AAU Sustainable Development Programme: Establishing a Roadmap towards a Green Built Environment

برنامج جامعة عمان الاهلية للتنمية المستدامة: وضع خارطة طريق نحو بيئة مبنية خضراء

Vision of the programme

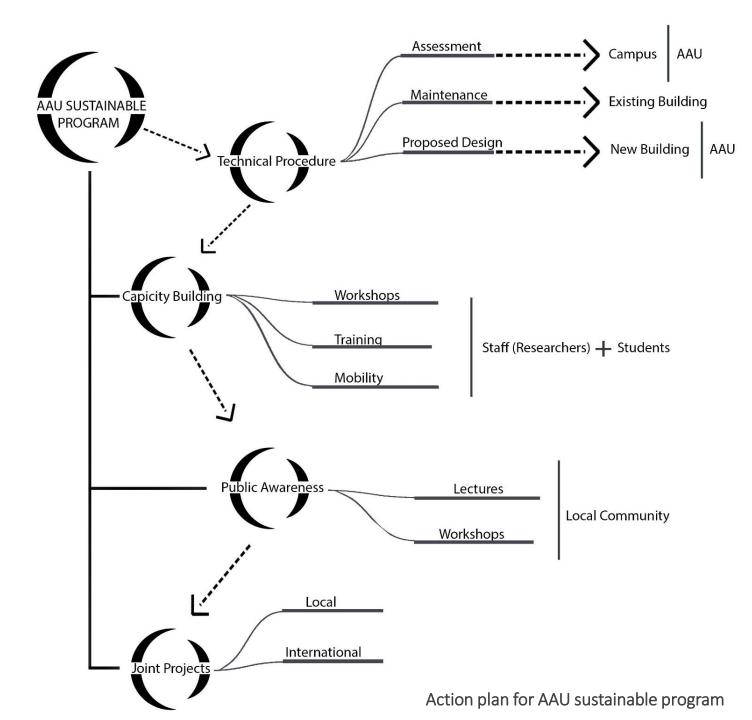
Promote construction and capacity for creating a highperformance built environment that is sustainable, comfortable, more energy and water-efficient, and environmentally responsible, according to the Jordanian context.

Mission of the programme

Achieve the social, environmental, and economic goals indicated in the vision by supporting and accelerating the adoption of green building construction, awareness, principles, education, policies, practices, standards, and tools. This plan will help to create sustainable architecture and sustainable communities that are environmentally responsible, profitable, and healthy places to live, work, and play.

Goals of the programme

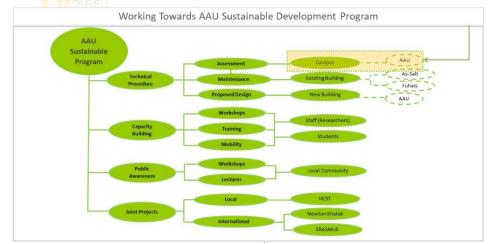
- To promote environmentally responsible design and building methods and solutions based on Jordan's standards of green building.
- To contribute to capacity building for researchers and students at AAU.
- To participate in community awareness about sustainability.
- To build collaboration and establish new research links locally and internationally.





Towards a Sustainable University Campus:

To achieve a World University Ranking in terms of green campus. Suggested accreditation is UI Green Metric World University Rankings Network (UIGWURN)).



Objectives

- 1. To investigate AAU campus sustainability in terms of different environmental and social categories used in the UI-Green Metric International rating system.
- 2. To demonstrate and develop (low cost- medium cost high cost) strategies for a healthy and eco-friendly campus environment.
- 3. To promote university-led social change concerning sustainability goals.
- 4. To outline recommendations for constructing a sustainable environment in the AAU campus that can ensure accreditation of the campus in the UI Green Metric World University Ranking.
- 5. To participate as a member of UI Green Metric World University Rankings Network (UIGWURN).

