



Bachelor of Landscape Architecture

Landscape Architectural Accreditation Board
Self-Evaluation Report | December 2019

Updated March 2021



Faculty of Agricultural
and Food Sciences
Department of Landscape Design
and Ecosystem Management



BLA 2019 | 2021

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LIST OF ACRONYMS

ALBA	Académie Libanaise des Beaux-Arts (Lebanese Academy for Fine Arts)
AREC	Advancing Research Enabling Communities Center
AUB	American University of Beirut
AUBMC	American University of Beirut Medical Center
CCECS	Center of Civic engagement and Community Service
CLOs	Course Learning Outcomes
FAFS	Faculty of Agricultural and Food Sciences
FPDU	Facilities Planning and Design Unit
LDEM	Department of Landscape Design and Ecosystem Management (BLA home)
MSFEA	Maroun Semaan Faculty of Engineering and Architecture
NCC	Nature Conservation Center
OEA	Order of Engineers and Architects
PLOs	Program Learning Outcomes
US/ICOMOS	USA chapter of The International Council on Monuments and Sites

REQUEST FOR REVIEW

LANDSCAPE ARCHITECTURAL ACCREDITATION BOARD

February 4, 2021

Date

Invitation to review is extended by: (chief academic officer by name and title)

Chief Academic Officer American University of Beirut	Lina Choueri, Interim Provost
	Signature: 

Identify the program in Landscape Architecture to be reviewed and the name of the institution.

Program Requesting LAAB Review	Bachelor of Landscape Architecture (BLA)
Name of Institution	American University of Beirut

This landscape architectural program certifies that it has been in operation since AY 2011-2012 (date) and is legally entitled to confer the following first professional degree:

Bachelor of Landscape Architecture

Preferred Dates for Review: Indicate first, second, and third preferences.

Option 1:	Mon March 29, 2021 - Thurs. April 1, 2021
Option 2:	
Option 3:	

Please give complete address for the program requesting review. Include the name, phone number, and e-mail address for the program administrator.

<p>Complete Address of the Program</p>	<p>Department of Landscape Design and Ecosystem Management Faculty of Agricultural and Food Sciences American University of Beirut Bliss Street, P.O. Box 11-0236 Beirut, Lebanon</p>
<p>Program Administrators' Contact Information</p>	<p>Chief Administrative Officer of the Faculty Rabi Mohtar Dean and Professor Faculty of Agricultural and Food Sciences Dean's Office American University of Beirut Bliss Street, P.O. Box 11-0236, Beirut, Lebanon Email: mohtar@aub.edu.lb Tel: +961135000 Ext.4400</p>
	<p>Signature: </p>
	<p>Chairperson of the Landscape Design and Ecosystem Management Department (LDEM) Yaser Abunnasr Chairperson and Associate Professor LDEM Department Faculty of Agricultural and Food Sciences American University of Beirut Bliss Street, P.O. Box 11-0236, Beirut, Lebanon Email: ya20@aub.edu.lb Tel: +9611350</p>
	<p>Signature: </p>
	<p>Coordinator of the Bachelor of Landscape Architecture Program Yaser Abunnasr Chairperson and Associate Professor LDEM Department Faculty of Agricultural and Food Sciences American University of Beirut Bliss Street, P.O. Box 11-0236, Beirut, Lebanon Email: ya20@aub.edu.lb Tel: +96113500</p>
	<p>Signature: </p>

PROGRAM SELF-EVALUATION REPORT

For the Academic Year	2018/2019
Institution	American University of Beirut
Program	Landscape Architecture
Degree Title/Degree Length	Bachelor of Landscape Architecture, 4 years Including 3 summer semesters
Chief Administrative Official of the Institution	Fadlo Khuri, President of the University College Hall, Bliss Street, P.O. Box 11-0236, Beirut, Lebanon president@aub.edu.lb +961135000 Ext.2500
Chief Academic Official of the College (University)	Lina Choueiri, Interim Provost College Hall, Bliss Street, P.O. Box 11-0236, Beirut, Lebanon lc01@aub.edu.lb +961135000 Ext. 2517/ 2518
Chief Administrative Official of the Division (Faculty)	Rabi H. Mohtar, Dean of Faculty of Agricultural and Food Sciences Agriculture Building, Wing A, Bliss Street, P.O. Box 11-0236, Beirut, Lebanon mohtar@aub.edu.lb +961135000 Ext.4400/ 4405
Chief Administrative Official of the Department	Yaser Abunnasr, Chairperson of Department of Landscape Design and Ecosystem Management Reynolds Hall, Bliss Street, P.O. Box 11-0236, Beirut, Lebanon ya20@aub.edu.lb +961135000 Ext.4548
Chief Administrative Official of the Program	Yaser Abunnasr, Associate Professor, Program Coordinator Reynolds Hall, Bliss Street, P.O. Box 11-0236, Beirut, Lebanon ya20@aub.edu.lb +961135000 Ext.4548
Report Submitted by	Yaser Abunnasr, December 15, 2019 (Re-submitted after updates on March 12, 2021)

MINIMUM REQUIREMENTS

For Achieving and Maintaining Accredited Status

1. The program title and degree description incorporate the term "Landscape Architecture".
2. An undergraduate first-professional program is a baccalaureate of at least four academic years' duration.
3. A graduate first-professional program is a master's equivalent to three academic years' duration.
4. Faculty instructional full-time equivalence (FTE) shall be as follows:
 - a. An academic unit that offers a single first-professional program has at least three FTE instructional faculty who hold professional degrees in landscape architecture, at least one of whom is full-time.
 - b. An academic unit that offers first-professional programs at both bachelor's and master's levels, has at least six instructional FTE, at least five of whom hold professional degrees in landscape architecture, and at least two of whom are full-time.
5. The parent institution is accredited by a recognized institutional accrediting agency.
6. There is a designated program administrator responsible for the leadership and management functions for the program under review.
7. The program provides a comprehensive public information disclosure about the program's status and performance within a single click link from the program's internet website homepage.
8. A program accredited by LAAB shall:
 - a. Continuously comply with accreditation standards;
 - b. Pay the annual sustaining and other fees as required; and
 - c. Regularly file complete annual and other requested reports.

The program administrator shall inform LAAB if any of these factors fails to apply during an accreditation period.

The Bachelors of Landscape Architecture program meets the minimum conditions to apply for LAAB accreditation.

Dr. Yaser Abunnasr

BLA Program Coordinator and Dept. Chairperson

Program Administrator Name

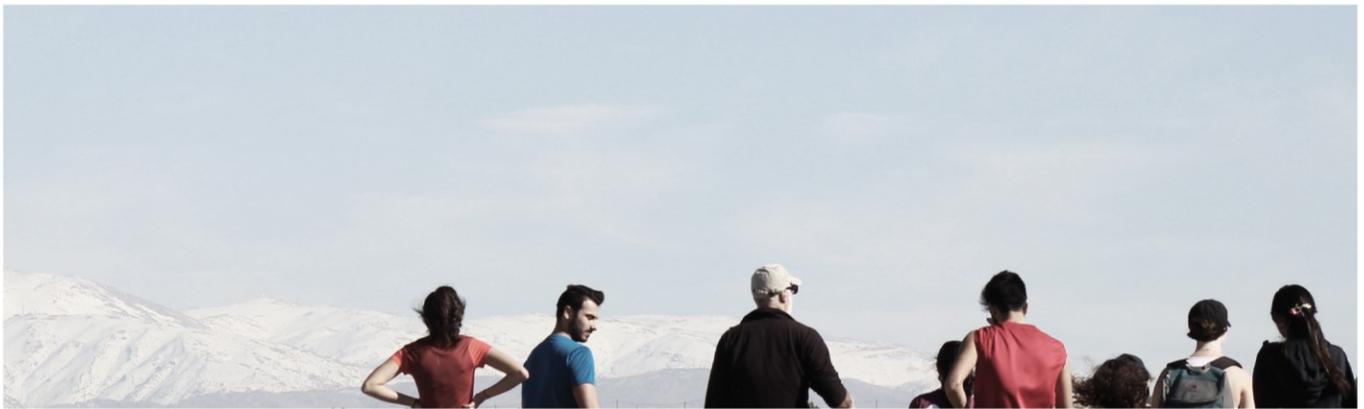
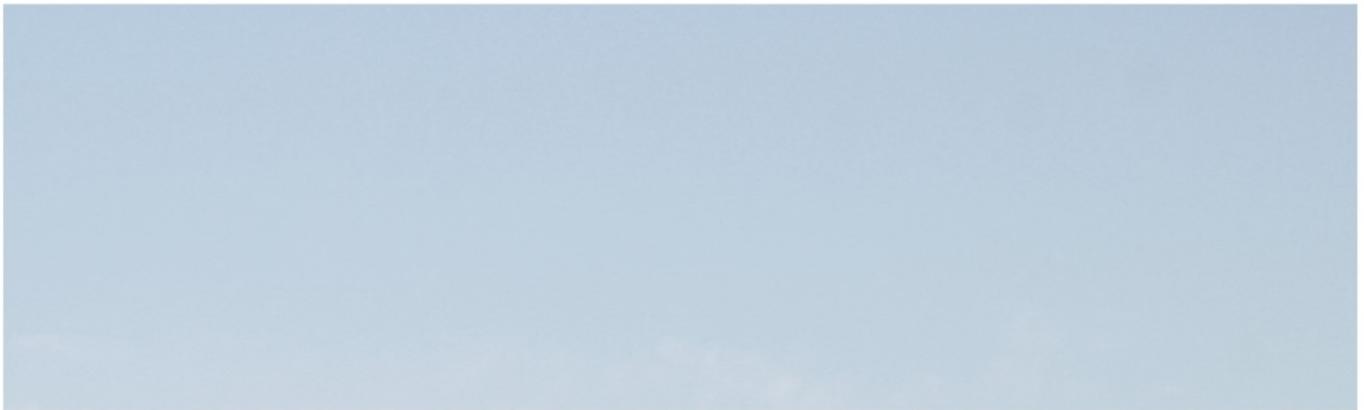
Title



Originally signed 12/15/2019; Re-signed 03/10/2021 due to postponed review due COVID-19 Pandemic

Program Administrator Signature

Date



INTRODUCTION

INTRODUCTION

1. History of the program

In chronological form provide a brief history of the program being reviewed, concentrating on events since the last review.

University History:

The American University of Beirut (AUB) – a private, non-profit University located in Beirut, Lebanon – is one of the oldest modern institutions of higher education in the Middle East. The University welcomed its first class of students in 1866 as the Syrian Protestant College. Governed by an autonomous Board of Trustees, AUB operates under a charter granted by the New York State Education Department (NYSED) which registers the University's degree programs. Over the last century and a half, AUB has broadened its activities while remaining faithful to the vision of its founders as described in its mission statement:

“The American University of Beirut (AUB) is an institution of higher learning founded to provide excellence in education, to participate in the advancement of knowledge through research, and to serve the peoples of the Middle East and beyond. Chartered in New York State in 1863, the university bases its educational philosophy, standards, and practices on the American liberal arts model of higher education. The university believes deeply in and encourages freedom of thought and expression and seeks to foster tolerance and respect for diversity and dialogue. Graduates will be individuals committed to creative and critical thinking, life-long learning, personal integrity, civic responsibility, and leadership”.

The University's total student population is 9408, including 7,782 undergraduate, 1626 graduate students, with 432 medical students, and 166 PhD students. International students represent 22 percent of total enrolled students. Women make up 49 percent of undergraduates, 45 percent of medical students, and 68 percent of graduate and PhD Students. Incoming students tend to have strong scholastic records, with 27 percent graduating in the top tenth of their secondary school classes and 76 percent in the top half. AUB's retention rate is 87 percent and the graduation rate is 88 percent. The total number of full-time instructional faculty is 914; in addition, the University employs 286 part-time faculty bringing the faculty head count to 1200. The student faculty ratio is around 11:1. The faculty gender distribution is 42 percent females and 58 percent males, with 20 percent international faculty members.

