that threatens nearly every aspect of life: the food we eat, the water we drink and the infrastructure that powers and transports society, not to mention basic economic activities and human health. In general, the Commission says, the EU can expect "more disasters such as droughts, floods, wildfires, diseases, crop failures, heat deaths, infrastructure damage, and structural changes to the environment" — but warns that the bloc isn't planning for those risks.

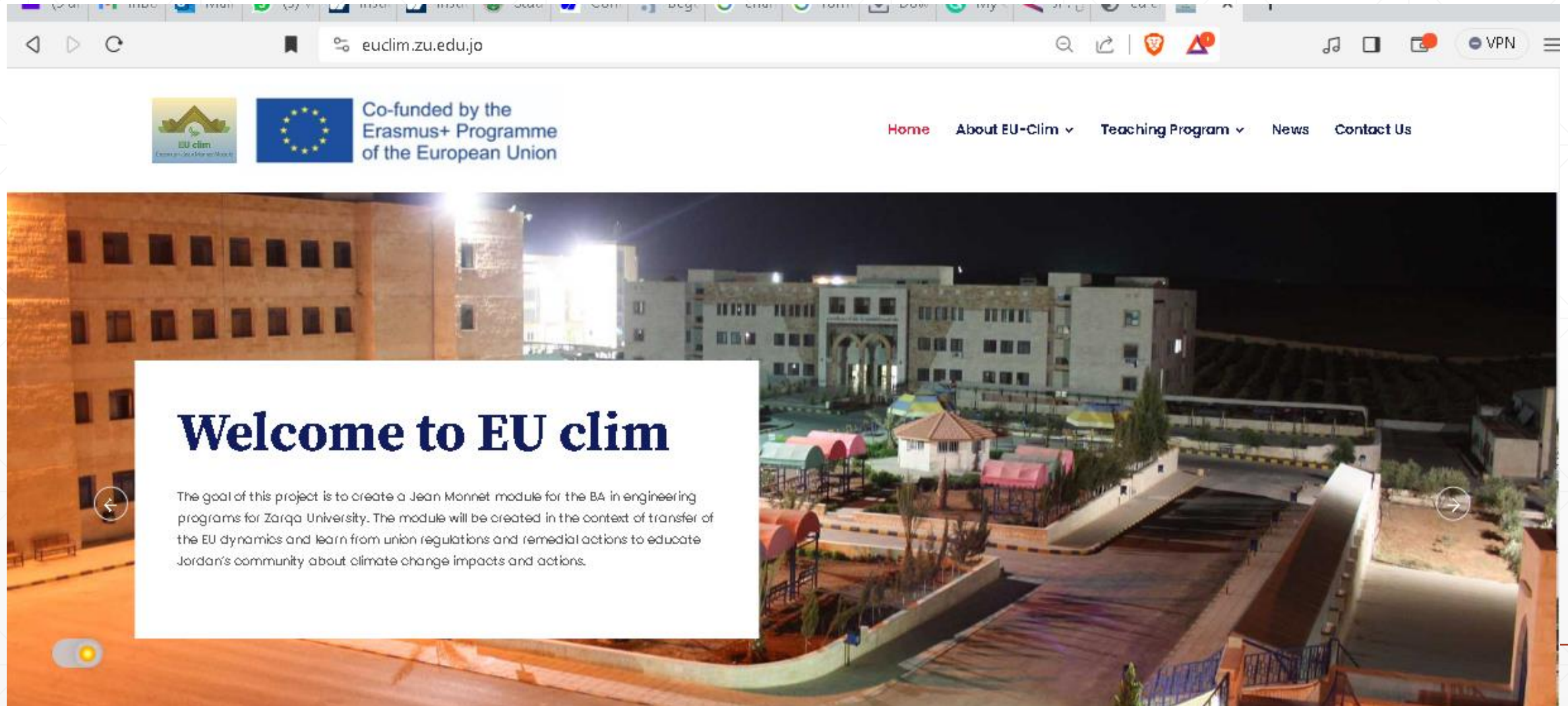


<https://www.reuters.com/world/europe/brussels-warns-water-conflict-danger-eu-2024-03-07/>

<https://www.youtube.com/watch?v=JUC2xK2S-2q&list=PL2ZzVt6w>

EU-Clim Website

<https://euclim.zu.edu.jo/>



Courses Information



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a- Engineering Faculty Module

Title: European Climate Change Experience –3 credit hours

The course is newly developed as elective course in the Bachelor degree program in Engineering faculty.