References

- 1. Lozano, R. (2010). Diffusion of sustainable development in universities' curricula: An empirical example from Cardiff University, J. Clean, Prod. 18, 637-644.
- 2. Tumbas, P.; Matkovic, P.; Sakal, M. and Pavlicevic, V. (2015). Sustainable university: Assessment tools, factors, measures and model. University of Novi Sad, Faculty of Economics Subotica (SERBIA).
- Ranking GreenMetric WUR, Overall http://greenmetric.ui.ac.id/overall-ranking2015/.

Suggested accreditation University Rankings Network (UIGWURN)) campus. University Ranking in terms of green Metric World

World (

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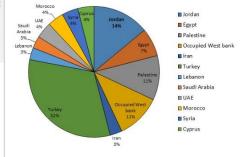
Green

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UI Green Metric Rating Criteria

ME countries participation in green universities movement according to UI Green Metric

Sustainable University Campus



AAU in of case The AAU ampus: Sustainable University ത **Towards**

Jorda

Assessment AAU Campus Maintenance **Existing Building AAU SUSTAINABLE** PROGRAM Proposed Design **New Building** Technical Procedure Capicity Building Workshops Training Staff (Researchers) + Students Mobility Public Awareness Lectures **Local Community** Workshops Local International Joint Projects

ordan

Project Highlights

New international rank 2019: UI GreenMetric

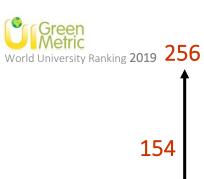
1 Annual report 2019

Sustainable website

4 Publications

1 Fulbright award (JFDP)

2 Workshops and awareness campaign





World University Ranking 2018

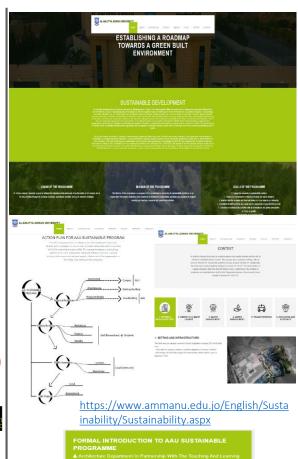


University: Al-Ahliyaa Amman University Country: Jordan

Web Address: https://www.ammanu.edu.jo/English/HomeP/Home.aspx

Topics of the project

- 1. Setting and Infrastructure
- 2. Energy and Climate Change
- 3. Waste Efficiency
- 4. Water Efficiency
- 5. Transportation
- 6. Education



WHAT DOES SUSTAINABILITY MEAN TO YOU?

HOW TO BE SUSTAINABLE? ▲ Department Of Architecture 6 16 March 202



FORMAL INTRODUCTION TO AAU SUSTAINABLE

You are cordially invited to attend the lecture on "Formal Introduction To AM organised by Teaching And Learning Center



Architecture Engineering 19328 Amman Jordan, Hashemite Kingdom of

This is to confirm that Dr. Saba Fawzi Alnusairat is welcome to participate in PLEA 2020 - Planning Post Carbon Cities, to be held in A Coruña, Spain from 1st-3rd September 2020.

lease note that registration fees, travel, living and accommodation expenses will not be supported by the conference

We look forward to seeing Dr. Saba Fawzi Alnusairat in PLEA 2020 conference



ktu

KAUNAS UNIVERSITY OF TECHNOLOGY INSTITUTE OF ENVIRONMENTAL ENGINEERING

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2020-11-20 Nr. DV19-MI-50-41

This is to confirm that the manuscript "Towards Zero Solid Waste in Jordanian Universities: The Case of Al-Ahliyya Amman University*** by Zahra Al-Shatnawi, Saba Alnusairat, Anan Kakani is accepted to the scientific journal Environmental Research, Engineering and Management and will be published in the upcoming issue (Vol. 76 No. 4 (2020)).

EREM is included in SCOPUS database since 2016, Print ISSN: 1392-1649; Online ISSN: 2029-

Environmental Research, Engineering and Manage

Aušra Randė, e-mail: ausra.norkeviciute@ktu.lt.

