

Sustainability 2021-22

COMMUNICATION ON
ENGAGEMENT
(COE)



UNIVERSITY OF BALAMAND

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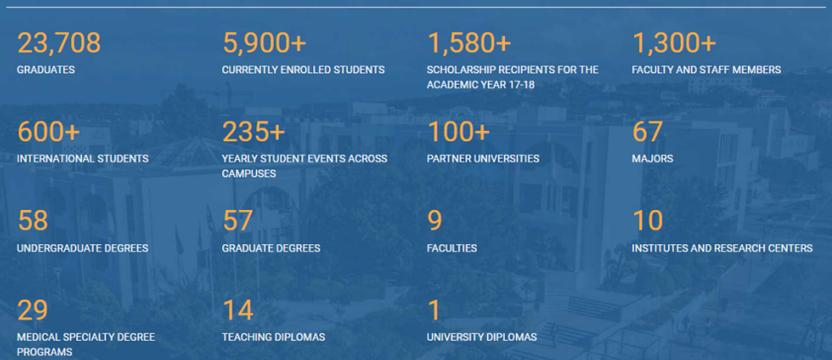
List of Acronym

ALBA	Académie Libanaise des Beaux Arts
BBA	Bachelor of Business Administration
CDLL	Cénacle de la Lumière
COE	Communication on Engagement
CSC	Career Services Center
DHC	Digital Humanities Center
FHS	Faculty of Health Sciences
FOBM	Faculty of Business and Management
FOE	Faculty of Engineering
GIS	Geographic Information System
IAB	International Advisory Board
LEMSIC	Lebanese Medical Students' International Committee
MOE	Ministry of Environment
MOU	Memorandum of Understanding
SDG	Sustainable Development Goal
TOT	Training of Trainees
UN	United Nations
UOB	University of Balamand

Introduction

The University of Balamand is a private non-profit independent Lebanese institution of Higher Education licensed by the State of Lebanon. It was founded in 1988 by His Beatitude Patriarch Ignatius IV in the name of the Patriarchate of Antioch and All the East for the Greek Orthodox. The University admits students from Lebanon and the Region without discrimination on the basis of religion, gender, or physical handicap. Inspired by the Tradition of the Antiochian Christian Orthodox Church in promoting the welfare of humanity and its highest values, the University is committed to principles of tolerance, compassion, and openness and Christian-Muslim understanding. The University is dedicated to graduating professionals who are well-rounded, critical thinkers, life-long learners, and active citizens in their respective societies.

UOB at a glance



The University also seeks to limit the influence of dogmatism and fundamentalism in intellectual, social, political, religious and cultural fields. The University believes in responsible freedom, in the role of reason in uncovering the truths, and in the deepening of human existence under God. Through quality education, rigorous research, concern for the public good, and engagement with the community, the University seeks to contribute to nation building, ethical standards, inter-cultural dialogue, environmental responsibility, and human development.

Today, the university's main campus remains on the Balamand Hill with five campuses across Lebanon. The University is also in the process of constructing a new hospital under the name of University of Balamand Medical Center.

Statement of Continued Support by the President

University of Balamand
Office of the President



جامعة البلمند
مكتب الرئيس

5 December 2022

The University of Balamand has been and will remain a pioneer in creating and supporting social and environmental developmental projects that contribute to promoting human health and the well-being of its community. Accordingly, I am pleased to confirm that our University reaffirms its support to the United Nations Global Compact and its Ten Principles in the areas of Human Rights, Labor, Environment, and Anti-corruption.

The activities listed in this Communication of Engagement represent the actions implemented by UOB to support the UN Global Compact and the Sustainable Development Goals. Some of our projects include:

- Strengthening the prevention and treatment of substance abuse and running awareness campaigns about reproductive healthcare services;
- Reinforcing the capacity for early warning, risk reduction and management of national and global health risks and providing access to quality health-care services and to safe, effective, and affordable essential medicines and vaccines;
- Supporting the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate;
- Sharing insights and solutions about substantially increase of financing, development, and retention of the health and education workforce through holding the International Forum on LEBANON REVIVAL PLAN "FROM MYTH TO REALITY".

Finally, UOB will continue to promote the sustainable goals and UN principles through its work and future initiatives.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'E. Warrak'.

Elias L. Warrak
President

UOB SDGs Initiative

As part of its commitment to SDG, the university of Balamand developed a Crowdsourcing Application to create a repository on all initiatives, research, teaching and activities that are related to and/or aligned with any one of the UN SDG's and targets.

This crowdsourcing repository is available all year long for staff, faculty, and student to update any initiative related to SDGs.