The University offers more than 141 programs leading to the bachelor's, master's, MD, and PhD degrees through six Faculties: Agricultural and Food Sciences (1956), Arts and Sciences (1866), Engineering and Architecture (1952), Health Sciences (1954), Medicine (1867) which includes the Rafic Hariri School of Nursing (1905), and the Suliman S. Olayan School of Business (2000). With the reintroduction of PhD programs in eight specialties in 2007-08, AUB became the first U.S.-accredited University in the Arab world to offer doctoral degrees. AUB bases its educational philosophy, standards, and practices on the American liberal arts model of higher education. The university believes deeply in and encourages freedom of thought and expression and seeks to foster tolerance and respect for diversity and dialogue to provide students with essential skills in research and communication, familiarity with significant modes of thought, and broad exposure to fields of learning in a wide range of areas (cultural, societal, and scientific) AUB offers its undergraduates with an exciting choice of courses for the fulfilment of General Education Requirements (AUB Institutional Self Study, 2019. Link: https://www.aub.edu.lb/selfstudy/Documents/AUB_Self-Study_Report_2019.pdf). The language of instruction is English. AUB also operates a medical center, which includes a 350-bed teaching hospital, committed to improving health care in Lebanon and the region.

The University was granted institutional accreditation in June 2004 by the Middle States Commission on Higher Education in the United States and this accreditation was most recently reaffirmed in June 2019.

AUB's faculties and schools have earned accreditation of specific programs from relevant international accrediting bodies: the Faculty of Health Sciences (FHS) Graduate Public Health Program is accredited by the Council on Education for Public Health; the Olayan School of Business (OSB) is accredited by the Association to Advance Collegiate Schools of Business International; the School of Nursing BSN and MSN programs are accredited by the Commission on Collegiate Nursing Education; four undergraduate engineering programs in the Maroun Semaan Faculty of Engineering and Architecture (MSFEA) are accredited by the Accreditation Board for Engineering and Technology; the Faculty of Agricultural and Food Sciences (FAFS) undergraduate Nutrition and Dietetics Coordinated Program has received accreditation from the Accreditation Council for Education in Nutrition and Dietetics (ACEND); and the Faculty of Medicine (FM) residency programs in Internal Medicine, Family Medicine, Emergency Medicine, Obstetrics and Gynecology, and General Surgery are accredited by the Accreditation Council for Graduate Medical Education – International (ACGME-I).

AUB is ranked first nationally and second regionally among 1000 universities in the Arab world in the 2018 QS Arab Region University Rankings, and ranks 237 in the QS 2017 World University Rankings. Its competitive advantages include its long history, faculty quality and research output, liberal arts foundation, strong professional education, location in Lebanon with its environment of openness and cultural diversity, and its dynamic and relevant research focused on innovation and interdisciplinarity.

Faculty History

The School of Agriculture was established in 1952; along with the Advancing Research Enabling Communities Center (AREC), then known as the Agricultural Research and Education Center, a 100 hectare facility located in the Beqaa, 80 km from the main AUB campus. The School offered a 4-year program leading to a BS degree in Agriculture and the 'Diploma of Ingenieur Agricole', and also a one-year Technical Vocational Training (TVT) course, offered from 1956 to 1971, aimed at government extension agents. These programs contributed greatly to building the capacity of agricultural scientists and technicians from the Middle East region. A graduate program leading to the MS in agriculture was initiated in 1956. The importance of food and nutrition and their linkage to agriculture was recognized in the late seventies. The School, which had become the Faculty of Agricultural Sciences in 1958, was renamed the Faculty of Agricultural and Food Sciences (FAFS) in 1979.

Today, FAFS houses three departments: The Department of Agriculture (AGRI), The Department of Nutrition and Food Sciences (NFSC), and the Department of Landscape Design and Ecosystem Management (LDEM). The Faculty offers five bachelor degrees, and nine master's degrees, four graduate interdisciplinary degrees, and one joint PhD with the faculty of medicine.

The Department of Landscape Design and Ecosystem Management at FAFS was established in September 2007. The Bachelor of Landscape Architecture (BLA) is housed in the LDEM department and was the first and only program in Landscape Architecture in the country and the region at the time. The Department also houses an Interfaculty Graduate Masters program in Ecosystem Management (MSES in Ecosystem Management) under the Interfaculty Graduate Environmental Sciences Program (IGESP). The program draws on the resources of various departments of the faculties of Agricultural and Food Sciences (FAFS), Arts and Sciences (FAS), Engineering and Architecture (FEA), Health Sciences (FHS), and Medicine (FM), and provides opportunities for study and research in the general field of the environment.

The following provides a chronological timeline of LDEM's history, highlighting main milestones and overview of the program.

Brief History of the Department and Program

1980s - 1990s FAFS developed a growing awareness that many graduates of its BSc in Agriculture were recruited by landscape companies. Some agriculture graduates had such successful careers that they established their own businesses in the landscape sector. The feedback from alumni working in this sector indicated the absence of qualified landscape designers and landscape horticulturists in Lebanon and the Arab World.

2001 The Bachelor of Science in Landscape Design and Eco-Management was launched within the Department of Plant Sciences (currently no longer a Department in the Faculty). Dr. Jala Makhzoumi was the chairperson of an interfaculty committee with membership from the Department of Architecture which is housed in the Faculty of Engineering and Architecture. The degree was registered with the Ministry of Education and Higher Learning in Lebanon, entitling students to join the National Syndicate of the Lebanese Order of Engineers. The official registered degree name at the Ministry was “BSc in Landscape Design and Eco-Management and Diploma of Ingénieur Agricole”¹.

2001 - 2004 Revisions to the LDEM program were consistently performed in response to discussions among faculty members regarding their perceptions of students’ performance, informal discussions with employers, and meetings and discussions with students.

The outcomes of these evaluations helped identify shortcomings and culminated in major changes to the program in 2004 where the ratio of design to non-design courses was adjusted and number of credits for most design studios was increased to 6.

2003 The LDEM program was officially approved by and registered with the New York State Education Department.

2007 The Department of Landscape Design and Ecosystem Management was established as an independent academic unit at FAFS in September 2007 to house two programs, the BS in Landscape Design & Eco-Management (LDEM) and the Interfaculty Master of Science in Environmental Sciences (MSES), major Ecosystem Management (ECOM). Dr. Rami Zurayk was appointed Chairperson of the Department.

2008 Dr. Salma Talhouk was appointed Chairperson of the LDEM Department.

During this period, the department was housed within the main FAFS buildings and included two studios, 6 faculty offices and a department office.

¹ *Diploma of Ingénieur Agricole* is the French name of the recognized degree by the ministry of education. During that period and until today, there is not an official degree in Landscape Design or Landscape Architecture. This is currently the only way to recognize the program and protect the students.

2008 - 2009 With the guidance and support of the University Center for Teaching and Learning (CTL), a new mission and Program Learning Outcomes (PLO's) were drafted for the LDEM program. As such, minor changes were performed to the existing curriculum including revision, cancellation, and/or introduction of courses. In addition, the department initiated efforts to accredit its undergraduate LDEM Program.

2009 - 2010 Upon benchmarking against similar programs in the US, the LDEM program aligned, with minor modifications, with accredited BLA programs. The Department recommended that such a program be established to replace the existing LDEM. During this academic year, a departmental retreat was held to revise the program into a BLA and elaborate Program and Course Learning outcomes (PLOs and CLOs) in line with the Landscape Architecture Body of Knowledge Study (LABOK).

2010 - 2011 A quality assurance four-year assessment plan to measure and evaluate PLOs was developed and followed starting Fall 2010-2011. Furthermore, seeking external feedback, the department organized the "Beirut Landscape Symposium 2010" on October 22 - 23, 2010 with the additional aim of promoting the profession of landscape architecture in the region.²

This symposium was organized in collaboration with the International Federation of Landscape Architects (IFLA) and the European Federation of Landscape Architects (EFLA) both of which were represented by the organizations' presidents. The symposium was attended by academics, practicing professionals, representatives of the landscape horticulture industry, students, and delegates from neighboring countries, Europe, Canada, and the USA.

Towards the end of the symposium the department organized one morning session dedicated to an external review of its undergraduate program, the BS in Landscape Design. During this session, the program and Program Learning Outcomes (PLOs) were described and the feedback was solicited from participants.

2011 - 2012 The Department recommended accreditation by the American Society of Landscape Architects (ASLA) and as such the program was again revised in order to ensure compliance to the guidelines set by ASLA as well as the knowledge, skills and core competencies established by the Landscape Architecture Body of Knowledge (LABOK) study.

This process led to name change of the program to Bachelor of Landscape Architecture (BLA) and guided curricular modifications such that the new program fulfills ASLA accreditation requirements.

² The Department is actively promoting the profession in Lebanon and the Middle East. Until today, there is no professional recognition of the profession (hence the Diploma of Ingenieur Agricole Degree) and there is no professional body representing the profession. The LDEM Department continues to take the lead in this area.

The department introduced the following modifications to fulfill accreditation requirements: changed major course requirements, kept same number of years, increased the total number of credits from 139 to 144, introduced a summer internship, and changed degree title to Bachelor of Landscape Architecture (BLA).

The Bachelor of Landscape Architecture (BLA) Program was approved by the AUB Senate and by the Board of Trustees (BOT) in early 2012. Please refer to *Volume 2, Appendix 13 (FAFS 2007-2019 Students Handbooks & Typical Program of Study)* for Curriculum changes from 2006 until 2019, and *Volume 1, Appendix 4 (BLA Courses Descriptions 2007-2019)* for individual courses' descriptions.

- 2013** Dr. Rami Zurayk was appointed as the Chairperson of the Department. The new BLA Program was registered at the Ministry of Education and Higher Learning in Lebanon. The official degree name remains “Bachelor of Landscape Architecture and Diploma of Ingénieur Agricole” at the Lebanese Ministry of Education. The program was initially registered at the new York State Education Department (NYSED) in 2013 pending final registration upon graduation of first class and conducting a self-assessment report.
- 2013 - 2014** An internal program review was conducted as stipulated by University Policy. In 2014, a self-study was prepared and two external reviewers were invited for a 3-day field visit in December of that year.
- 2014 - 2015** External Reviewers made recommendations tackling issues such as reduction of courses, improvement of history courses, and altering allocation of space.
- 2015 - 2016** Some courses were reshuffled based on reviewers recommendations
- Jan 2016** The LDEM department was relocated to the current building, Reynolds Hall. This was a direct response to additional space needs of the program. The new floor and a half provide 4 studios, 8 faculty offices, 1 part-timers office, 1 room that houses 7 research assistants, 1 administrator office, 1 students lounge, a small class/seminar room, and a printing/stationery room.
- 2016 - 2017** In response to the University’s re-installing of Tenure at AUB, the department spearheaded the effort of developing promotion criteria for the department. The draft was developed in 2016-2017, guiding principles were approved by Faculty, and final criteria were approved in 2018.

Curriculum adjustments: The LDEM department was engaged in a process of curriculum adjustment in the wake of the program review and the PLO/CLO assessment results. On April 13, 2016, BLA curriculum adjustments voted upon by LDEM were approved by the Academic Curriculum Committee (ACC) at FAFS. Changes became effective Fall 2016/2017 for new students entering the program in Fall 2016/2017. These changes were mostly organizational and did not include any radical modifications.

Nehme Moujaess Landscape Architecture Award: FAFS Honored Alumnus Mr. Nehme Moujaess for his Pledge and establishment of “The Nehme

Moujaess Student Award in Landscape Architecture” (gift amount is 25,000USD). This was the first time for LDEM Students to receive such an award. Mr. Moujaess is an FAFS Alumnus who received his MS in Soils and Mechanization in 1995 and BS in Agriculture in 1992. He has been providing LDEM students with a unique opportunity of paid internship at Terraverde landscaping company located in Dubai, UAE and which he co-owns. “The Nehme Moujaess Student Award in Landscape Architecture” will be granted annually during a formal ceremony to the most deserving senior Landscape Architecture students selected by the Department based on their final year project that is aligned with FAFS vision and mission. Awardees may also be granted “first look” placement and recruitment consideration at Terraverde as well. The department with approval of Mr. Moujaess determined the criteria for the selection of the best project effective May 2017. The committee members who serve as jury include: R. Zurayk as Chairperson and representative of N. Moujaess (voting member), an LDEM full-time faculty member a representative of the LDEM department (voting member), and a representative of the landscape profession/field (voting member) and the final year project instructor and FYP coordinator of each academic year (non-voting member) to assist in clarifying any matters pertaining to the shortlisted projects.