اسم الورشة	الجهة المستهدفة
ررشة عمل تعريفية لمشروع الاستدامة في جامعة عمان الاهلية	أعضاء الهيئة التدريسية في
بعنوان:	الجامعة
Introduction to AAU Sustainable Programme	
ررشة عمل بعنوان:	طلبة الجامعة
What does sustainability mean to you?	
ررشة عمل بعنوان:	موظفو الجامعة و الطلبة
How to be sustainable?	

Re: 2020 Jordanian JFDP Awards- Primary Candidate

<s.alnusairat@ammanu.edu.jo> Cc: Alain.mcn@fulbright.org.jo <Alain.mcn@fulbright.org.jo>; Iman.aw@fulbright.org.jo <!man.aw@fulbright.org.jo>; naser.m@fulbright.org.jo <naser.m@fulbright.org.jo>; aya.a@fulbright.org.jo <aya.a@fulbright.org.jo>

Greetings from the Fulbright Office

Subject: 2020 Jordanian JFDP Awards- Primary Candidate

I am pleased to inform you that, based on the results of your interview with the Selection Review Committee (SRC) of the Binational Fulbright Commission and receiving Washington, DC's final approval, you have been nominated as one of our Primary Candidates for an award on the

2020 - Fulbright Junior Faculty Development

However, due to the current situation of the COVID-19, the JFDP program will not take place this summer. It has been deferred to summer 2021. Details will be shared in the

As our Primary Candidate, you need to notify your Dean or Supervisor(s) and, the President of your home university that you have been nominated for a Fulbright JFDP award. Please send an email to Ms. Rana Al-Anani (rana a@fulbright org.jg) with a copy to Mr. Naser Al-Malkawi (naser m@fulbright org.jo) and Ms. Aya Al-Abdallat (aya a@fulbright.org.jo) to acknowledge receipt of

as possible if you still wish to be considered as a Primary candidate on the JFDP for next year or, if you are declining your candidacy no later than June 15, 2020.

With kind regards

Iman Abdul-Wahid Deputy Director

Towards a meaningful university places: Satisfaction with and perceptions of the quality of open spaces for students

Zahra Al-Shatnawi

Yara Ayyad Faculty of Architecture and Design, Al-Ahlyya Asonas University, Jorda y.ayyad@ammani.edu.jo

Reactivating Open Spaces in University Campus to Enhance Health through Enabling Comfort Conditions: Architecture Post Pandemic

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Yara Ayyay Amman University, Jordan
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Zahra Al Shatnawi
Faculty of Architecture and Basiya. A-delayu seman University, Jordan
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Faculty of Architecture and Basiya. A-delayu seman University, Jordan
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Jordan

Project Highlights

New international rank 2019: UI GreenMetric

1 Annual report 2019

Sustainable website

4 Publications

2 Workshops

1 Fulbright award (JFDP)

2 Awareness campaign



256

World University Ranking 2019

154



410

World University Ranking 2018

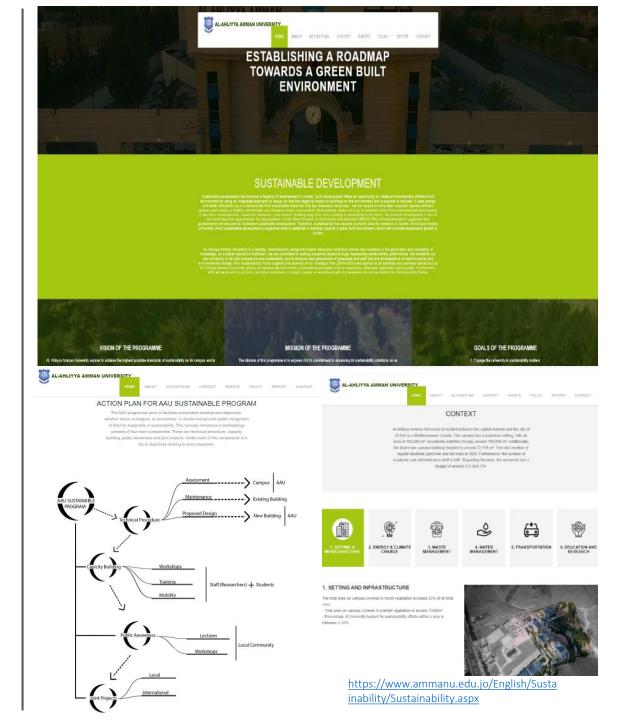




University: Al-Ahliyaa Amman University
Country: Jordan
Web Address: https://www.ammanu.edu.jo/English/

