

Healthy Earth, Healthy Food, Healthy People



# Department of Landscape Design and Ecosystem Management (LDEM)

Research Activities and Projects

Our Nexus with the Nexus

February 7, 2018

# Overview LDEM

## Multidisciplinary

Landscape architects/designers

Natural scientists

Social scientist

Artists

7 full time professorial rank, lecturer and part timers

## Degrees

Bachelor of Landscape Architecture

MSc in Environmental Sciences, Major: Ecosystem Management

**Teaching and research focus** on Middle East nature/society/culture

**Synergy** with departments in FAFS and other faculties (esp. FEA, FHS, A&S, NCC, CTL).



## Bachelor of Landscape Architecture (BLA) and Diploma of Ingénieur Agricole

- Four-year **professional** program.
- First class graduated in **2004**.
- LDEM Department established in **2007**
- Graduates since 2004: **247**
- Current number of students: **81**
- **holistic view** of landscape and the environment.
- Aim to graduate **socially responsible** landscape architects that are responsive to place, culture, and to the natural and ecological needs of the region.

## MS in Environmental Sciences (MSES), Major: Ecosystem Management (ECOM)

- A 2-year Interfaculty Graduate Environmental Sciences Program (IGESP).
- Program established under IGESP in **1997**
- Graduates since 1999: **51**
- Current number of students: **11**
- **Interdisciplinary**
- **Nexus** of human, ecological, sustainable use of resources.
- Enhancement of the **well-being of people and nature**



# Research by LDEM

	Total grants	Total in USD
Internal ( AUB grants)	17	145,100
<b>External</b>		
Local grants	7	310,488
International grants	36	2,671,086
<b>Total</b>	<b>60</b>	<b>3,126,674</b>

## Total publications last 10 years

Peer-reviewed articles (refereed journals)	Other publications/ articles in other journals	Books	Chapters in books	Abstracts	Manuscripts	Newspaper and magazine articles
64	25	10	61	59	5	8



# YASER ABUNNASR

(Associate Professor of Landscape Architecture)

- **Green infrastructure planning, design and experimentation**

GI is a nature-based system (natural or engineered) across scales and contexts to derive ecosystem services. Includes: urban networks of open space, green roofs & walls, urban agriculture, river systems, wetlands, forests, etc.

- **Climate Change Adaptation**

Development of integrated and no-regrets systems for urban climate adaptation including water management, urban heat islands, and informal systems

- **Sustainable and Resilient Cities**

Planning and design of cities with specific focus on environmental sustainability and social resilience.



# NAYLA AL-AKL

(Assistant Professor of Landscape Architecture)

- **Waterscapes** and other water related projects that approach water treatment, harvesting and human interactions with water as a main landscape element.
- **Rethinking Dams** in “Dam Alternative: A New Vision for the Bisri Dam”
- **River Restoration** in “Seasonal River Restoration”
- **Redefining the Qaroun Lake** Landscape in “At the Lake between East and West”
- **Water harvesting in dense urban communities** in “Karm El Zeitoun Re-envisioning the communal space”
- Infused into teaching and design studios



# BEATA DREKSLER

(Visiting Assistant Professor of Landscape Architecture)

- Teaching themes

**Sustainable water management**

**Urban agriculture**

- Research themes

**Urban revitalization** – recycling of urban abandoned spaces with new functions such as urban agriculture and sustainable water management solutions



**MONIKA FABIAN**  
(Instructor – Horticulture)

- **Mediterranean extensive green roof** : towards a participatory process for urban greening and biodiversity conservation in Beirut (by Dr. Salma Talhouk and Mrs. Monika Fabian)





# SALMA TALHOUK

(Professor – Landscape Horticulture)

## **Daskara : Digital Crowdsourcing to map local cultural ecosystem services**

**Daskara** is a nature and heritage conservation local mapping guide. Built as a free digital platform, **Daskara** is compatible with most smart phones, tablets (app), and computers (website).

## **Exploring links between nature and culture: cultural ecosystem service (CES).**

Define nature and natural resources as object of cultural concern providing nonmaterial services, such as recreation, aesthetic experiences and spiritual enrichment



# MARIA GABRIELLA TROVATO

(Assistant Professor – Landscape Architecture)

- **Sustainable solid waste management in Jurd al Kaytee, Akkar**
- The project aims to support municipalities where there has been a significant influx of **Syrian refugees**
- Includes a **land characterization** assessment for the Nahr el Bared watershed



## RAMI ZURAYK

(Professor – Ecosystem Management/ Socio-ecological systems)

- **The transformation of agrarian landscapes**

In the process of making themselves, cities remake the world outside them. This impacts the natural, cultural and social landscape of the agrarian world. What are those impacts? What are the implications on food and water security?

- EAT-Lancet commission on **sustainable diets from sustainable food systems**: Planetary boundaries (water)
- **High Level Panel of Experts on Food Security and Nutrition (CFS)**: Produce evidence-based information to aid policy



**THANK YOU**