The course comprises 40 teaching lectures, incorporating dynamic group discussions and seminars across four courses offered by the Department of Civil Engineering. Specifically tailored to offer a comprehensive understanding of climate change dynamics, environmental shifts, and economic impacts, the curriculum places a distinct emphasis on the European context. Students will engage with historical climate patterns, conduct thorough analyses of environmental impacts on diverse ecosystems, and evaluate economic consequences within sectors like agriculture and energy. Additionally, the course delves into mitigation and adaptation strategies, evaluates European climate policies, and underscores the importance of global collaborations. Through immersive case studies, assessments, and a final project, participants will attain a profound understanding of Europe's strategic response to climate challenges. The curriculum further explores the European Union's extensive climate policy, addressing critical aspects such as greenhouse gas emissions reduction, climate change adaptation, and the transition to a low-carbon, climate-resilient economy. It delves into the global role of EU environmental and sustainable development policies, major European and global environmental issues, the Environment Action Program to 2030, the renewed Sustainable Development strategy, and the integration of environmental considerations into decisions and activities across various policy sectors. Topics covered encompass climate change, atmospheric, biospheric, hydrospheric, and lithospheric processes, the greenhouse effect, global warming, the impact of

[euclim.zu.edu.jo/en/ModuleInfo](#)



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the impacts of climate change.

b- Law Faculty Module

Course 2: European Legal Experience in Climate Change Adaptation –3 credit hours

The course is newly developed as elective course in the Bachelor degree program in Law faculty.

The proposed module aims to provide students, practitioners and civil society with in-depth knowledge about the European and international laws and policies , its achievements and challenges, and its interaction with emerging environmental issues and landmark intergovernmental processes.

The Module is 40 hours of lectures , group discussions and seminars across four courses offered by the Department of Law of Zarqa University.

The course titled "The European Legal Experience in Addressing Climate Change" offers a comprehensive exploration of climate change-related regulations and laws within the European context. Designed to provide participants with an in-depth understanding of the legal frameworks and mechanisms shaping climate action, the curriculum incorporates insightful case studies and a thorough analysis of international agreements. Participants will delve into the European Union's intricate legal landscape addressing climate change, examining regulatory frameworks aimed at mitigating greenhouse gas emissions, promoting renewable energy, and fostering sustainable practices. Moreover, the course will explore