Topics of the project

- 1. Setting and Infrastructure
- 2. Energy and Climate Change
- 3. Waste Efficiency
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- 6. Education



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Dr. Saba Fawzi Alnusaira Al-Ahliyya Amman University Architecture Engineering Al-Ahliyya Amman University 19328 Amman Jordan, Hashemite Kingdom of

A Coruña, 29/Jul/2020

To Whom It May Concern

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Dr. Saba Fawzi Alnusairat is author/co-author of the following accepted contribution(s):

Towards an Integrated Sustainable University Campus: The case of Al-Ahliyya Amman University- Jordan Author(s): Alnusairat, Saba Fawzi: Al-Shatnawi, Zahra: Kakani, Anan-

Presenting Author: Alnusairat, Saba Fawzi

Submission Type / Conference Track: Technical Paper Submission

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Editor-in-Chief

2020-11-20 Nr. DV19-MI-50- 41

Confirmation letter

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prof. dr. Jolita Kruopienė

Environmental Research, Engineering and Manageme

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<s.alnusairat@ammanu.edu.jo>

Cc: Alain.mcn@fulbright.org.jo <Alain.mcn@fulbright.org.jo>; Iman.aw@fulbright.org.jo <lman.aw@fulbright.org.jo>; naser.m@fulbright.org.jo <naser.m@fulbright.org.jo>; aya.a@fulbright.org.jo <aya.a@fulbright.org.jo> Subject: 2020 Jordanian JFDP Awards- Primary Candidate

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Jordan

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Towards a meaningful university places: Satisfaction with and perceptions of the quality of open spaces for students

Faculty of Architecture and Design, Al-Ahliyya Amman University, Jordan s.alnusairat@ammanu.edu.jo

Zahra Al-Shatnawi

Faculty of Architecture and Design, Al-Ahliyya Amman University, Jordan zahraa_shatnawi@hotmail.com

Faculty of Architecture and Design, Al-Ahliyya Amman University, Jordan v.avvad@ammanu.edu.jo

Purpose - This study seeks to examine the attitudes of students towards the use of outdoor open spaces in universities through questioning the most comfortable conditions and favourable factors of outdoor specs: including thermal, visual, acoustic, air quality conditions, physical

Design/methodology/approach — A quasi-experiment was adopted in this study. Fieldwork was conducted on three open outdoor spaces located in the campus of the case study university. On-site measurements on the peak hours of outdoor spaces occupancy in summer and ramy seasons were conducted to define the microclimate conditions. Spatial analysis using space systax was recruited to define parameters of integration, agent, and connectivity. Students activities were observed, and a questionnaire survey was undertaken to capture students behavioral preferences.

Findings - The findings showed that there is a link between the microclimate conditions and the use of outdoor spaces in university campus. However, students show tendency to use outdoor spaces although the microclimate conditions are not favorable. The study established a base line of data to facilitate actions towards integration between social-related factors (users' experiences and perspectives), and siterelated factors, with providing a special emphasis on young people (university students age).

Research limitations/implications - The sample was representative of students from one university as a case study, although it includes students from various faculties. However, the study was limited to an exploration of students' opinions, and it did not include the points of

Originality/value - Outdoor open spaces in universities are essential features that function as community oriented places where students can meet, interact, and relax. In addition, these places play a vital role in the students' experience and psychological development. Such environments can encourage shared living and thriving communities where a friend is close to hand to talk over the stresses and challenges of student life which is important to achieve the academic and life growth. Therefore, there is a greater need to understand the relationship hatman open spaces and emotions, particularly as caleted to factors that make outdoor spaces attractive to university student

Reactivating Open Spaces in University Campus to Enhance Health through Enabling Comfort Conditions: Architecture Post Pandemic