UNIVERSITY OF
BALAMAND

The aim of this form is to create a repository on all initiatives, research, teaching and activities that are related to and/or aligned with any one of the UN SDG's and targets. The repository will serve to:

- Evidence UN SDG's related activities for the Global Compact since UOB has just joined in with Dr. Warrak as a council member.
- Identify meaningful content for the announcement of this membership.
- Participate in THE Impact Ranking, 1st by identifying the SDG's that are most "popular" at UOB
- Going forward, inform strategic planning by providing context on current UN SDG's activities and alignment at UOB

Since the UN SDG's targets/KPI's are different from the THE metrics that are used to assess universities, it is important to capture both KPI's and THE metrics values.  

PLEASE Use your UOB credentials to log in to the form.

--Select User Type--

Enter your Email

Enter your Password

SUBMIT

For technical problems, please send an email to
Webmaster@balamand.edu.lb

If you need any inquiry or clarification about the requested fields, please contact Ms. Diala Farah diala.farah@balamand.edu.lb

Initiative by SDG

1 NO POVERTY

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION

5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



17 PARTNERSHIPS FOR THE GOALS

SDG Council Membership

The University of Balamand is highly committed to the SDGs which led to university's President Dr. Elias Warrak to be appointed as a United Nations Global Compact council. This membership is affiliated to the largest initiative in the world driving change at a scale; and it leads to engaging with the UN Global Compact's business leaders' community and access to networking opportunities within high level national and international events.

MOUs with International Organizations

Europtima

UOB signed a Memorandum of Understanding (MOU) with Europtima, a leading international group of construction and real estate project management, that has an established track record of over 10 million m2 of delivered buildings in diverse sectors of the industry. The MOU entails the exchange of expertise in the fields of Construction, Technology & Management Solutions, Engineering & Contracting, Real Estate, Engineering Management, Consultancy, GIS, Quantity Surveying, Economics, Talents & Cultures, and Corporate Social Responsibility. It also promotes the placement of students and alumni in training sessions, internships, recruitment, workshops, senior projects and seminars.

Avia Pro

The University of Balamand (UOB) and AviaPro Consulting have signed a Memorandum of Understanding (MOU) to enhance the Engineering & Sciences programs offered at the University. AviaPro Consulting have recently branched out into the Lebanese market to engage with students who in turn will have access to a wide range of opportunities such as training, professional development, internships, and employment. This MOU further reinforces the commitment of the University of Balamand to provide students with work-based learning opportunities that will allow students to acquire skills that will help them succeed in their professional careers.



Dutch Wavemakers United

UOB has committed to the joint efforts and signing an (MOU) with the Dutch Wavemakers United after participating in a panel discussion at the Expo 2020 Dubai.

The main objective of Wavemakers United is to inspire, motivate, activate, and give visibility to the water, food and energy innovations and thereby create awareness around the various global challenges we are facing, which corresponds with the vision of the Faculty of Engineering and LEWAP student chapter who seek to solve the problems of all matters related to water resources along with the development of innovative solutions.



MOUs with NGOs:

Cénacle de la Lumière (CDLL)

UOB signed a cooperation agreement with the CDLL, in order to exchange experiences between the two institutions, and to provide the necessary training for students and graduates, for the benefit of society.

Under this agreement, the university confirmed its constant endeavor to secure trainings and employment opportunities for students and graduates. It also affirms its commitment to urging students to work to serve the community, and to participate in awareness campaigns on substance abuse.

UOB reinforced its commitment to continue its cooperation in projects that serve the community, stressing the importance of mental health among young people, even at the level of schools and high schools.



Geographic Information System (GIS) Center

The University of Balamand boasts Lebanon's first fully operational academic center devoted to advancing GIS knowledge. The University uses GIS to integrate education, and community based research and service projects by working closely with local and international agencies and organizations . The GIS center consists of students and faculty working together to solve practical, real-world problems. Many of the students are working toward graduation requirements. Others work voluntarily with a community partner or seek to further their qualifications through continuing education programs.



A Training of Trainees programme (TOT) on “GIS for Municipal Strategic Planning” was launched by MASAR Programme and the GIS center at the Faculty of Engineering at the University of Balamand (UOB).

MASAR for Local Governments is a programme funded by the European Union implemented in Lebanon by VNGi (Association of Municipalities of the Netherlands), PCPM (Polish Centre for International Aid) and ACCD (Catalan Agency for Development Cooperation).

The MASAR programme is being implemented in three areas of intervention across Lebanon Akkar, North Lebanon and the Bekaa and Baalbek-Hermel working with municipalities and unions of municipalities most affected by the Syrian refugee crisis. The training was held from the 13th till the 16th of December, 2021.