LDEM students’ relocation to Reynolds Hall: Utilizing the recently acquired space in Reynolds, the LDEM department completed relocation of the students to the building in September 2016 under the supervision of Dr. Yaser Abunnasr allowing it to meet ASLA (American Society of Landscape Architects) accreditation requirements, as well as comply with NYSED registration in terms of studio space.

2017 - 2018 Curriculum adjustments: LDEM 265 ‘Landscape Management’ brings together what students learn from the plant material, the horticulture, the soil and the water courses. It has been reintroduced to the curriculum as a required course to be registered by students who joined the program effective 2016/2017. The course started to be offered during the Spring of Year III as of Spring 2018/2019.

Self-Evaluation Report (SER) and the BLA program review: The self-evaluation report for the landscape architecture program was completed during Fall 2017/ 2018. The LDEM department started the preparations for an external program review of the BLA program in Spring 2016-2017 upon the graduation of the first class of students from the program. This effort was led by Dr. Yaser Abunnasr with significant contribution by all LDEM members and administrative staff. Reviewers were contacted after preliminary list approval by NYSED. In late March/ early April 2018, two reviewers approved visiting and evaluating the BLA program. Two program reviewers’ visit to the department were organized and held on two separate but consecutive visits due to teaching responsibilities in their respective universities. Dr. Susan Kelly Shannon (program reviewer 1), professor of urbanism at the Department of Architecture, Faculty of Engineering at KU Leuven, Belgium, visited LDEM

from April 25 to April 29, 2018. Dr. John Francis Ahern (program reviewer 2), professor of landscape architecture and urban planning at the University of Massachusetts Amherst, visited LDEM from May 2 to May 5, 2018. The two international external reviewers expressed very positive feedback regarding the report and the site visit. The final program reviewers report, the department's response and the BLA self-study report were submitted for final approval and registration at NYSED in early summer 2017/2018. Once full registration is achieved, the same study will be updated based on the new academic years and based on ASLA requirements to be submitted for ASLA/LAAB accreditation.

Faculty Promotions: Dr. Yaser Abunnasr was promoted to Associate Professor effective Fall 2017/2018.

Faculty Tenure: Both Dr. Salma Talhouk and Dr. Rami Zurayk (Chairperson) have applied for the recently re-established tenure in August 2017. Both were awarded tenure by the Board of Trustees (BOT) out of a first cohort of seventy-three faculty members in June 2018.

2018 - 2019 BLA program full registration at NYSED: Further to the two program reviewers visits in late April/ early May 2018, Dr. Susan Kelly Shannon (program reviewer 1), professor of urbanism at the Department of Architecture, Faculty of Engineering at KU Leuven, Belgium and Dr. John Francis Ahern (program reviewer 2), professor of landscape architecture and urban planning at the University of Massachusetts Amherst, NYSED addressed some inquiries to the department and the department clarified them in December 2018. In July 2019, LDEM received the decision of NYSED for final approval and registration of the BLA program.

BLA program coordinator: Further to the program reviewers repeated recommendation and the department recommendation, Dr. Yaser Abunnasr was appointed as BLA program coordinator effective Fall 2018/2019.

BLA program accreditation status: In March 2019, Y. Abunnasr (BLA coordinator) received from the ASLA/LAAB (Landscape Architecture Accreditation Board) that the BLA program was approved to go ahead with the full accreditation application process. If all goes well, our program will be the first to apply for accreditation outside the USA. The same self-study used for program re-registration will be updated during Fall 2019/2020 based on the 2018/2019 academic year and based on ASLA requirements. It will be submitted for ASLA/LAAB accreditation in December 2019/2020. The department will prepare for the accreditation visit which is anticipated in March or April 2020.

Proposal of the Masters of Landscape Architecture (MLA): The MLA proposal lead by Dr. Maria Gabriella Trovato with significant contribution by LDEM administrative staff was finalized and submitted to FAFS Dean during early December 2018 to be processed through the proper university channels in Fall 2019/2020. The program is benchmarked with similar ASLA accredited programs across the US.

Nayla Al-Akl, Associate Dean of Student Affairs: Assistant Professor Nayla Al-Akl was appointed as the University's Associate Dean of Student Affairs, effective January 15, 2019. The appointment aligns with the strategic goals of the Office of Student Affairs for a holistic, coherent response to the student campus experience that ensures a sense of belonging and enhances access to the best of what AUB offers and represents to all students. Al-Akl's leadership of the student affairs team will further promote inclusion by helping to establish a data-driven approach and framework based on analysis. She will develop reporting measures to improve understanding of student issues with the goal of improving inclusion on campus.

LDEM joins ECLAS to expand its reach of high academic standards: LDEM became officially a member of the European Council for Landscape Architecture Schools (ECLAS) in March 2019. ECLAS is a community working on fostering and developing scholarship in landscape architecture at the European and international level. By affirming its commitment to the highest standards of academic scholarship in landscape architecture, LDEM enhances its presence and visibility in the international academic community of landscape architecture through information exchange, experiential participation, common research agendas, and collaborative research projects (<http://www.eclas.org/>).

2019 - 2020 New Chairperson of the LDEM Department: Dr. Yaser Abunnasr was appointed as Chairperson of the LDEM Department effective January 2020. He also remains BLA program coordinator.

ECOM program Coordinator: Dr. Rami Zurayk was appointed as coordinator of the graduate Ecosystem Management (ECOM) program.

BLA program Accreditation status: In March 2020, LAAB informed LDEM Chair that the site visit is postponed due to the rising COVID-19 pandemic.

2020 - 2021 Proposal of the Masters of Landscape Architecture (MLA): The submitted MLA proposal was approved by the Board of Graduate Studies in October 2020. Due to the financial collapse in Lebanon and impact on University finances, the department decided to postpone the Senate approval until a time when the situation is more conducive.

BLA program accreditation status: In December 2020, Y. Abunnasr (Chairperson/ BLA coordinator) was informed by ASLA/LAAB (Landscape Architecture Accreditation Board) that the BLA program was approved to go ahead with the initial accreditation application process and that the site visit will be held virtually due to the COVID-19 pandemic. The program will prepare for the virtual accreditation visit from March 29 to April 1, 2021.

2. Organizational Structure of the Program

Provide a very brief description of the relationship of the degree program being reviewed to the organizational structure in which it is placed. Is the academic unit exclusively landscape architecture or does it also serve other disciplines (name them and show their relationship)? Is the degree program under review the only landscape architecture degree program or are there both undergraduate and graduate landscape architecture programs? (Organizational structure discussion will go into detail in Standard 2 Part A.)

The BLA program is housed in the department of Landscape Design and Ecosystem Management (LDEM). LDEM is housed in the Faculty of Agricultural and Food Sciences (FAFS) with two other departments: Department of Agriculture (AGSC) and The Department of Nutrition and Food Sciences (NFSC). The LDEM department only caters for the landscape architecture and related studies and only serves other disciplines through its elective courses (mostly graduate). The Bachelor of Landscape Architecture (BLA) is the only program in Landscape Architecture in the department. LDEM also houses an interdisciplinary and interfaculty graduate degree, a Masters of Science in Environmental Sciences (MSES), major Ecosystem Management (ECOM). A proposal for a Masters of Landscape Architecture (MLA) has been submitted and going through academic and administrative approvals in the university. **It is currently on hold.**

3. Response to Previous LAAB Review

Describe the progress that has been made on the *Recommendations Affecting Accreditation* from the previous accreditation visit (not applicable to those seeking initial accreditation). List each prior Recommendation verbatim and provide an updated recap of responses made on annual interim reports. List each *Consideration for Improvement* and provide an update.

This is the first time that the LDEM department applies for the LAAB accreditation for the BLA program and therefore this section is not applicable at this stage.

4. Describe current strengths and opportunities

The BLA Program continues to benefit from its setting in the Faculty of Agricultural and Food Sciences (FAFS) and from the access to a diverse amount of information that comes with that placement, as well as its unique context that enriches its content. The below sections highlight major strengths of the BLA program.

4.1 The Context as a Learning Laboratory

National Scale

At the national level, Lebanon provides an excellent laboratory for student learning. Lebanon uniquely offers a variety of micro-climates, urban/rural landscapes, geographies, and diversity of characters set in in a relatively small area of 10,542 square km. Lecture and studio classes benefit from this asset through field visits and studio topics where students have the opportunity for first-hand tangible experience through sites that are readily accessible. The program's central setting in Beirut makes it possible to reach any major city or rural area in Lebanon in a short amount of time, elevating the number of contexts within which to study the landscape. This also allows for a variety of topics and focuses throughout the program's studio sequence, culminating in a diversity of Capstone Project topics and contexts. In addition, non-studio courses such as Landscape Appreciation and Site Analysis (LDEM 263), Landscape Ecology (LDEM 218), Soils in the Landscape (LDEM 217) and all plant-related courses (LDEM 211, 219 and 221) have a substantial field trip component that enriches the courses and their applied learnings.

This diversity within the national scale also presents major similarities to different climates that the students would encounter in their professional careers, be it in the Middle East or abroad.

City/town Scale

Major cities in Lebanon are along the coast and offer excellent case studies for students to experiment. For example, Beirut provides a good subject for students to address issues such as open space availability, coastal issues, urban ecology, accessibility, infrastructure, heritage and cultural landscape. Being the country's capital and its densest city in terms of population, as well as having a high concentration of relevant Organizations, firms, and professionals and thus a high number of information, Beirut is an excellent starting point for the educational path of the program. Beirut and other cities in Lebanon provide differing social, cultural, economic, and physical contexts, providing places where students can address real life issues (Trovato, Al-Akl, Abunnasr, and Talhouk).

Campus Scale: Beirut Campus

The AUB campus is one of the few green vegetated sites within Beirut. It includes a collection of 168 native and exotic trees and shrubs, serves as a bird sanctuary, and offers stunning views to the Mediterranean Sea due to its topographic change. These assets, in addition to its historic character, people movement, and diversity of spaces provide proximate and varied outdoor experiment for students to incorporate into their work. This opportunity is especially important for the first and second year students, providing the opportunity to build confidence in skills and observation prior to handling real sites outside the campus. The Landscape Descriptive Drawing class (LDEM 201) uses the site as one of its main inspirations and as an outdoor classroom. The first design studio, Studio I: Landscape Design Fundamentals (LDEM 202) utilizes the campus as a place of experimentation for land art compositions and understanding fundamental principles of space design. The campus is specifically suited for the study of plants as it provides a large variety of tree species for students to observe, collect, draw, and see in their plant family context.

In addition, the department/program shares with other FAFS departments an outdoor plot originally named "the green house area" or more recently "FAFS Eco-Unit". This space has been designed and under implementation and includes an outdoor classroom, students' community planting plots, green roof research center, compost, water collection, and green house. Currently, the Eco-Unit is under construction, with Phase 1 complete (entrance), Phase 2 complete (Outdoor Classroom) Phase 3 under planning and construction in collaboration with civil engineering department to construct a mudbrick room facility.

Campus Scale: Beqaa AUB Campus

AUB's Advancing Research Enabling Communities Center (AREC) is a research and educational facility for FAFS located in the agricultural Beqaa Valley, 80 km away from Beirut. At an area of around 244 acres, the site is four times the size of the Beirut campus, providing opportunities on site and in the surrounding context for teaching and research. Today, the site is utilized during summers for teaching (i.e. Site Engineering sequence, where the LDEM II students realize a project that will serve the AREC community, visitors, and students. In Summer 2018-2019, LDEM 249 (Site Engineering III) course conducted a one-week workshop and engineered a tree-house structure while students of Summer 2019-2020 conducted an intensive one-week workshop, developed the design and constructed a traditional Tannour (traditional clay oven for bread) with a hexagon pergola, comfortable wooden table, chairs, and swings A (see Addendum G, p. 25-26). AREC is also used by faculty (from FAFS and other faculties) to conduct research. It provides opportunities for tangible studio design projects (Al Akl, Abunnasr). The location of AREC provides another context for design characterized by its agricultural characteristics and surroundings and dry and arid climate. AREC provides an opportunity to conduct academic activities with

rural communities, and with the recent events in Syria, the campus also provides an opportunity to work with refugees and institutions managing these refugee camps.