EU-Clim Website



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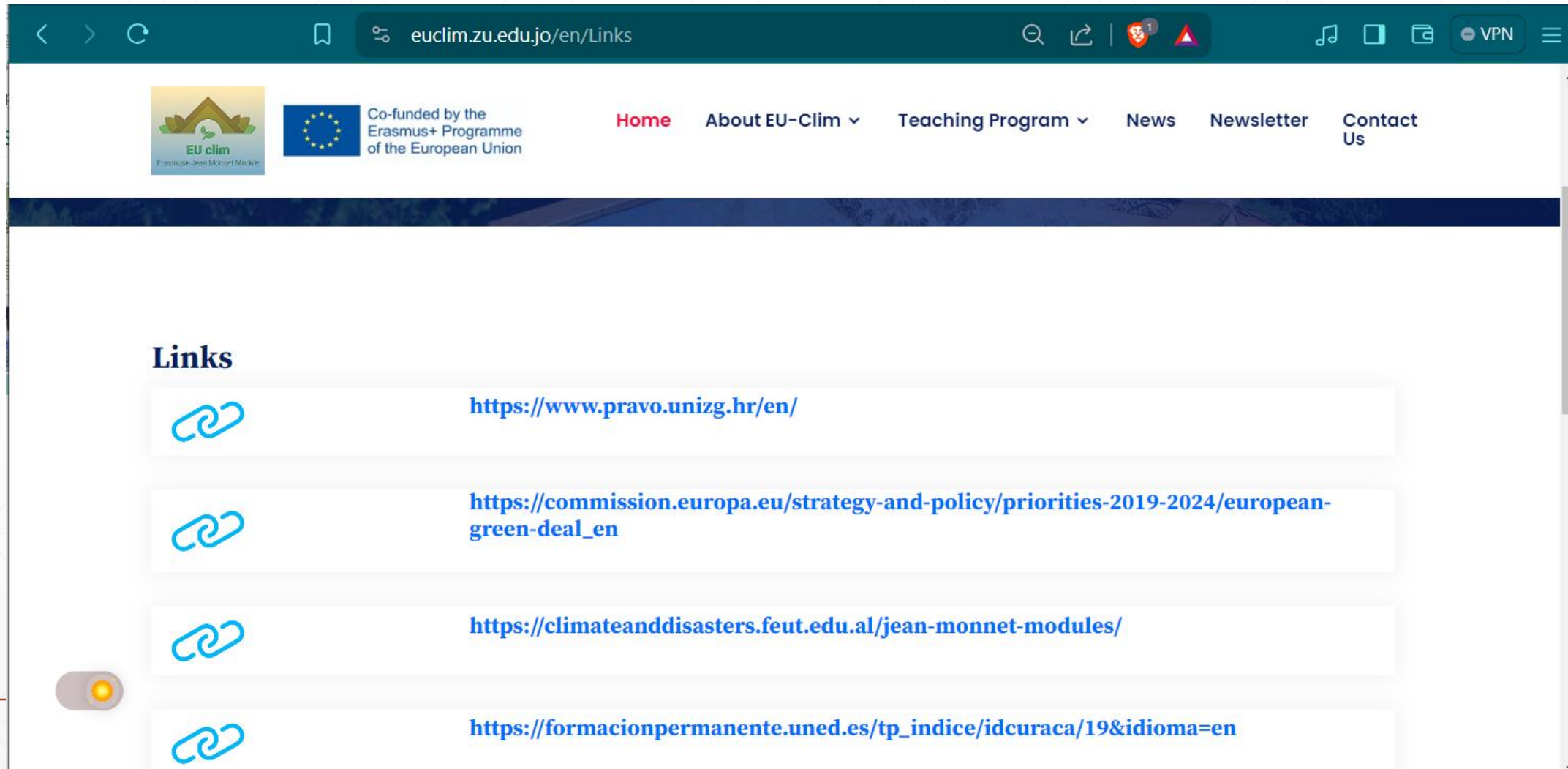
 Jan 1, 2024

Zarqa University Secures Erasmus Support for Climate Change Project

[Read More](#) →

Latest News

EU-Clim Website



The screenshot shows a web browser displaying the EU-Clim website. The browser's address bar shows the URL `euclim.zu.edu.jo/en/Links`. The website header includes a logo for "EU clim Erasmus+ Jean Monnet Module" and a text indicating it is "Co-funded by the Erasmus+ Programme of the European Union". The navigation menu contains links for "Home", "About EU-Clim", "Teaching Program", "News", "Newsletter", and "Contact Us". The main content area is titled "Links" and lists four external links, each preceded by a blue chain-link icon. A small "VPN" button is visible in the top right corner of the browser interface.

euclim.zu.edu.jo/en/Links

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Links

- <https://www.pravo.unizg.hr/en/>
- https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en
- <https://climateanddisasters.feut.edu.al/jean-monnet-modules/>
- https://formacionpermanente.uned.es/tp_indice/idcuraca/19&idioma=en

Project Outcomes- New Courses

- Course 1:
 - EU Climate Change Adaptation Course called "EU experience in Climate Change Adaptation" course in the engineering bachelor program, focusing on cutting-edge climate change strategies and solutions.
 - Module focus on 1) Water and Environment impacts and 2) Economic Impacts
 - Course 2:
 - Law Faculty Course: Presenting a dedicated course in the Law faculty, titled "Climate Legislative and Regulatory EU Actions," to deepen legal understanding of climate-related regulations.
-

Engineering Course – European Experience in Climate Change


Management 3 c hrs

Elective course in Bachelor Engineering program


Total 46 hours in semester.

Teacher Dr. Ashraf Shaqadan


Faculty: Engineering Technology			
Department: Civil Engineering		Program: Civil Engineering	
Academic year: 2023/2024		Semester: 1st	



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Course Plan

First: Course Information

Course No. 0902580	Course Title: European Climate Change Experience	Credit Hours: 3
Prerequisite: 0902221	Section No.:	Lecture Time: 9-10
Type Of Course:	<input type="checkbox"/> Obligatory Faculty Requirement <input checked="" type="checkbox"/> Elective University Requirement <input type="checkbox"/> Obligatory University Requirement <input checked="" type="checkbox"/> Faculty Requirement <input checked="" type="checkbox"/> Course Elective Specialization Requirement <input type="checkbox"/> Obligatory Specialization requirement	
Type of Learning:	<input checked="" type="checkbox"/> Face-to-Face Learning <input type="checkbox"/> Blended Learning (2 Face-to-Face + 1 Asynchronous) <input type="checkbox"/> Online Learning (2 Synchronous + 1 Asynchronous)	