Under the GIS for Strategic Planning ToT, trainees from different regions in Lebanon came together to share experiences, learn from each other, and get capacitated to pass on their training on smart surveys development, data collection management, and grant proposals writing. This training contributed in enhancing municipal management.

The GIS Center has been actively engaged on the GIS component of the MASAR programme, which is dedicated to strengthening the capacities of local governments in light of the demographic and economic pressure caused by the massive influx of refugees.

By bridging humanitarian aid and long-term development, MASAR focuses on municipal planning, public service delivery and local economic development.

UOB strongly maintains its status as a center of excellence with the GIS center leading the way at the heart of digital transformation.

The GIS center actively collaborates with various NGOs and civil society organizations to create programs that enhance the skillset and capabilities of the Lebanese youth.



SALAMATI Application for Abasan Al-Kabera, is another GIS community project that offers technical support and training on the use of SALAMATI Application (a mobile application for Corona fast-tracking in Abasan Al-Kabera municipality in Palestine).

[Link to GIS Center](#)

Additional Collaborations :

	Country	Faculty/Department	Start Year	End Year
Premester	France	FOE	1-Jul-21	1-Jan-22
SKL International	Sweden	GIS Center - FOE	1-Jul-21	1-Jan-21
Ortho Maker	USA	FHS	1-Dec-21	30-Jun-22
Mruna	UAE	FOE	1-Mar-22	1-Sep-22
Matelec	Lebanon	FOE	1-Aug-22	1-Dec-22
Wavemakers	Netherlands	FOE	1-Mar-22	1-Mar-23
VT solutions	Lebanon	FOE	1-Jan-22	1-Jan-23
Izdihar	Lebanon		1-Nov-21	1-Nov-24
United Cities	Austria		1-Jan-22	1-Jan-27
Difaf	Lebanon	FOE	1-Mar-21	
Masco - MEA	Lebanon	FOE	1-Jun-21	1-Jun-22
Lucian Blaga University of Sibiu	Romania		1-Mar-2021	1-Mar-2026
University College for Teacher Education Vienna / Krems	Austria		1-Mar-2021	1-Mar-2026
Universite Toulouse III	France	FOM	1-Jun-2021	1-Jun-2026
IMT Atlantique Bretagne Pays de Loire	France		1-Mar-2021	

Additional Collaborations :

	Country	Faculty/Department	Start Year	End Year
ESRI	Lebanon	FOE	15-Nov-22	
MASAR	Netherlands	FOE	15-Nov-22	
Joint Commission International JCI	USA	FOM	Jan. 2021	Jan-24
Arab Hospitals Federation	Lebanon		2021	2024
University of Central Lancashire (UCLan Cyprus)	Cyprus	FOM	Apr. 2022	
Union of Arab Banks	Lebanon	FOB	May-22	May-24
Jordan University of Science and Technology (JUST)	Jordan	FHS	2022	2027
Stichting Greenpeace Council I Greenpeace International & Stichting Greenpeace MENA	UK & Lebanon	FAS	Jul-22	Nov-22

Community Outreach



Community Fair

The Career Services Center (CSC) at UOB, in collaboration with Global Compact Network Lebanon and RESTART Center, organized the annual “Community Fair-Engage to Change”-2022 under the theme “Community Policing- Good Health and Wellbeing” an EU funded project jointly executed by FIIAPP and CIVIPOL. The fair is a yearly initiative to introduce students to volunteering and to reinforce communication between security actors and civil society in promoting a rights-based approach in the community. This event hosts local and international Non-Governmental Organizations.

Christmas Village Festive Spirit

The UOB Christmas Village was set in motion at the University of Balamand's main campus in Koura, marking its second run in 2 years. The UOB Christmas Village was packed with holiday fun, featuring a wide range of Christmas activities for all ages. From musical programs and daily entertainment shows for children to games, cartoon characters, gifts, and even Santa Claus appearances. It bears mentioning that throughout the 7 days of the event, a Christmas Market was carried out every day, with the participation of many small businesses and local shops, that offer a supply of various handicrafts, relishing food, and other products. This stems from the university's dedicated efforts to supporting local businesses and helping the region flourish. In accordance with the university's commitment to spreading the Christmas spirit to all, it should be noted that all the activities and programs at the UOB Christmas village were free of charge.

The university was adorned with beautiful, unique decorations and lights this year, including a stunning Christmas tree bursting with colorful, festive lights. These decorations were the result of a collaborative effort between the Lebanese Academy of Fine Arts Alba-Koura and students, who worked together to design and implement them. Note that all material used for the festival decoration was either used or recycled material.