4.2 Faculty Diversity and Contribution

Our BLA program faculty members remain exceptionally strong in the areas of teaching, research/creative work, and service. They continue to make significant contributions to the field of landscape architecture in different areas due to the diversity of specialties, integration of design and science, and cultural backgrounds.

Research and creative work has been an important element for faculty members. In the last six years, the landscape architecture faculty were able to attract funding equal to \$4.92million US Dollars in grants for research, projects, and creative work. In the Academic Year 18/19 alone, total grants amount (recent continuing and new; excluding continuing older grants) totaled \$1,431,433 for projects ranging from Using Unmanned Aerial Vehicles (UAV)/Drones to measure the contribution of trees to Urban Heat Island Reduction in Urban Landscapes (Y. Abunnasr) to Sustaining the landscape of cemeteries (N. Al-Akl) and beyond. The results of the faculty's work continue to be published in books, book chapters, journal articles and professional journals. (Talhok, S.N., Y. Abunnasr, M. Hall, T. Miller, and A. Saif (2014)³; Madani, M, Williams, J., & Kharfan, G. (2016)⁴; Zurayk, R. (2016)⁵; Gharios, C., El Nour, S., Mundy, M., Zurayk, R. (2016)⁶; Moledor, S., Chalak, A., Fabian, M., and S.N.Talhok*(2017)⁷). Publications are a mean by which faculty members contribute to the field of landscape architecture, Talhok, S., Abunnasr, Y., Forrest, A., and Miller, T. (2018), Ioannis N. V., T. S. Terkenli, Trovato, M.G., and Abu-Jaber, N (2018).

Faculty members have a diversity of professional experience, academic background, research focus, and nationality, thus providing a rich learning and research environment. Having a diversified faculty body allows the integration of various scientific and design techniques in the design/studio teaching, integration of creative problem-solving skills, and an elevated variety of teaching approaches and research foci. Having diverse professional experience allows faculty members to bring in their unique experiences into the studio as well as it allows students to be exposed to various ways of addressing and tackling a studio's same topic of focus. Current issues related to the profession or technical know-how enriches the quality of the exchange. For example, Nayla Al-Akl, Yaser Abunnasr, Beata Dreksler, Maria Gabriella Trovato, and Mehran Madani have all practiced in different capacities and on different types and scales of projects. Many faculty members continue to practice and/or provide consultancies (Zurayk, Talhok, Abunnasr, Al-Akl, and Trovato) providing a continuous enrichment and update of knowledge that is shared with the students.

Different academic backgrounds represented by the variety of degrees earned (i.e.: level and subject matter) and education context (i.e.: Europe & USA) provide diverse teaching pedagogies. Students are

³ Talhok, S.N., Y. Abunnasr, M. Hall, T. Miller, and A. Saif (2014) "Ancillary Botanic Gardens - Local Contributions to Plant Conservation" *Sibbaldia, the Journal of Botanic Garden Horticulture* No. 12, p 111-128, Royal Botanic Garden Edinburgh, UK

⁴ Madani, M, Williams, J., & Khafran, G. (2016) - "Reclaiming the Virtual Sense of Place"— Common Ground Publishing, Journal of Constructed Environment

⁵ Zurayk, R. (2016). The Arab Uprisings through an Agrarian Lens. In Kadri. A. (ed). Development Challenges and Solutions after the Arab Spring. Hampshire, England: Palgrave Macmillan. pp. 139-152

⁶ Gharios, C., El. Nour, S., Mundy, M., Zurayk, R. (2016). Transformation rurale, paysage et conflit dans un village du Liban Sud, Sinay. *Economie Rurale* 353-354/Mai-Juillet 2016. P 9-26

⁷ Moledor, S., Chalak, A., Fabian, M., and S.N. Talhok*. (2017). Socioeconomic dynamics of Vermicomposting systems in Lebanon. *Journal of Agriculture, Food Systems, and Community Development*.

exposed to varied methodologies and tools of learning across the different course sequences (i.e.: studios, science, and theory).

The diversity of nationalities brings cultural diversity to the program. The nationalities of faculty members during AY 2018/2019 were Lebanese, dual Lebanese/American, Italian, dual Iranian/American, Hungarian, and Polish. This brings in richness to the teaching environment, to faculty meetings, retreat debates, and overall approaches to research. This provides a fresh and new framework to address design and planning issues.

Many of the faculty's activities meet multiple goals. Maria Gabriella Trovato's focus on the recent refugee crisis is incorporated into her design studios; it has provided service to the community and resulted in a research work titled 'Landscapes in Emergency'⁸. Similarly, the work by Mehran Madani on older adults, has directed his research to the evaluation of urban physical settings and landscape infrastructure quality of different urban forms in Beirut Metropolitan Area, in terms of 'older adults'⁹ ease of access to the community.

The diversity of specialties results in attending a wide spectrum of conferences and international venues. The range spans the fields of landscape architecture, urban planning and design, food security, ecosystem management and services, and health. Presentations in these venues result in international connections through attendance of conferences, workshops, and invitations to give lectures. Attending such events has resulted in new collaborations and networks (Zurayk, Talhouk, Trovato, and Abunnasr) that have advanced the department's credibility and increased visibility.

The faculty's commitment to service is also significant. In addition to many faculty members serving on multiple committees related to governance (Zurayk, Talhouk, Al-Akl, Trovato, and Abunnasr), there is extensive service to communities through studio teaching (Trovato and Abunnasr), serving with the NCC (Talhouk), and research (Zurayk).

Faculty members are highly qualified, experienced, and are able to enrich the regional knowledge with significant involvement in culture, design, natural resources, social, rural, and urban aspects; in addition to providing leadership in emerging local and regional concerns through the involvement in research, professional, and outreach activities.

The LDEM is always active in the recruitment of new faculty to sustain a faculty body that is vibrant and scholarly productive, including publications of articles and books, participation in conferences, symposiums, workshops, and professional practice. This has been possible because of the administration's support to the program, which allows recruitment of new faculty as deemed necessary by the curriculum needs.

The involvement of a rich array of part-time and visiting faculty also plays a significant role in enriching the program, having varying levels of experience and practice.

4.3 Distinctive Program Features

The program has several distinct features that differentiate it from programs in the MENA region as well as other academic landscape architecture programs. It is very distinct at the regional level as it is the first of its kind and offers a US modelled program that is professional in scope. The program's teaching and

⁸ Landscape In Emergency. Syrian informal settlements in Lebanon, in JOLA Journal of Landscape Architecture (Status: submitted for peer review)

research focus highlights issues of sustainability and resilience across arid and semi-arid climates. The program is developed as a multi-disciplinary model of landscape architecture teaching that culminates in a two-semester capstone project that few LA programs have. The following sections highlight these strengths.

National and Regional Distinction

The BLA Program at AUB is the first BLA Program based on a US model in the Middle East and the first having English as the primary teaching language, and the only landscape architecture program that culminates in a Professional Degree. At the local level within Lebanon, two programs are currently offered at the graduate level that are not professional and focus mostly on research and housed within urbanism or urban planning departments ([Lebanese University](#), and [University of Balamand](#)). Only two other programs are at the undergraduate level: A landscape design program at the [Arab University](#), started in 2017; and a landscape architecture program at the [University of Balamand](#), started in 2012. Both undergraduate programs are very recent and do not follow a US Model. All the aforementioned programs offer non-professional degrees, as opposed to the BLA at AUB which offers a Professional Degree.

At the regional level, programs exist in Iran and Turkey and vary in scope and content. Some based in design schools and others in environmental faculties. Yet, none provide a professional degree based on the US model of higher education in landscape architecture.

Areas of concentration

The program has several areas of concentration that are relevant to the MENA region and applicable worldwide. These areas of concentration build on the expertise of various professional landscape architects, designers, and faculty of diverse background such as landscape horticulture, soil science, environmental engineering, architecture, and planning to ensure this continuous distinctiveness. The program is recognized for its local and regional focus that addresses issues such as regional landscape architecture trends and practices (Jala Makhzoumi, Yaser Abunnasr), urban landscapes (Nayla Al-Akl and Yaser Abunnasr) refugees and crises (Maria Gabriella Trovato), and natural landscape conservation (Salma Talhouk and Monika Fabian). These can be summarized in the list below:

- **Heritage Conservation and Planning:** Landscape planning for nature and rural heritage conservation with a strong focus on conservation and sustainable use of native flora.
- **Landscape Ecology:** Ecological approach to landscape design including ecosystem services and cultural practices.
- **Natural and Cultural Landscape:** Relationship between rural landscapes, rural livelihoods, agriculture and food security.
- **Landscape Design and Social Impact:** Relationship between landscape design, education, and human behavior.
- **Environment:** Water conservation, soils, and plants.
- **Urban Greening and Sustainability:** Urban landscapes and systems with an emphasis on urban greening, climate change and impact on urban and rural landscapes.
- **Landscape Resilience:** Green infrastructure as an adaptation tool for climate change and extreme events (i.e. Wars, natural disasters, migration, refugees etc.).

These major focus themes in the research and educational fields reflect the interdisciplinary nature of the program, which is further contemplated in the design topics tackled throughout the four-year BLA program. These areas of focus offer an understanding of the need to protect cultural, natural and agricultural resources within the rural settings, and for maintaining, conserving, protecting, and sustaining

such resources in different context at different scales and thus to enhance community development and human well-being. Students study and apply their acquired knowledge from these focus areas to preserve and sustain the cultural and historical landscapes, particularly in the Mediterranean and Arab World, to maintain and protect the rich heritage that identifies such prolific and vernacular region.

Moreover, students make use of landscape architecture materials and systems to propose and practice environmentally and ecologically sustainable solutions with the aid of innovative technologies in practicing urban greening, green technologies, in addition to watershed management and brownfield rehabilitation and reclamation.

Interdisciplinary Program: Integrating Design and Science

Another hallmark of the BLA program is the explicit and intentional integration of landscape architecture and design with ecological/ecosystem science knowledge, methods, and skills. The faculty believes that such integration provides an edge in the market for our students as well as skills and knowledge to pursue further studies beyond the BLA. Design faculty members integrate scientific investigation in project analysis and as inspiration for design ideas. Students are constantly advised to consult scientists on issues such as ecology and pollution, as well as engineers on issues of construction, specific technical transportation issues, etc. Speakers of various technical backgrounds are also brought to studios to give lectures in specific topics in addition to a varied array of topics assigned in readings. Similarly, science faculty in the program have either shifted part of their focus to subjects or methods pertaining to design such as participation in plant conservation (example Dr. Salma Talhouk), or integrated design project processes to address scientific topics such as soils (Dr. Rami Zurayk). This approach provides richness and consistency in the process of transfer of knowledge to students. This is an ongoing process and the program faculty members continue its development and integration.

Many of our faculty members achieve this through several means. Co-teaching courses between design and science members, bringing specific expertise to studios (Landscape Ecology: Yaser Abunnasr. Horticulture: Monika Fabian), or incorporating teaching methods into courses such as Rami Zurayk's incorporation of project presentations similar to studios into his soils course, collaborative assignments between science and arts courses have also served to advance students reading and understanding of the landscape elements (Horticulture (Fabian)/Descriptive Drawing (Badran)).

Integrated Studio Sequence

The strength of the studio sequence lies in the sequencing of topics covered in each studio (one studio per semester) where each studio builds on previous studio knowledge and parallel lecture subjects (i.e. science, history, theory, engineering, and skills) culminating in a two-semester final year project (capstone project). The eight studio sequence is built up to vary and increase in complexity of scale, subject matter, and creative thinking integrating design and science. As design problematics increase in complexity, so does the scientific and engineering knowledge required to address them. Accordingly, science and engineering courses are planned to support this sequence in parallel to the studio sequence. For example, for Studio VI, Natural Landscape Design (LDEM246) which is given in the spring semester, students are required to take in the previous fall semester Landscape Ecology (LDEM 218) and Geographic Information Systems (LDEM 251) to acquire the necessary knowledge for the studio.