Faculty of Architecture and Design, Al-Ahliyya Amman University, Jordan s.alnusairat@ammanu.edu.jo

Yara Ayyad

Faculty of Architecture and Design, Al-Ahliyya Amman University, Jordan y.ayyad@ammanu.edu.jo

Zahra Al-Shatnawi

Faculty of Architecture and Design, Al-Ahliyya Amman University, Jordan zahraa shatnawi@hotmail.com

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Keywords University campus, Outdoor open spaces, Users' (students/young people) perception and satisfaction, Behaviour pattern, Spatial

Paper type Research paper

FORMAL INTRODUCTION TO AAU SUSTAINABLE **PROGRAMME**

WHAT DOES SUSTAINABILITY MEAN TO YOU?

HOW TO BE SUSTAINABLE?

▲ Department Of Architecture ## 16 March 2020

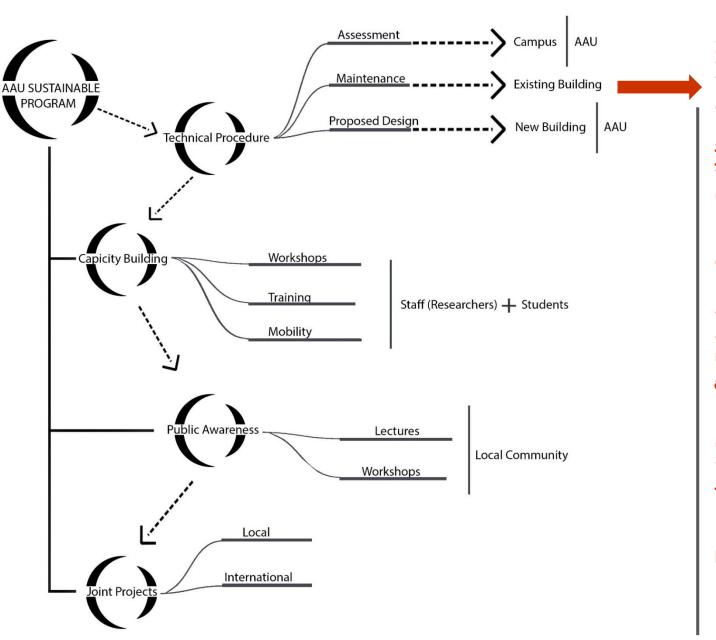


FORMAL INTRODUCTION TO AAU SUSTAINABLE **PROGRAMME**

Teaching And Learning Center 30 November 2019

You are cordially invited to attend the lecture on "Formal Introduction To AAU Sustainable Programme" in Nizar Qabbani Auditorium @ 10.30 AM organised by Teaching And Learning Center

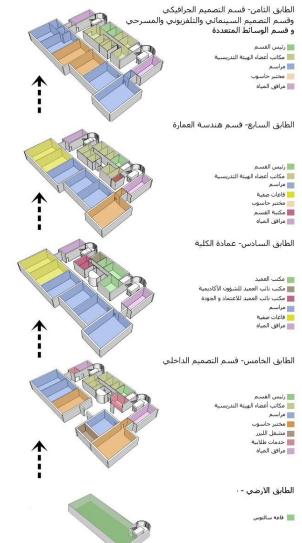
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أعضاء الهيئة التدريسية في	ورشة عمل تعريفية لمشروع الاستدامة في جامعة عمان الاهلية	
الجامعة	بعنوان:	
	Introduction to AAU Sustainable Programme	
طلبة الجامعة	ورشة عمل بعنوان:	
	What does sustainability mean to you?	
موظفو الجامعة و الطلبة	ورشة عمل بعنوان:	
	How to be sustainable?	