Career and Internship Fair

The CSC organized its Annual Career and Internship Fair-2022 which was a great opportunity for students and alumni to interact with recruiters, learn about the available internships and job opportunities and get introduced to the latest market trends. Around 60 multinational and national companies' and non- governmental organizations were present and offered internships, part-time and full-time jobs to current and senior students, as well as alumni who are looking into advancing their career.

Department	Title
Biology	Role of a new family of bacterial protein kinases in programmed cell death in <i>Bacillus subtilis</i> – Potential candidate in the antimicrobial arsenal
Medicine	The integrated Effect of Antimicrobial Restriction and Protocol Driven Treatment on MDR Colonization Prevalence and Disease Burden
Agriculture Engineering	Sown forage mixtures for sustainable agroecosystems in the Mediterranean area (SUSFORAGE)
Medical Laboratory Sciences	Molecular Epidemiology of sexually transmitted diseases among females attending women seeking gynecological check-ups
Medical Laboratory Sciences	Identification of AMP-activated Kinase (AMPK) as a novel NOX1/2 regulator in tumor microenvironment
Biology	The mechanisms decreasing fibrinolysis and wound healing in endothelial cells when subjected to physiological levels of Myeloperoxidase modified LDL
Biology	Infrared-assisted extraction of polyphenols from olive (<i>Olea europaea</i>) processing by-products
Medicine	Multi-Drug Resistant Organisms in the Lebanese Livestock
Civil Engineering	Polymer-Modified Cementitious Materials for Underwater Construction and Repair Works
Medicine	Impact of oncologic parameters as well as frailty markers and geriatric assessment on treatment decisions in elderly Lebanese cancer patients
Electrical Engineering	Balancing of Single-Phase Loads in a Low Voltage Power System at the Distribution and Unit Level
Biomedical Engineering	ADHD and Bipolarity
Medicine	Bullying and Mental Disorders
Chemistry	Nanotechnology for the delivery of anticancer drugs
Medicine	Decreased jejunal glucose uptake in TNBS-induced colitis: a potential mechanism for mitochondrial dysfunction
Mechanical Engineering	Improving the efficiency of VAWT through automatic shielding
Civil Engineering	Recommendations for Using Recycled Concrete Aggregates in new Self-Compacting Concrete mixtures
Nutritional Sciences	Screening of the Occurrence of Antibiotics Residues in Milk and Dairy Products in Lebanon
Physics	Effects of dust on plant light absorption. Estimation of the dust thickness effects on photosynthesis process and plant growing

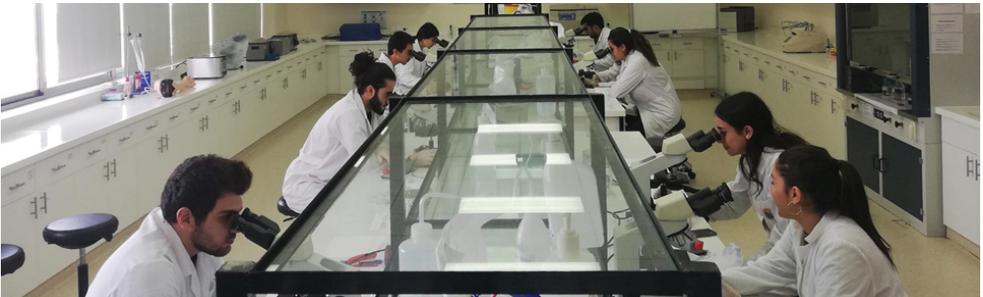
3 GOOD HEALTH AND WELL-BEING



Collaborations and Health Services

International Advisory Board (IAB)

The International Advisory Board of the Faculty of Health Sciences (FHS) consists of honorary members selected from leading international universities engaged in health sciences education and research and national authorities in the field. The IAB advises the Dean on all academic developments and on the strategic growth of the Faculty including fundraising.



Purpose of IAB

- To engage FHS in international developments in education and research especially as they relate to benchmarking, accreditation, opportunities for collaborative research and sponsored projects, doctoral studies, and student and faculty exchanges.
- To contribute to strategic planning for the further development and internationalization of the FHS teaching and research programs.
- To facilitate faculty development by providing opportunities for faculty exchange and student at international universities.
- To advise the dean on fundraising issues as deemed necessary.
- The members of the IAB are from international higher education institutions such as University of Pennsylvania, USA; University of Maastricht, the Netherlands; University of Wollongong, Australia; Georgetown University Medical Center, USA; the James Madison Center for Civic Engagement, USA; WHO/EMRO, Cairo, Egypt; Bloomberg School of Public Health, Johns Hopkins University, USA.