The build-up of knowledge is designed to transform the intuitive into an explicit expression of design. This begins in the first year where students are taught basic theories of design through hands-on skills of model building and drawing (Studio I: Landscape Design Fundamentals, LDEM 202). The second studio is focused on small-scale garden design (Studio II: Landscape Garden Design, LDEM 216). In the second and third years the topic sequence includes planting design (Studio III: Landscape Planting Design,

LDEM 222), cultural landscape design (Studio IV: Cultural Landscape Design, LDEM 204), urban landscape design (Studio V: Urban Landscape Design, LDEM 228), and natural landscape design (Studio VI: Natural Landscape Design, LDEM 246). The fourth year culminates in the capstone project with a research/concept design studio (Studio VII: Landscape Capstone Project I, LDEM 241) and a full design project (Studio VIII: Landscape Capstone Project II, LDEM 242) in the spring semester of the fourth year.

The Final Year Project (Capstone Project)

The final year project (FYP) is one of the major strengths of the program. Over two studio courses, FYP provides the opportunity for senior undergraduate students to demonstrate their assimilation and integration of all knowledge and skills during the BLA program. Students are required to develop a project based on their personal interest from inception, research, and concept design during the fall semester; and develop the design during the spring semester to a full preliminary/design development stage. While the general guidelines are to be followed, individual projects take different paths, and are led by the students depending on issues addressed, theme, scales, and context as well as design exploration. As such, the number of projects varies by the number of students and theme focus. These themes include but are not limited to: Cultural Landscapes, Historic Landscapes, Urban Landscapes, Community Landscapes, Militarized Landscapes, Landscape Changes, Natural Landscape, Landscape and Ecosystem Health, Rural Landscapes, and Landscape Versus Development.

A full-time faculty member with the help of one or two part-time faculty members usually administer the capstone project, where at least one of the part-timers is a practicing landscape architect. This teaching dynamic provides the students with multiple perspectives and areas of expertise to draw from, as well as an array of varying resources that could be relevant to their project's area of focus. The capstone project provides the opportunity for students to develop their own interests and focus as well as their design autonomy. Not only does the capstone sequence encourage thinking outside the box, it also encourages the application of time management and project planning techniques, the discovery of unique areas of interest, and the balancing of self-reliance and collaboration (Please refer to Volume 5, *Appendix 26, Student Work-LDEM 242*).

Required Professional Internships

The required summer internship for credits is essential for the program within the context of the MENA region where the profession remains in its infancy and opportunities are not abundant. The summer internship program is essential to the curriculum and the academic experience of the students because it spans two courses, provides intentional opportunities, and the rigorous assessment that is carried out upon completion. The integration of professional practice (LDEM 290) and the required professional internship course (LDEM 292) provide a distinct experience for students.

In LDEM 290, students are taught to prepare job applications, portfolio, and letters of interest in addition to understanding how professional firms work through learning about contracts and workplace practices, with the integration of case studies and interviews with local firms. Using the extensive database of regional and international firms (i.e. single designer firms, medium sized and multi-disciplinary) as well as their individual research, students apply to a large number of firms in a competitive manner. Upon completion of an internship, students are required to submit an internship report, publically present it and obtain a confidential employer report about their performance. The experience provides a first exposure to professional environment and the issues involved. The faculty believes that the professional practice course provides a unique opportunity for students to experience firsthand the dynamics of a professional

setup teaching them the principles of the profession, its organization, future career opportunities and ethics of practice.

Field Study and Field Trips

Field study and trips are important components of the BLA curriculum because they provide direct experience and immersion in the landscape context to comprehend socio-political, socio-economic, cultural, ecological and environmental values, yielding experienced students in relating thinking to actual contexts and conditions.

The program requires field visits and study components in most of the courses taught. The faculty believe that this is an intrinsic component of the program that helps connect theoretical ideas with reality and practice allowing students to experience, analyze, and synthesize what they are taught in the classroom. This emerges from the fundamental principle of engaging students with their contexts. For example, in the capstone project (LDEM 241 and LDEM 242) students are required to visit their selected sites multiple times to document it and provide analytic drawings of their observations. This is presented through evidence in their research reports, sketches, and drawings that they present. This is required in other courses and include: Landscape Appreciation and Site Analysis (LDEM 263, taught by Maria Gabriella Trovato); Landscape Horticulture (LDEM 211, taught by Monika Fabian); Design Studios (taught by Maria Gabriella Trovato, Yaser Abunnasr, Beata Dreksler, and Ramzi Mezher); Soil in the Landscape (LDEM 217, taught by Rami Zurayk); Surveying and Base Plan development (LDEM 291, taught by Halim Nader and Wissam Melhem); and Landscape Descriptive Drawing (LDEM 201, taught by Noura Badran)

4.4 Facilities

The program maintains two unique outdoor facilities for the BLA, in addition to the usual indoor facilities. The program includes offices for each full time faculty member, four studios (one seat for each student), a shared part-time instructors' office, a shared research assistants' office, a seminar room, support administrative offices and recently an outdoor classroom. In addition, a newly renovated space was transformed into a new model-making and printing space completed at the end of the Fall 2020-2021 semester. All facilities are connected to the internet, printing room, as well as the presence of audiovisual equipment in each studio.

The outdoor teaching and research facilities include a plot of land on the main campus, named the ECO-UNIT, and AREC, which is located in the Beqaa Valley, 80 kilometers from the main campus. The ECO-UNIT is used for teaching plant courses (LDEM 211, LDEM 219, and LDEM 221) and Site Engineering II (LDEM 248). The unit is also used by the faculty for research, such as green walls and extensive green roofs (Salma Talhouk and Monika Fabian). It is also used for K-12 student outreach and awareness about the environment. The future plan is to develop the space into sustainable landscape design model.

AREC also provides an opportunity where students spend extended amount of time (one week and more) to learn about landscape management, and water (usually summer semester and include courses LDEM 265, LDEM 231). In addition, special projects or building samples of design are usually carried out (Beata Dreksler, Site Engineering III, LDEM 249). Faculty also conduct research and outreach activities with adjacent rural communities. The facility also includes sleeping and eating facilities, allowing the presence for extended periods of time. These two unique facilities provide unique educational and binding experiences between students themselves and with their instructors.

4.5 Opportunities to Study Abroad

At the University level, students benefit from the services of the Office of International Programs (OIP) for international exchange program opportunities. The OIP has memoranda of understanding with individual universities (e.g.: UC Berkley) or network of universities (e.g.: Erasmus Universities) across Europe and the USA.

Several BLA students have benefited from these opportunities in the past years, visiting institutions such as Universita di Bologna and UCLA. At the individual faculty level, several short-term design workshops have been initiated to support student experiences. For example: The One-week 'Landscape Planning and Nature Conservation of the Cultural Landscape of Slavonic Workshop' in Prague, Czech Republic (Yaser Abunnasr), the ten-day workshop on integrated energy planning and the use of the C-maps in Amman, Jordan (Y Abunnasr), the one-week Venice Biennale workshop in 2014 (by Yaser Abunnasr and Nayla al-Akl), the "Landworks" International operative workshops in Italy (2013, 2014 with Maria Gabriella Trovato). For an example of more recent opportunities, see Addendum G, page 23. Most activities have been stopped since March 2020 due to the COVID-19 pandemic while few moved online (see Addendum G, p. 21 and 28).

4.6 Community Service

The department has expressed an open commitment to community development and service. This academic commitment by faculty is transmitted to students who develop an affinity to problems and issues faced by communities, especially marginalized ones. This involvement happens at various levels:

- In teaching, through courses where community and environment are the focus of the studio, such as the refugee informal settlement project conducted by Maria Gabriella Trovato during Spring semester of 2015 and 2016 while teaching (LDEM 228) and rural towns (LDEM 216, taught by Ramzi Mezher).
- Student participation in funded projects that directly involve communities. The funded project titled 'Baldati Biati' (My Village My Environment by Salma Talhouk) allows students as research assistants and volunteers to be involved in participatory mapping for local planning and conservation of natural and cultural heritage.
- Student participation in community projects through the Landscape Architecture Student Society and its collaborations with municipalities and NGOs such as their September 2018 collaboration with Green Hand, and environmental NGO, and the Baysour Municipality to design the Baysour Ethnobotanical Garden. The Student Society produced a design aimed at making the visitors more familiar with the local biodiversity.
- Mehran Madani's project addressing accessibility in the city for the older adults, provided students with opportunities to interact with the elderly in an assisted living center in Beirut. Also, FYP projects by some students require them to be involved with specific communities and stakeholders in support of their project designs.

The faculty members continues to be engaged in service activities in relation to the community at large (See Addendum G, p. 36-39).

4.7 Strong Relations with Alumni

The program maintains and continues to foster a strong relationship with alumni through several ways. The department maintains a current list (updated yearly) of alumni. Alumni are often invited to participate in orientation session on professional placement of current students seeking internships and jobs, and are often employed as research assistants on research projects and as part-time instructors to support in teaching. Alumni also volunteer to give lectures about their experiences and work. In addition, alumni are

often invited to participate as jury members, in conferences, and in department activities. Recently, success stories and testimonials of several alumna were featured on the department social media venues and website as part of the BLA recruitment media campaign.

4.8 Continuous Program Assessment and Improvement

The continuous assessment process allows the program to continuously add improvements and developments. The BLA program applies the university policy of rolling assessment and continuous improvement. This process includes a yearly Program and Learning Outcomes (PLOs/CLOs) assessment and a 5-year program review mandated by the university. The LDEM Faculty develop a comprehensive PLOs/CLOs plan for the BLA. The assessment plan includes learning outcomes of the program, tools and methods of assessment, and a 4-year implementation plan (the typical PLO/CLO cycle). The PLO assessment report is written every semester, by which courses for the semester are assessed using direct (faculty) and indirect (students) tools. After collecting the assessment data, an annual assessment report is prepared and recommendations for implementation are put forward. The department then meets and discusses the challenges and implements changes. This process is supported by the Center of Teaching and Learning (CTL) to promote teaching and learning excellence, and supervised by the Academic Assessment Unit at AUB.

Moreover, the 5-year program review is part of the process of registration confirmation of the program at the New York State Education Department (NYSED) where each program in the university is assessed every five years. The program was given initial registration in 2013, which was pending a final review after the graduation of the first class with a Landscape Architecture degree in spring 2017, as opposed to their predecessors who did so with a Landscape Design degree. NYSED registration was acquired in 2018. A final document is then agreed upon with a five-year implementation plan until the next review cycle. This process is supervised and supported by the Academic Assessment Unit at AUB.

Revision of Program and Course Learning Outcomes: While student-learning outcomes remain the same at this stage, the COVID-19 pandemic and the several other crises prompted the BLA program to review and update the program and course learning outcomes. Initially, this was done to see if and how the learning outcomes are met within the COVID-19 situation. Once we revised outcomes, we realized we needed to develop and refine the outcomes. Accordingly, a new set of PLOs/CLOs were developed to address the gaps by adding, deleting, and renaming certain learning outcomes, with specifically a learning outcome related to technological delivery of course material. The following was completed: Mapping all course syllabi against skills, knowledge, and level. These were used to redefine the learning outcomes. Tables comparing new and old learning outcomes were developed. The revised learning outcomes were approved by the center for teaching and Learning with projected implementation in Fall 2021/2022 (See Addendum G, p. 30 and attachment 14 in Addendum G, p. 66-196).

5. Describe current weaknesses and challenges

5.1 Difficulty in faculty recruitment

Because the field of landscape architecture is relatively new in Lebanon and in the region, there is not a sufficient number of local specialized landscape architects qualified to work in academia. When advertising for new positions, advertisements are included in international venues to attract international faculty. While the program has been successful in attracting some faculty from the US and Europe, it remains a challenge when advertising for specialized fields. The department had advertised for an open line in history for the past two years with very few candidates applying. Updates regarding faculty recruitment are described in Addendum G, p. 10.

5.2 Insufficient funding for program enrichment

Budget items to support guest speakers, exhibits, a yearly conference, workshops, and travel abroad are very limited. This affects the program's ability to further advance its impact and increase its effect. The department should continue to lobby for more funds from the Dean's office and upper administration while seeking external funds for such events.