.⊑ Building Green Existing Retrofit Ø **Towards**

existing building /space in Architecture and Design Faculty Building- the ground floor Aim: to achieve a adopt green building principles for an

Suggested accreditation is Jordan Green Building Guide, local guidelines for green buildings are considered

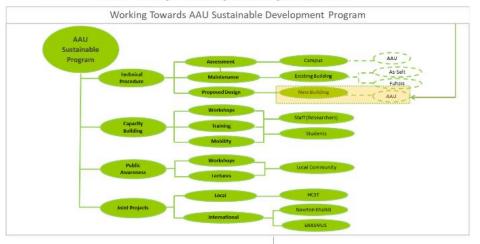




Goal

To achieve a **recognised international green certification** for new constructed building.

Suggested accreditation is Leadership in Energy and Environmental Design (LEED). In addition, local guidelines for green buildings are considered.



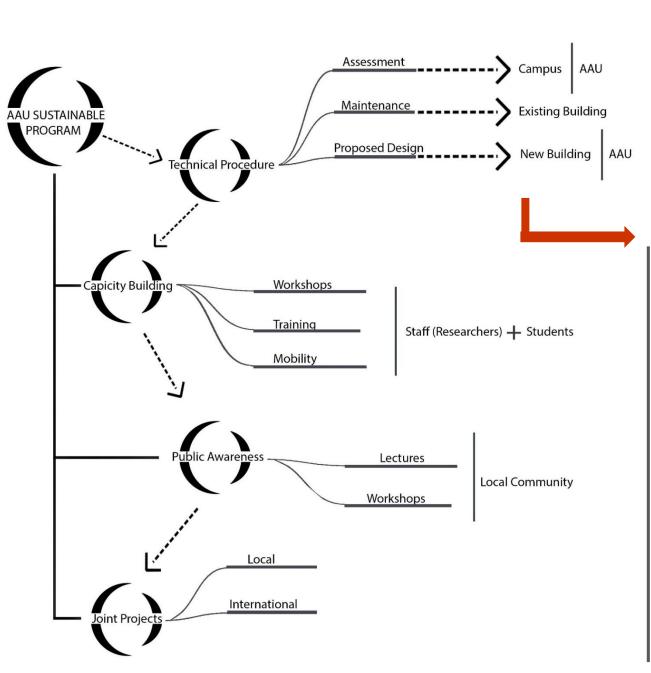
Objectives

- To study the most known international green building rating systems such as LEED, and the local green guidelines for Jordan CASBEE. Then provide a comprehensive analysis of them considering their categories, issues, criteria, and significances.
- 2. To identify the local context and priorities. Therefore, this research provides an analytical study of the key aspects of Jordan's context, significantly AAU environment that are relevant to the sustainable assessment framework infrastructure, building policy, social priorities and economic priorities
- 3. To develop green strategies that can be integrated in the proposed design of the new building. Thus strategies can ensure a high score of green accreditation.
- 4. To apply for LEED (new construction) accreditation.

References

- Ali H. H. and Al Nsairat S.F. (2009). Developing a Green Building Assessment Tool for Developing Countries – Case of Jordan". Building and Environment. 44 (5), 1053-1064.
- Gibberd J. (2005). Assessing Sustainable Buildings in Developing Countries The Sustainable Building Assessment Tool (SBAT) and the Sustainable Building Lifecycle (SBL). Proceedings of the 2005 World Sustainable Building Conference (SB05Tokyo); Sep 27-29, Tokyo. 1605-1612
- 3. USGBC. (2019). LEED v4.1 BUILDING DESIGN AND CONSTRUCTION

Green Building in Certified 4 **Towards**



In addition, local guidelines for constructed building. new Environmental Design (LEED). international green certification for Energy [Leadership in recognised σ Suggested accreditation is Aim: to achieve

considered

green buildings are

Green Certification Credit Categories (LEED V4)



















LEEDing the Way
Greening Buildings with LEED Certification

Public Awareness Lectures **Local Community** Workshops

Local

International

Joint Projec<u>ts</u>

Performance Educational Quality in Buildings in Jordan and its Impact on Health and Air and Comfort **Assessment of Thermal**

Existing Building

New Building

educational environment and demonstrate the impact of carbon dioxide on the health and performance Aim: aims to develop the education in Jordan by improving the internal climatic conditions of the of the users

The Need of Healthy Buildings – Post COVID19.