Community Project

- Project: Development of contextualized guidelines and capacity building for UNICEF partners and counterparts on COVID-19: IPC, prevention, and community engagement. Funding: UNICEF - Status: Completed (Oct 2020-June 2021)
- Project: Evaluation of Engaging Men Programme Funding: UNICEF - Status: Completed (Dec 2020-Feb 2021)
- Project: Human Rights (Dealing with the Past - Memories for the Future) Funding: PHCHR - Status: In progress (Jan-Dec 2021)
- Project: Promoting Sustainable Management of Water Services and Resources in Countries Affected by the Syrian Crisis -Funding World-GVC- Status: Completed (Jan 2020-Sept 2021)
- Project: COVID 19- Response Funding: Unicef- Status: In progress (June 2021-Feb 2022)
- Project: Capacity building – Nutrition Campaign- Funding: Unicef- Status: In progress (May-Dec 2021)
- Project: Addressing the Needs of Vulnerable Groups in Lebanon Mine Victim Assistance-Funding: ITF Status - In progress (February 2021 -December 2022)

4 QUALITY EDUCATION

Education for the SDGs

Sustainability Courses

Each faculty at UOB has at least several courses related to sustainability. Such is the case of the Faculty of Business and Management (FOBM) courses:

- MGMT291- Business Ethics and Professional Responsibility: (for Bachelor of Business Administration- BBA Undergraduates)
- BUSN222- International Business: (BBA Undergraduates)
- EMBA 450- Business Ethics and Sustainability (Executive Education).

And the Faculty of Engineering (FOE) courses:

- CIVE520 - Principles of Environmental Engineering, CIVE318 Environmental Engineering Modeling, CIVE311 Sanitary Engineering.

The Department of Environmental Sciences trains students to understand the scientific basis of the environmental crisis, as well as the social, political and economic factors that affect ecological problems and solutions. The essence of a BSc in Environmental Sciences is to provide students with the scientific foundation, and the holistic critical thinking skills to better understand and manage environmental issues. The Department also offers an MSc in Environmental Sciences that provides students with a general understanding of the field and fosters discussions regarding basic and advanced science, management and solutions of environmental problems.

Towards a New Future in Engineering Education

“Towards a New Future in Engineering Education”, is a research topic that investigates the awareness, attitudes, and perceptions of engineering students towards sustainability and the sustainable development goals (SDGs) in order to incorporate the SDGs in the course mapping.

Student Committees

To foster an environment of intellectual and personal growth, UOB encourages students to participate in the University life through various means, from serving as members on Faculty Committees to consultations with University Officers.

Awareness Campaigns about SDGs

- The Nursing Student organized a Breast Cancer Awareness Campaign.
- For world's AIDS day, the local Lebanese Medical Students' International Committee (LEMSIC) team went around UOB campus with the highlights (students' newspaper) team to test UOB community knowledge about HIV as part of their “Love you to death campaign”.

World Water Day

UOB and the Ibrahim AbdelAI Foundation for sustainable development which featured a panel discussion highlighting the major challenges in the Lebanese water sector and many initiatives in this respect



- The panelists drew attention on the importance of access to freshwater advocating for the Sustainable management of Lebanon's freshwater resources. The seminar was an opportunity to discuss future collaboration projects among the foundation, the El-Mina Municipality, and the University (Faculty of Engineering and Académie Libanaise des Beaux Arts - Alba) aiming to raise local awareness on water usage rationalization and the right of every person to clean water.
- The talks linked the Day to the UN SDGs in this respect, and it opened room for a fruitful discussion with students and faculty members.

6 CLEAN WATER AND SANITATION



Water Usage and Care

The UOB Treatment Plant is located within the University at its northern end and lowest elevation. The selection of this site by the University was in line with the Master Plan, ensuring a downward-inclining location away from existing buildings and facilities. A program of visits or “field day visits” is organized for members of the community, including staff from Municipalities, Ministries and NGO’s, together with some engineers, technicians, trainees and students. A primary task is to educate the community about the need for and importance of sewage treatment, as well as the adoption of environmentally-sound practices of recycling such as the re-use of effluent in irrigation. The essential aim of this Treatment Plant is to develop public awareness, leading to people’s acceptance of sewage treatment and the beneficial recycling of effluent and sludge.



The undeniable importance and inevitability of sewage treatment is now common knowledge among those responsible, with the result that towns, villages, and Municipalities are currently planning or beginning to implement its adoption.