5.3 Absence of local and/or regional recognition of the profession

A primary challenge for the program and students is the recognition of landscape architecture as a stand-alone profession and practice. It is a challenge to our program because there is no local or regional certifying body recognizing the profession, thus making the program harder to be marketed and attractive to students. The challenge to our students is the difficulty in finding jobs in the field of Architecture, Landscape Architecture, and Urban Design because many local Architecture firms do not recognize the profession. In addition, students are obliged to register in the Order of Engineers and Architects as Ingénieur Agricole rather than as landscape architects which removes their identity as professionals and at the same time the recognition of their capacity distinct from architects. To this effect, the department is working with other universities and associations to change the status quo. It follows that there is no professional body or chapter within the Syndicate of Engineer and Architects dedicated to Landscape Architecture to be in line with the Lebanese Ministry of Education. For alumni to obtain some sort of registration, seniors graduate as "Ingénieur Agricole" which allows them to practice the profession. The Department will continue its active work to promote the profession and build on previous activities (i.e.:2019 membership into ECLAS and presence at the ECLAS Conference in Norway, 2010 Landscape symposium, formation of the Lebanese Landscape Association (LELA) under IFLA, 2016 International Conference held at AUB).

6. Describe any substantial changes

This is the first time that the LDEM applies for the LAAB accreditation for the BLA program and therefore this section is not applicable to this report.

7. Describe who participated in the preparation of this report

Faculty, administrators, students, alumni, outside professionals, etc. in preparing this self-evaluation and briefly state their roles. The LAAB recommends involving as many people as possible in preparing the SER, as the process of self-evaluation can be one of the greatest benefits of accreditation.

Although much of the final writing, assembling and editing of the document was done by Dr. Yaser Abunnasr (appointed BLA Program Coordinator and Self-Study Coordinator and currently Chair of the department) many people have contributed to the text, data and formatting of the SER as listed in **Table 1** below.

Some faculty members and Faculty (College) administration members contributed to individual standards (Table 1). In addition, they provided information regarding their individual teaching records, their course syllabi, and other requested information pertaining to their teaching, research and service. The BLA faculty were also asked to review and comment on the document after it was assembled. All faculty and administration in the BLA program participated in different capacities. These preceding documents were developed at several stages by current or previous Department Committees as follows:

- *Self-assessment report in 2019/2020 committee:*
 - Yaser Abunnasr (BLA Program Coordinator/ Chairperson)
 - Rim Hazimeh (Departmental Research Assistant)

Sara Hamzeh (Research Assistant)

Nadine Modad (Administrative Officer)

- *Self-assessment report in 2016/2017 committee:*

Yaser Abunnasr (BLA Program Coordinator)

Sandra Youssef (Departmental Research Assistant)

Nadine Modad (Administrative Officer)

- *Self-assessment report in 2013/14 committee:*

Nadim Farajalla (Chairperson of Program Review Committee)

Yaser Abunnasr (Committee member of Program Review Committee)

Nayla Al Akl (Committee member of Program Review Committee)

- *Earlier self-assessment reports:*

Salma Talhouk (Chairperson of Review Committee)

Jala Makhzoumi (Committee Member)

Rasha Talhouk (Research Assistant)

The Department conducted a survey of alumni and students, with the assistance of Alia Alameddine (FAFS Dean's Office), Tharwat Haddad (FAFS Student's Office), and Sandra Youssef (Former Departmental Research Assistant), Rim Hazimeh (Current Departmental Research Assistant), and Sara Hamzeh (Research Assistant). In addition, support was received from FAFS IT manager Dania El-Ashi, and Salpy Naalbandian from Library Services, for their respective sections. Nadine Modad, Administrative Officer at LDEM, compiled and provided updated data and previous reports. The departmental administrative staff contributed data; formatting and production of the document are displayed in **Table 1**.

Table 1: Individual contributors to the SER and their roles

Individual Contributors	Their Roles
Yaser Abunnasr, Associate Professor, Chairperson of LDEM (effective January 2020) and BLA Program Coordinator	Lead faculty member and coordinator of SER: Compilation of data, analysis, organization, coordination, writing & reviewing of the whole document, including Addendum G and overseeing videos of facilities
Nayla Al-Akl, Assistant Professor	Provided syllabi of courses, coursework samples, and personal teaching record and updates from the Office of student Affairs in Addendum G (p. 12-14)
Dania Al-Ashi, IT Manager (FAFS and OSB)	Section 7 B, Computer Labs Equipment and available software and updates in Addendum G (p. 44-48)

Zeinab Charara, <i>Departmental Research Assistant (Creative and Admin Support); effective February 2021</i>	Assist in writing of Addendum G and document graphics; shooting of videos of the facilities
Beata Dreksler, <i>Assistant Professor</i>	Provided Syllabi of Courses, Coursework Samples, and Personal Teaching Record.
Monika Fabian, <i>Instructor/ greenhouse supervisor</i>	Provided Syllabi of Courses, Coursework Samples, and Personal Teaching Record.
Tharwat Haddad, <i>Students Records Officer, Dean's Office, FAFS</i>	Deploying Alumni and Student Surveys, support in Data Collection of Current Students & Exit Surveys; Addendum C Data
Mehran Madani, <i>Assistant Professor (Dr. Madani resigned effective Fall 2019-2020)</i>	Provided Syllabi of Courses, Coursework Samples, and Personal Teaching Record (or the Fall 2018-2019 semester only)
Nadine Modad, <i>Administrative Officer</i>	Data Collection and Analysis of Addendum A, D & E; Providing Department Archive available for Data Collection; Final editing and review; Data collection and writing of Addendum G
Sally Naalbandian, <i>Head of Science and Agriculture Library</i>	Section 7 C. Library Resources and updates in Addendum G (p. 48-51)
Maya Nabhani, <i>Director of continuous Academic Improvement, Dean's Office, FAFS</i>	Contributed to discussions and reviews of report sections and Survey Questions. Final Report Review and contact with upper administration
Salma Talhouk, <i>Professor</i>	Provided Syllabi of Courses, Coursework Samples, and Personal Teaching Record.
Maria Gabriella Trovato, <i>Assistant Professor</i>	Provided Syllabi of Courses, Coursework Samples, and Personal Teaching Record.
Rim Hazimeh, <i>Departmental Research Assistant (until November 2020)</i>	Supervision of Alumni & Students Survey. Data Collection of Student and Alumni Surveys. Data Analysis of Alumni Survey Results. Document review and graphics. Final editing and review for consistency.
Sara Hamzeh, <i>Research Assistant (until January 15, 2020)</i>	Supervision of Alumni & Students Survey. Data Collection of Student and Alumni Surveys. Data Analysis of Alumni Survey Results. Data collection of reports and materials. Document editing, compilation, and review.
Rami Zurayk, <i>Professor and Department Chairperson (until January 2020)</i>	Contributed to discussions and reviews of report and provided Syllabi of Courses, Coursework Samples, and Personal Teaching Record and the Final Report Review.



PROGRAM MISSION AND OBJECTIVES 1

1. PROGRAM MISSION and OBJECTIVES

STANDARD 1: The program shall have a clearly defined mission supported by goals and objectives appropriate to the profession of landscape architecture and shall demonstrate progress towards their attainment.

INTENT: Using a clear concise mission statement, each landscape architecture program should define its core values and fundamental purpose for faculty, students, prospective students, and the institution. The mission statement summarizes why the program exists and the needs that it seeks to fulfill. It also provides a benchmark for assessing how well the program is meeting the stated objectives.

The BLA Program is aligned with the Department’s Mission and Vision and it has been revised in its most recent form in 2012 to better reflect the scope of the profession.

A. Program Mission

1. State the current program mission and date adopted.

The mission of the Bachelor of Landscape Architecture (BLA) is:

To graduate lifelong learners and critical thinkers who adopt a holistic view of the landscape, and who are equipped with interdisciplinary, scientific, and creative skills to start as entry-level landscape architects and to become, with experience, successful professionals serving their communities (2011).

2. Describe how the mission statement reflects the purpose and values of the program and how it relates to the institution’s mission statement.

The mission statement of the BLA program reflects the fundamental purpose of our program: to educate students in the professional practice of landscape architecture. It also captures our core values, such as commitment to working with students, stewardship of the landscape, and giving back to communities. These values are in line with AUB’s mission statement, which states:

The American University of Beirut (AUB) is an institution of higher learning founded to provide excellence in education, to participate in the advancement of knowledge through research, and to serve the peoples of the Middle East and beyond. Chartered in New York State in 1863, the university bases its educational philosophy, standards, and practices on the American liberal arts model of higher education. The university believes deeply in and encourages freedom of thought and expression and seeks to foster tolerance and respect for diversity and dialogue. Graduates will be individuals committed to creative and critical thinking, life-long learning, personal integrity and civic responsibility, and leadership.

The mission of our BLA program relates closely to the University’s mission. Our program is the only undergraduate program in Lebanon and the region that practices teaching in landscape architecture following a US model. By educating our undergraduates in the best practices of landscape architecture, we are preparing them to be “creative and critical thinkers”, instilling in them personal

“integrity and civic responsibility”, and pushing them to develop an ethical stewardship to land and people. As graduates of the program, they are expected to serve the people of the Middle East.

The mission of the LDEM department is:

To promote a holistic view of landscape and the environment within its students, and to equip them with cutting edge scientific knowledge and creative, flexible skills for the design and management of natural and cultural resources. The essence of the department lies in its interdisciplinary nature, equally in teaching and in research, with applications in the large Middle Eastern region. To that end, the Department builds on the strong linkages established with other academic units within and outside the faculty.

Holism is meant to be a comprehensive view of life. We practice a holistic approach by understanding and teaching landscapes as systems that are interrelated and connected. A holistic approach generates sustainable and resilient solutions to problems within Lebanon and the Middle Eastern region. A holistic approach to teaching incorporates creative and scientific skills, to successfully instill the needed skill set for developing natural, cultural, and urban landscapes as an interrelated system. Holism is ecological in its literal and metaphoric sense. A holistic approach provides an outside-the-box approach to learning, research and service.

Within the American University of Beirut, we are part of the Faculty of Agricultural and Food Sciences (FAFS), and support the Faculty’s mission and bring our particular strengths to it. The FAFS has the following mission statement.

The mission statement of the Faculty of Agricultural and Food Sciences is:

Through research, education and community engagement, FAFS inspires minds, fosters enhanced food and nutrition security and promotes sustainable environment, water, livelihoods, and food systems in Lebanon, the region and beyond.

The BLA program supports the Faculty (College) mission in terms of sustainable design, planning and management of the land, the environment and the human resources to the well-being of communities and natural systems.

The BLA program makes important contributions to the Faculty (college) and Departmental missions through:

- Courses that focus on issues of sustainability, land use, biodiversity, ecology, environmental quality, and social equity, primarily within the context of the Middle East.
- Conducting applied research on natural, cultural, and urban systems that affect communities and ecology in Lebanon and the region.
- Training students to be creative and critical thinkers and to intelligently use information technology including GIS and CAD.
- We believe that our particular strengths and interests are presented in the University and Faculty (College) mission statements. We are confident that our contributions to teaching, research and service are well recognized by the administration.

B. Educational Goals

1. State the academic goals of the program.

The program has set six goals that support its mission and allow the achievement of the program's short long-term targets.

- a. To provide up-to-date landscape architectural skills and knowledge, emphasizing issues and constraints in the Middle East region.
- b. To maintain an academically active and highly qualified group of faculty who are leaders in their field and who possess a strong sense of engagement.
- c. To encourage out of the box thinking while emphasizing up-to-date tools and technology employed by the profession.
- d. To offer a dimension of sustainability through experiential and service learning in order to educate future landscape architecture professionals who adopt a holistic view of landscape.
- e. To emphasize inter-disciplinarity highlighting the relationship between landscape architecture and other disciplines.
- f. To impart a sense of cultural sensitivity and professional and environmental ethics to students.

2. Describe how the academic goals relate to the program's mission.

The first three goals above (a, b & c) relate to our mission to prepare students to become "entry-level" landscape architects. Goals d, e & f relate to our mission to build on the basics to prepare students to become "successful professionals serving their communities" that incorporate scientific, creative skills and knowledge. These goals also further acknowledge that contemporary practice requires awareness to social, cultural and environmental issues.