Second: Instructor's Information

Name: Ashraf Shaqadan		Academic Rank: Associate Professor			
Office Number: 231 L		Ext. Number:	E-mail: ashqadan@zu.edu.jo		
Office Hours:	Sunday 10-11	Monday 09-10	Tuesday 10-12	Wednesday 09-10	Thursday 10-11

Third: Course Description

The course introduces students to the European Union (EU) climate change policies and mitigation actions. EU has a comprehensive climate policy aimed at reducing greenhouse gas emissions, adapting to the impacts of climate change, and fostering the transition to a low-carbon, climate-resilient economy.
The course discusses the growing global role of EU environmental and sustainable development policies, introduces and examines the major European and global environmental issues, the

ZU/QP10F004



issue:02 Issue Date: 11/7/2021

Engineering Program Course – 2nd sem\2024



Law Program Course – EU Legal Experience in Climate change Management – 3 cr hr



Elective course in Law Bachelor program
Total 46 hours in 2nd semester
2024
Teacher Dr. Omar Al-Makhzoumi

Course Moodle Website

Zarqa University

تجربة الاتحاد الأوروبي في معالجة التغير المناخي - شعبة 1- صباحي-وجاهي

Dashboard / My courses / تجربة الاتحاد الأوروبي في معالجة التغير المناخي - شعبة 1- صباحي-وجاهي

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- Syllabus
- Lectures
- ACTIVITY1: Glaciers- 03/07/24
 - Objectives
 - Students will understand how alpine glaciers changed over the 20th century.
 - Students will understand possible reasons for glacier retreat over long and short periods of time.
 - Students will consider the possible impacts of global glacier retreat.
 - Study the pictures at following link and write in which countries they exist
https://scied.ucar.edu/sites/default/files/documents/A-Century-of-Glacier-Change_image-pairs.pdf
- Activity 2 : Analyzing Tree Ring Data Sequences- 03/14/2024
 - Activity Objectives :
 - Students will understand that data about past climates and climate change can be gathered from sources other than weather data, and that some of these data sources span time periods long before human weather observations began.
 - Students will observe the direct correlation between climate and annual tree growth patterns.
 - Students will learn how longer climate chronologies can be built up by combining tree ring samples from multiple trees as long as the growth periods of the different trees overlap somewhat.
- Activity 3: 03/21/2024 - Sea level Rise
 - Watch the [Rising Sea Level video](#) (6 min) from the National Science Foundation and NBC Learn: Ask student to note (1) how much sea level has changed in recent years,
 - (2) how much sea level change is projected for this century, and
 - (3) the two reasons that sea level rises due to climate change.
 - <https://scied.ucar.edu/video/rising-sea-levels>

EU Experience: Powering Change- EU's Investments in Clean Energy

- Shedding light on EU policies driving investments in renewable energy to address environmental issues and combat climate change.



Module Structure

- Part 1: Fundamental EU climate change policies, regulations, laws and their implications.
 - Part 2: Environmental Impacts in Europe and MENA region
 - Part 3: Economic Impacts in Europe and MENA region
 - Workshops educating local community / students about climate change
-

Future Activities -Workshops

- Workshop Topics: Outlining the diverse topics of the three workshops, covering areas such as policy implementation, technological advancements, and case studies.
 - Expert Involvement: Highlighting the participation of industry experts, EU representatives, and climate change specialists in the workshops.
 - Duration: Communicating the three-year timeline for the workshop series, ensuring sustained engagement and knowledge transfer.
-

Conclusion and Future Impact

- Project Impact: enhancing academic curricula to fostering a deeper understanding of climate change among students and the local community.
 - Sustainability: Emphasizing the long-term sustainability of the project's outcomes, envisioning continued collaboration between Zarqa University and European Union initiatives for climate change.
 - Raise awareness among local community and students in climate and environment challenges
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Project Information

- Dr. Ashraf Shaqadan
- E-mail: ashaqadan@zu.edu.jo
- Project Videos: <https://youtu.be/SjMsRpxrRW0>