These programs, combined with visits made by interested parties to our Plant, will help to educate the public generally about the vital need to convert dangerous effluent into a liquid which, when used to irrigate the land, is positively beneficial. The prime duty is the presentation of laboratory analytical data produced regularly on samples collected from the Treatment Plant, since theoretical knowledge needs always to be scientifically corroborated by analytical data. To this end, a monitoring program has been initiated to generate data on specific parameters that indicate the progress of the treatment process. The treatment process is being carried out in a series of tests conducted on influent and effluent water samples collected. The efficiency of the Plant and its operations and the precision of our measurements are verified by comparison with standard values set by the Lebanese Ministry of Environment (MOE) to check the accuracy of all analytical data produced. Also, the treated effluent is being used for irrigation on the UOB Campus. The areas thus irrigated have displayed good growth when compared with irrigation using University well water.

Throughout the « Sustainable Wastewater Treatment for Hospitals / SWaTH » project's lifetime, many workshops and awareness campaigns about water management, wastewater processing, water-Energy-Food interlinkage, carbon-based membranes for water purification, green infrastructure for sustainable cities, and innovative sustainable green materials are/will be carried out. In addition, SWaTH participated in numerous cluster meetings to promote sustainability, student opportunities, internationalization & engagement, wastewater, etc. These workshops, awareness campaigns, and cluster meetings are directly related to SDGs 6, 7, and 11. In line with this, key staff members had intensive training sessions about Life Cycle Assessment and the latest sustainable techniques and green materials used in wastewater treatment, as well as field visits to the San Cecilio Clinical University Hospital, the UGR's Center for Scientific Instrumentation, the Emasagra South Bio factory, Syvab, Henriksdal, Aqualia wastewater treatment plant, and Oulun Vesi wastewater treatment plant. More to the point, the SWaTH project ensures diversity and inclusion by involving several undergraduate and graduate students through short and long-term student mobilities and educational trips to French, Swedish, Finnish, and Spanish institutions to raise the quality of education, reduce inequalities, and learn more about the sustainable and clean treatment technologies. These training sessions, field visits, and student mobilities are correlated to SDGs 4, 5, 6, 9, 10, and 14. Finally, a needs analysis on the methods currently used in Lebanon to treat hospital wastewater through an exit survey was carried out and falls under the category of SDG14

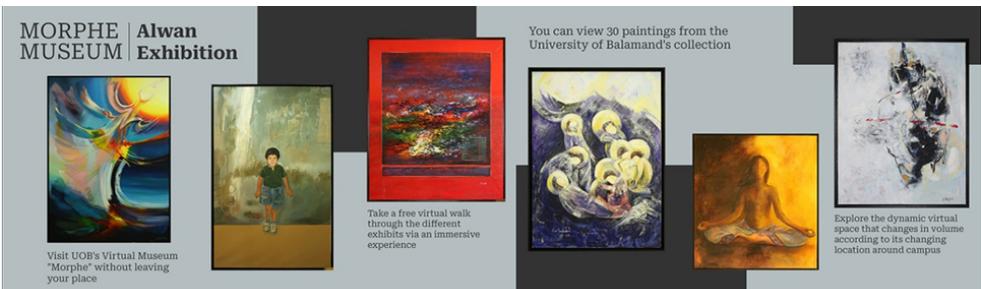
11 SUSTAINABLE CITIES AND COMMUNITIES

Among the many initiatives of UOB with respect to Sustainable cities and communities, below are some related to Arts and Heritage:

Support of Arts & Heritage

UOB's Virtual Museum "Morphe"

Morphe is a virtual museum designed, developed, and curated by the Digital Humanities Center (DHC) and ALBA main Campus at UOB. The museum intends to expose online the Lebanese art and culture making them accessible to a universal audience. The collections include tangible (paintings, sculptures, coins, manuscripts, monuments, archaeological sites, etc) and Intangible (oral traditions, performing arts, social practices, rituals, festive events, etc) assets available at UOB or obtained from different cultural partners and organizations in Lebanon and abroad. Morphe accommodates digital presentations of the various collections where visitors can virtually walk through and enjoy the different exhibits via an immersive experience.



MORPHE MUSEUM | Alwan Exhibition

Visit UOB's Virtual Museum "Morphe" without leaving your place

Take a free virtual walk through the different exhibits via an immersive experience

You can view 30 paintings from the University of Balamand's collection

Explore the dynamic virtual space that changes in volume according to its changing location around campus