3. Describe how the program regularly evaluates its progress in meeting its goals.

The program regularly evaluates the progress being made in meeting its goals through discussions and LDEM faculty members bi-weekly meetings, in addition to departmental retreats that take place at least once a year. Also, faculty are present at departmental studio presentations, which is an opportunity for all faculty to evaluate the learning outcomes of each studio. Course evaluations that students complete at the end of every semester have a designated area for instructors to include evaluation questions specifically related to the course goals and learning objectives. This is conducted through the Instructor Course Evaluation (ICE) assessment tool where students respond to tailored questions that are catered to help achieving program goals. Furthermore, in the course learning outcomes assessment tool, the program has adopted a set of key performance indicators (KPI) which will be used by the department members and chairperson to objectively evaluate progress.

C. Educational Objectives

1. List the educational objectives of the program.

In addition to program and course learning outcomes, the department has developed academic objectives, which are aligned with the program, the department, the Faculty, and the University at large, and consist of the following:

- Provide diverse knowledge and skills by offering a curriculum comprised of a well-balanced set of courses and experiences that expose students to local and regional perspectives.
- Support summer internship with placement services at the department and faculty levels.
- Increase faculty/staff satisfaction and support.

- Create a teaching and research environment conducive to excellence.
- Provide an open environment where creativity, inquiry, critical thinking and risk-taking are encouraged.
- Emphasize the development of students’ ability to articulate and transform environmental, social, and economic issues into material form and design.
- Enhance applied and student-centered learning in the curriculum.
- Develop community-based studio and research projects with outreach units in the University.
- Infuse the curriculum with interdisciplinary courses and hands-on experiences
- Provide opportunities for landscape architecture students to interact with students in other disciplines at the University (studios, projects, electives...).
- Encourage faculty and students to engage in University-wide interdisciplinary units.
- Offer opportunities to participate in responsible community development and preservation.
- Articulate professional values and ethics throughout the curriculum.

2. Describe how educational objectives fulfill the educational and mission goals.

The program has attainable educational objectives that are matched with set academic goals.

Table 2 below demonstrates how one or several educational objectives support the academic goals.

Table 2: Educational goals fulfilling mission goals

Educational Goals	Mission Goals
1. Provide diverse knowledge and skills by offering a curriculum comprised of a well-balanced set of courses and experiences which incorporate local and regional perspectives.	a. To provide up-to-date landscape architectural skills and knowledge emphasizing issues and constraints in the Middle East region.
2. Support summer internship with placement services at the department and faculty levels.	
3. Increase faculty/staff satisfaction and support.	b. To maintain an academically active and highly qualified group of faculty who are leaders in their field and possess a strong sense of engagement.
4. Create a teaching and research environment that is conducive towards excellence.	
5. Provide an open environment where creativity, inquiry, critical thinking and risk-taking are encouraged.	c. To encourage out of the box thinking while emphasizing up-to-date tools and technology employed by the profession.
6. Emphasize the development of students’ ability to articulate and transform environmental, social, and economic issues into material form and design.	
7. Enhance applied and student-centered learning in the curriculum.	d. To offer a dimension of sustainability, experiential and service learning in order to educate future landscape architecture professionals to adopt a holistic view of landscape.
8. Develop community based studio and research projects with outreach units in the University.	

Educational Goals	Mission Goals
9. Infuse the curriculum with interdisciplinary courses and hands-on experiences	e. To emphasize inter-disciplinarity highlighting the relationship between landscape architecture and other disciplines.
10. Provide opportunities for landscape architecture students to interact with students in other disciplines at the University (studios, projects, electives...).	
11. Encourage faculty and students to engage in University-wide interdisciplinary units.	
12. Offer opportunities to participate in responsible community development and preservation.	f. To impart a sense of cultural sensitivity and professional and environmental ethics to students.
13. Articulate professional values and ethics throughout the curriculum	

The explicit objectives stated above satisfy the academic goals of the program, faculty, and university at large in various ways:

- The necessary steps to support, accomplish and achieve each goal has been described and identified.
- Each academic objective of the department’s goals supports a specific and unique professional and educational aspect.
- Each specific objective tackles a commitment to attain the defined goal.

Each objective has been identified and evaluated by the faculty to guarantee its relevance and relatedness to the faculty vision and mission and to that of the university at large.

D. Long Range Planning Process

1. What is the program’s long-range planning process?

The Department’s long-term viability is integral to and integrated within the Faculty strategic planning process. The strategic plan of the department and the program is developed based on a long-term vision of LDEM, which is aligned with FAFS strategic plan. As a result, implementation initiatives and actions for LDEM were developed. The planning process is achieved through regular meetings and retreats to evaluate and further refine the long-term objectives. The two latest Faculty of Agricultural and Food Sciences Strategic plans (2012-2017) and (2019-2025; *Volume 2, Appendix 13*) included goals for this period and include new facilities, new hiring, and improvement of teaching. These goals were achieved through a systematic process, which entails the following:

- Bi-weekly department meetings: during these meetings, issues and/or problems are raised by faculty members related to future objectives for curriculum development, research, outreach, and engagement.
- Yearly retreat: A yearly retreat is carried out by all members of the department discussing the list of issues raised during the year as well as proposals put forward by the chairperson or any faculty members. These retreats also address alignment with the Faculty (College) and University strategic plans.

- Five-year program review: The first program review was conducted in 2014 with two international reviewers visiting the program at AUB. The review resulted in strategic actions which have been planned over a span of several years, whereby, the Chair oversees the implementation and reports yearly on the process and sets priorities.

These meetings have resulted in several changes and improvements over the last six years. For example; 1) increase in total number of full-time faculty from four to eight; 2) relocating in 2016 to new facilities (Reynolds Hall) providing more faculty office space, four studios (in place of the previous two) and having the whole department in an integrated unit; 3) approval and renovation of a student model-making and printing room for hand-on learning; 4) several improvements to the curriculum by reorganizing studio sequence and adding/cancelling courses; and 5) refining the program/course learning outcomes.

The most recent Faculty Strategic Plan (2019-2025) was released in October 2019 after a Faculty retreat including all FAFS departments and units was held and hosted at the LDEM Department (*Volume 2, Appendix 13*). It includes goals and objectives such as promoting interdisciplinary research within and outside of FAFS, enhancing recruitment by increasing the competitiveness of faculty compensation packages and raising the average salaries of existing faculty, as well as seeking international faculty with demonstrated and proven excellence.

Some other future goals for LDEM that emerged from this process included the potential to renovate a large basement space into an exhibition/presentation hall, increase hands-on teaching activities in courses, and increase the diversity of the student body of the BLA program (i.e. gender balance, international versus local).

2. Does the long-range plan describe how the program mission and objectives will be met and document the review and evaluation process?

The FAFS Strategic Plan has the Faculty (College) mission regularly revised and as a main guide to its goals and objectives. The Faculty (College) mission serves the University mission. The BLA program mission serves the Faculty (College) mission and is an integral part of the FAFS Strategic goals and objectives. Major accomplishments are constantly measured against the BLA program mission and objectives.

The most recent FAFS Strategic Plan (2019-2025) includes specific action points to better plan and target its goals (*Volume 2, Appendix 13*).

The faculty's strategic plan has two tiers:

- 1) Excellence in learning, discovery, and engagement.
- 2) Influencing FAFS-related sectors through partnerships. The strategy identifies goals critical to the conversion, integrating them into FAFS programs, activities, and mission.

The underlying FAFS strategic themes are:

- 1) Establish a culture of interdisciplinary thinking and acting;
- 2) Enrich student educational experience through service learning;
- 3) Encourage and facilitate engagement with stakeholders and communities in Lebanon and the region.

Six specific goals, with supporting objectives, initiatives, and actions were developed in FAFS 2025 to enhance the impact and visibility of the faculty’s education, research and outreach efforts.

These six FAFS goals are listed below:

Goal 1: Integrate research in support of water and food security, resilient environments, and health and nutrition

Goal 2: Deliver outstanding student experience

Goal 3: Improve student enrollment relevant to local and regional needs

Goal 4: Establish a regional multidisciplinary research, education and community service hub for Water, Food and Nutrition Security at AREC

Goal 5: Effectively engage with FAFS stakeholders and communities at large in Lebanon and the region

Goal 6: Advance faculty and staff wellbeing

A summary table (found in Volume 2, Appendix 13) also shows how FAFS’ goals indicated above align with the University’s VITAL (Valuing/Integrating/Transforming/Advancing/Lifting) strategic themes.

LDEM initiatives and actions are linked to the FAFS 2025 implementation plan as follows:

LDEM Strategic Goals	
Goal 1	Continue developing an integrated research agenda in line with FAFS research priorities and in support of LDEM research themes including landscape planning and design, land use and land cover change, green infrastructure systems, nature conservation, cultural landscapes, landscape character assessment and public health
Goal 2	Continue expanding student learning experience within and outside the classroom
Goal 3	Strengthen the landscape architecture and ecosystem management professions in the local, national and regional dimensions
Goal 4	Become a regionally recognized academic department in the education of landscape architecture and ecosystem management
Goal 5	Expand the department by introducing a new MLA graduate program and an undergraduate program in Ecotourism
Goal 6	Increase the visibility of the department to attract and retain undergraduate and graduate students
Goal 7	Ensure faculty and staff satisfaction and development

	LDEM Strategic Goal	Objectives	Initiatives/ Actions	Alignment to FAFS 2025 Initiatives/ Actions	KPIs
Goal 1	Continue developing an integrated research agenda in line with FAFS research priorities and in support of LDEM research themes including landscape planning and design, land use and land cover change, green infrastructure systems, nature conservation, cultural landscapes, landscape character assessment and contribution to public health	<p>1.1 - Align with FAFS research agenda</p> <p>1.2 - Integrate current departmental research within a cohesive research agenda</p> <p>1.3 - Build on current research programs in AREC including green infrastructure, cultural heritage and landscapes in emergencies</p>	<p>- Hold research development retreat</p> <p>-Recruit and retain highly qualified faculty members to support current and new graduate programs</p> <p>-Secure grants for the integrated research agenda</p>	<p>FAFS Goal 1 &</p> <p>FAFS Goal 4</p>	<p>- Number of visiting/exchange scholars</p> <p>- Number of collaborative research initiatives</p> <p>- Percent of research outcome based on interdisciplinary projects implemented outside the department/ and faculty (papers, grants, workshops...).</p> <p>- Number of papers published in refereed journals per Full-time Faculty</p> <p>- Dollar value of active grants awarded to LDEM Faculty during the year</p> <p>- Revenue from new grants received from external sources</p> <p>- Diversity of Faculty research focus</p>

	LDEM Strategic Goals	Objectives	Initiatives/ Actions	Alignment to FAFS 2025 Initiatives/ Actions	KPIs
Goal 2	Continue expanding student learning experience within and outside the classroom	<p>2.1- Continue facilitating student placement in successful internships through assigned internship coordinator</p> <p>2.2 - Continue to integrate design and science courses</p> <p>2.3 - Continue to enhance applied and student-centered learning</p>	<ul style="list-style-type: none"> - Expand internship, student workshops, study program and capstone project opportunities - Provide opportunities for service and collaborative learning for students within and beyond FAFS - Continue to seek funding opportunities for students to participate in local, regional and international conference, workshops and awards - Continue to use AREC for hands-on teaching - Upgrade current experiential learning space and create new spaces 	FAFS Goal 2 & FAFS Goal 4	<ul style="list-style-type: none"> - Number or percent of courses with experiential/hands-on sections - Number and frequency of courses using AREC for hands-on student experience and student/instructor feedback - Student experience reports and student evaluation reports by firms where they were placed for internship