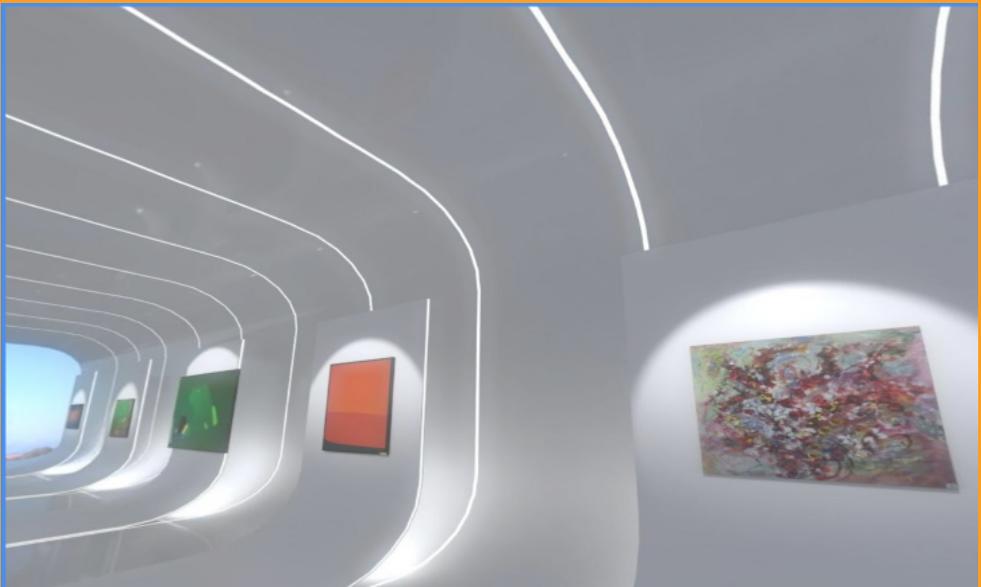
The concept behind the architecture of Morphe is to make it coherent with the surrounding of UOB campus. It is purposed to be dynamic rather than static whose volume changes according to its changing location around the campus. It makes symbiosis with the surrounding environment via transparency and reflection. Morphe is a Greek word meaning "form" and this naming of the museum was inspired by that changing volume of the virtual space.

PAVONe

The DHC at the University of Balamand developed an online database for the Arabic text of the Gospels. The database is accessible online for free. It allows the user to browse the Gospels manuscripts transcribed in the database. Two browsing modalities are offered: the first one allows the scholar to visualize the manuscripts in their geographical location using a geotagging feature; the second one allows the filtration of the manuscripts by a variety of parameters (date, language...). Both modalities lead to the same resources and give the researcher the possibility of displaying some codicological and paleographical properties of the manuscripts and their content as well.

Alwan Virtual Exhibition

Alwan virtual Exhibition is a collection of the University of Balamand paintings) on Google Maps (Virtual visit): <https://goo.gl/maps/gqMif3axGf9fh79L6>



Turath Qalhat Exhibition

In celebration of International Museum Day 2022, a three-days cultural event “Turath Qalhat” was organized by the Department of Archaeology and Museology and the Ethnography Museum at UOB in collaboration with the Municipality of Qalhat – Koura. Taking place at the heart of the village, Turath Qalhat featured an exhibition that unveiled Qalhat’s diverse cultural heritage. The audience was invited to explore the village’s rich history, ethnographical traditions, and various architectural elements as they took a tour inside the exhibition.

[http://www.balamand.edu.lb/news/AllNews/Pages/Details.aspx?](http://www.balamand.edu.lb/news/AllNews/Pages/Details.aspx?FilterField1=ID&FilterValue1=254)

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Other Projects

- ArHive: Database of Arabic manuscripts and historical documents
<http://193.227.175.22/weblink>
- Database of Arabic Orthodox Christian Journals <http://journals.uobdh.org/>



- Bibliotheca Hagiographica Arabica: Database of Eastern saints in Arabic (Synaxarion in Arabic) <http://bha.uobdh.org/>



Sustainable Practices:

Urban and transPortation reGeneration for Reducing Automobile Dependency in mEna (UPGRADE)

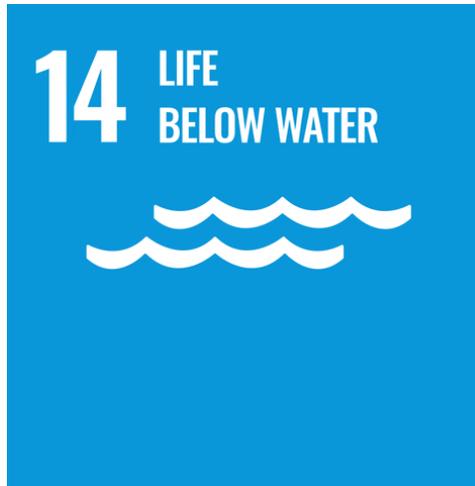
UPGRADE is an Erasmus+ Joint Regional Project, aimed Capacity Building in the field of Higher Education. The project consortium comprises the departments of Architecture, Urban Planning, and Civil Engineering in 8 highly reputable Higher Education Institutes and one Research Center from 6 different countries. Two of which are Partner Countries (Egypt and Lebanon) -in which the project will be held- and four of which are Program Countries (Germany, Italy, Greece, and Spain) -by which the project will be supervised. Throughout its duration of 3 years (November 2020- November 2023), the project focuses on the development and integration of the relationships between the following three different sectors within each Partner Country:

- 1.The Research and Education sector: represented by participating Higher Education Institutes in Egypt and Lebanon.
- 2.The Society: represented by local Non-Governmental Organizations (NGOs) in Egypt and Lebanon.
- 3.The Business Sector: represented by transportation and mobility corporations. Participating Higher Education Institutes embark on an educational process that focuses on evidence-based urban and transportation planning.



The students will be encouraged to learn through handling a real-life case study in order to address urban planning and urban mobility challenges faced by an unprivileged fraction of the population within the society. Local NGOs will be invited to assist students through the data collection phase of the case study, where students will be encouraged to identify critical urban planning and urban mobility challenges faced by the targeted population.

The role of UOB in this project is to contribute to strengthening the engineering educational programs, in particular those related to the transportation track and infrastructure planning. Also, UOB serves to create strong connections with civil societies in Lebanon and participating countries; several workshops and training sessions will be organized for this purpose.



Supporting Aquatic Ecosystems through Education

The marine ecosystem in Lebanon is continuously being subjected to a series of diverse stresses (both natural and human) that are leading to habitat destruction and a tremendous decline in marine biodiversity.

Funded by the European Commission, the Institute of the Environment at the University deployed an artificial reef 1 km off-shore the Barbara-Jbeil region at a depth of 25 m.

The Reef creates suitable habitat for fish species and other marine organisms that depend on it for shelter, feeding, and spawning, enhances fishing success, and provides SCUBA diving attractions.





Assessment of Commercial Fish Species

To strengthen the capacities of Lebanese Non State Actors to enhance the use of evidence and science in environmental policy-making and regulation (National).





Environmental, Social & Governance

Managing **Wildfire** Risks

The Land and Natural Resources Program at the Institute of the Environment has become a reference in forest fire research in Lebanon. It is a leading program working in a comprehensive approach to address fire risk in a country experiencing an increasing number of fires and burned areas. Wildfire prevention measures remain an essential step towards reducing future fire risk in Lebanon. These measures include developing and implementing forest management plans, improving the monitoring of fire danger, and ensuring law enforcement coupled with awareness raising.

Firelab (<http://ioe-firelab.balamand.edu.lb>) is a very promising tool not only for fire danger forecast but also for assessing and monitoring forest fires in Lebanon. Firelab can be used by various stakeholders to extract a lot of information of relevance to fire risk all over the country.

The fire danger forecast module in Firelab is a very user-friendly tool that is available for use by the public at large. The objectives of the tool include checking the spatial distribution of fire danger well in advance (i.e., up to 9 days before) and accordingly, taking all necessary measures to avoid the use of any source of fire during critical periods.

More specifically, the daily maps produced by the fire danger forecast system could help local authorities being informed about where to deploy municipal guards who could assess fire risk in real time. It could also help the civil defense and the Lebanese Air Forces to know where they should direct firefighting equipment. Local authorities such as municipalities are invited to make full use of Firelab especially during a fire season. No special training is needed for its use. However, more people should be aware of its availability for use as needed to support fire prevention efforts.



UOB Weather Station

The installed weather station is manufactured to withstand harsh environmental condition. It comprises the following sensors; ELO105 Data Logger, Wind Speed, Wind Direction, Temperature, Relative Humidity, Rainfall Precipitation, Radiation, and Pressure. All the sensors are installed on a customized mast, where the user can modify the height hydraulically up to 9 meters, by the prevailing environmental conditions.

The data logger is also installed in a safe box and has an internal battery, which ensures safe operation and continuous data handling in all circumstances, including that of a power interruption. The University thus has secure data retrieval. Additionally, the logger is connected to the central unit/Server via RS 232 advanced cables to ensure data is being transferred without interference.



As for the software, the installed unit is equipped with a double software system; the first is programmed to retrieve data from the logger, to give online reading, but is also equipped with X-Panel software enabling it to imprint the data onto the server screen of the live gadgets to make all the retrieved data realistic. The second is high-end e-SAM software with unlimited data storage capabilities, enabling the continuous storage of data in two formats, one being Excel and the other PDF with user-defined intervals.

The installed server is not only operated via RS 232 interfaces but is able also to be connected to additional complete units installed in remote areas so that data from other stations can be retrieved from the central unit.