	LDEM Strategic Goals	Objectives	Initiatives/ Actions	Alignment to FAFS 2025 Initiatives/ Actions	KPIs
Goal 3	Strengthen the landscape architecture and ecosystem management professions in the local, national and regional dimensions	<p>3.1 - Influence policy-making in landscape, environment and natural resources management issues</p> <p>3.2 - Formalize the profession locally and regionally</p> <p>3.3 - Strengthen the department's reputation for excellence in professional services</p> <p>3.4 - Become a regionally recognized professional center for landscape architecture and ecosystem management professionals</p> <p>3.5 – Reach out to stakeholders</p>	<ul style="list-style-type: none"> - Establish an LDEM advisory board which will include professionals and scientist related to the profession - Planning spatial needs to meet accreditation requirements for landscape architecture and upcoming undergraduate/ graduate studies. - Develop and enhance an alumni community network - Expand and further develop collaborations with the private and public sectors - Expand current network of local stakeholders (municipalities, NGOs, etc...) to support service learning and research - Continue to develop the community engagement and outreach services provided by the department 	FAFS Goal 2 & FAFS Goal 4	<ul style="list-style-type: none"> - Number of advisory board members - Number of events involving stakeholders - Complete accreditation process and subsequent reviews - Number of events involving alumni

	LDEM Strategic Goals	Objectives	Initiatives/ Actions	Alignment to FAFS 2025 Initiatives/ Actions	KPIs
Goal 4	Become a regionally recognized academic department in the education of landscape architecture and ecosystem management	<p>4.1 - Influence policy-making in the landscape architecture and ecosystem management academic fields</p> <p>4. 2- Strengthen the department’s reputation for excellence in academic services</p>	<ul style="list-style-type: none"> - Continue to seek exchange programs and MOUs with international top ranking universities in the landscape and environment fields - Organize international and regional conference and workshops in the landscape and environment fields - Invite international speakers from the landscape and the environmental sciences fields 	FAFS Goal 3 and Goal 5	- Number of public lectures/ conferences/workshops organized or hosted by FAFS

	LDEM Strategic Goals	Objectives	Initiatives/ Actions	Alignment to FAFS 2025 Initiatives/ Actions	KPIs
Goal 5	Expand the department by introducing a new MLA graduate and an undergraduate program in Nature and Recreation	<p>5.1 - Increase student enrollment by offering attractive undergraduate and graduate programs in both design and science fields</p> <p>5.2 - Become a leader in the region in the current and upcoming programs</p>	<ul style="list-style-type: none"> - Develop new programs: MLA at the graduate level and Ecotourism/Recreation at the undergraduate level - Planning space facilities needs to meet accreditation requirements for landscape architecture and upcoming undergraduate/graduate studies. 	FAFS Goal 3	<ul style="list-style-type: none"> - Yearly Undergraduate and graduate enrollment - Number of students transferring to LDEM - Number of students enrolling in the new programs over a five-year period - Facilities meet accreditation standards and requirements

	LDEM Strategic Goals	Objectives	Initiatives/ Actions	Alignment to FAFS 2025 Initiatives/ Actions	KPIs
Goal 6	Increase the visibility of the department to attract and retain undergraduate and graduate students	<p>6.1 - Improve visibility and marketing of the program on professional and academic levels</p> <p>6.2 - Become the first program in the world to receive American Society of Landscape Architects (ASLA) accreditation outside the USA</p>	<ul style="list-style-type: none"> - Engage former, current students and faculty in program promotion in schools at the local and regional levels, advertise in social media - Continue process of seeking memberships in international educational bodies such as European Council of 	FAFS Goal 3	<ul style="list-style-type: none"> - Undergraduates and graduate students graduation rate - Number of LDEM new undergraduate and transfer students as well as graduate students admitted during the year - FTE student to FTE faculty ratio

	<p>6.3 - Recruit and retain high quality undergraduates</p>	<p>Landscape Architecture Schools (ECLAS) , Council of Educators in Landscape Architecture (CELA) among others</p> <ul style="list-style-type: none"> - Complete the accreditation process for the BLA program by the American Society of Landscape Architects (ASLA) - Successfully recruit landscape architecture (focus: design and History) Faculty as per program reviewers repetitive recommendation - Active campaigning in schools. - Organize public lectures/events for visibility. 		<ul style="list-style-type: none"> - Number of non-LDEM students registered LDEM core or elective courses - Recruitment of landscape architecture faculty (focus: Design and History) in Spring 2019/2020 - Number of yearly schools visits by LDEM students/ alumni/ landscape society or faculty members - Number of lectures and workshops organized yearly by LDEM members - Complete accreditation process and subsequent reviews
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	LDEM Strategic Goals	Objectives	Initiatives/ Actions	Alignment to FAFS 2025 Initiatives/Actions	KPIs
Goal 7	Ensure faculty and staff satisfaction and development	7.1 - Enhance a conducive and collaborative teaching and research environment 7.2 - Continue to increase faculty/staff satisfaction 7.3 - Maintain and build on the diversity on faculty and staff	<ul style="list-style-type: none"> - Increase common activities across the department - Enhance communication and continue to promote inclusiveness of part-time faculty - Encourage and support staff participation in workshops and conferences - Continue to provide mentorship to junior faculty 	FAFS Goal 3	<ul style="list-style-type: none"> - Number of Faculty research and development leaves - Monitor satisfaction survey results - Overall progress of faculty towards professional milestones (promotion, tenure, etc.) - Number of meetings and activities where staff and part-timers are involved.

In addition, the program mission and the future objectives go hand-in-hand. The focus of the mission is to graduate life-long learners with a strong scientific and creative skill set, equipped to become successful professionals in their communities and beyond. This is achieved through a series of objectives that emanate from the mission as stated in section (C) of this chapter. These objectives are the basis of the curriculum of study, which in turn integrates the different course sequences with specific program/course learning outcomes. These learning outcomes are highlighted in each course syllabus. In this manner, the mission is clearly integrated into the course learning outcomes of each course.

The periodic five-year program review, as stipulated by the University, builds on weaknesses that are identified for the period and builds on the strengths of the program. Some of these long-term issues that will be addressed include increasing visibility of the program at the regional and international levels, developing collaborations (teaching and research) within the university and externally, and fortifying the multi-disciplinary aspect of the program. These are elaborated further in the next section.

Internal and university required measures of assessment and review ensure that the future objectives are achieved. The University mandates that the program be reviewed internally every five years based on mission, objectives, and learning outcomes. The last internal review was completed in 2018. Program and Course learning outcomes are assessed every semester with a critical revision every

fourth year to include any new developments or changes. In addition, the faculty conduct a yearly internal departmental retreat for evaluation and assessment of shorter-term targets.

One of the priorities of the program is seeking LAAB accreditation to support its mission and learning objectives and fortify its distinctness in Lebanon and the region, thus emphasizing the legitimacy of the field, which is currently underappreciated.

3. Describe how the long-range plan is reviewed and revised periodically and how it presents realistic and attainable methods for advancing the academic mission.

The long-range plan is reviewed and assessed at the university, Faculty (College) and department levels. The program goes through five-year cycles in developing targets and goals to be met. Accordingly, the university requires an internal program assessment (including future goals and targets) to ensure that the program continues to meet the university's standards of excellence. In addition, yearly program and course learning outcomes (PLOs/CLOs) are assessed with specific focus on short and long-term improvements to teaching. The PLOs/CLOs assessment plan is revised every four years with new priorities and actions set for the upcoming cycle. At the level of the Faculty (College), program plans are reviewed in conjunction with the strategic plan. At this level, the program is assessed based on the extent of meeting goals set forth in the five-year Faculty's Strategic Plan. At the department level, this is somewhat a yearly process that is carried out internally as described in question (D.2) above.

All the above reviews are compiled by the program administrator, shared with faculty members and considered in the internal process of short, medium, and long-term planning. The results of these evaluations are usually discussed in department meetings and acted upon during the yearly retreats. The reviews become the basis for discussions and brainstorming sessions with the aim of setting attainable and realistic targets. Attainable and realistic targets account for resource availability and allocations (i.e. physical, financial, and human, time constraints, economic reality of the country and university, security situation as well as cultural considerations. For example, the department realized six years ago that having just two studios for four levels of students (program-years) is not a workable solution for student learning and accreditation. Previously, the department was located and distributed in the FAFS building (Wing A) with limited floor space. It was agreed that this is an issue that will require long-term thinking, lobbying, and securing resources to ensure its success. The process started in 2011 until its fruition in 2016 with patience and diligence by several department members including the current chairperson. While this was a complex process, it was attained with a clear understanding of the reality of the University's internal dynamics coupled with vision and patience.

Weakness and strength analysis of the program provides the platform to define long-term targets through department meetings, yearly retreats, and faculty discussions. Faculty members have developed the following set of targets (**Table 3**) to respond to weaknesses and challenges and build on strengths to support the mission of the program. The following table lists the weaknesses and challenges and the corresponding targets set for the coming period.

Table 3: Action targets in response to weaknesses and challenges

Weaknesses/Challenges	Corresponding Planned Targets
Perception as an expensive program	Diversify revenue sources from highly populated disciplines by offering minors, diplomas and general education courses that complement students' majors.
Difficulty in faculty recruitment	Develop a recruitment strategy to identify and attract alumni who pursued graduate studies and continue to target regional and international candidates to join the faculty.
Insufficient funding for program enrichment	Revise financial governance at the department level to address specificity of the department to ensure budget items reflecting enrichment activities.
Few endowed grants	Increase endowment (from current \$25,000) at a rate of 10% per year over the next five years.
Absence of local and/or regional recognition of the profession	Develop a collaborative strategy with other university programs within AUB and outside that builds on previous efforts to lobby the Lebanese government and Syndicate of Engineers and Architects for professional recognition through creating a registration process.
Insufficient strength in representation skills by students	Design a required course focused on creative representation skills and techniques of design thinking and scientific information.
Misconception of the profession of Landscape Architecture	Develop and put in place a visibility strategy to inform stakeholders of the nature and significance of the profession of Landscape Architecture.

4. Describe how the program has responded to recommendations and considerations for improvement from the previous accreditation review. Report on efforts to rectify identified weaknesses.

This is the first time the program applies for accreditation.

E. Program Disclosure

1. Describe how program information is disseminated to the public. Provide a link to material on the internet and copies of other materials to the visiting team. Articulate how program literature and promotional media accurately describe the program's mission, objectives, educational experiences, accreditation status, student achievement, program costs for a full-time student for one academic year, estimated housing costs per year, average costs of books and materials per year, student retention and graduation rates, number of degrees per year, percentage of students with timely graduation (master's students graduating within 4 years and/or bachelor's students graduating within 6 years).

There are several means by which the program information is disseminated to the public.

Table 4 provides the links to each type of informational material available. Copies have been downloaded and included in (*Volume 1, Appendix 11*).

Program Information	Location / Web link
6- Student Housing cost per year Academic Year 2018- 2019 Academic Year 2020- 2021	AUB has on and off campus housing facilities with information posted at the Office of the comptroller and student housing pages: https://www.aub.edu.lb/SAO/housing/Documents/Rates-AY-18-19.pdf https://www.aub.edu.lb/SAO/housing/Documents/AY-Rates-2020-21.pdf
7- Student retention and graduation rates	The retention and graduation rates of LDEM are available internally but as per university protocol are not publicly accessible, they are available upon request
8- Average costs of books and materials per year	\$965/Year as self-reported by students in the Student Survey 19-20 (<i>Volume 3, Appendix 24</i>)
9- Number of degrees per year	By university policy, this information is not publicly accessible
10- Percentage of students with timely graduation	-Faculty Website: https://www.aub.edu.lb/fafs/Documents/AnnualReports/Annual%20Report%202016-2017.pdf https://aub.edu.lb/fafs/Documents/AnnualReports/Annual Report 2017-2018.pdf (most recent FAFS's annual report)
11- Departmental Flyers	-Departmental website: https://aub.edu.lb/fafs/Documents/Flyers/LDEM%20Flyer.pdf
12- Facebook page	-Landscape Architecture at AUB- LDEM page https://www.facebook.com/LandscapeArchitectureAUB/
13- Instagram Page	- Landscape Architecture at AUB- LDEM page https://www.instagram.com/landscapearchaub/
14- Landscape Architecture society (LASS) Instagram Page	Landscape Architecture Student Society Student led Instagram page highlighting activities and initiatives https://www.instagram.com/landscapearchi_aub/
13- LASS Facebook Page	Student led Facebook page highlighting activities and initiatives https://www.facebook.com/Landscape-Architecture-Society-AUB-735346656546862/



PROGRAM AUTONOMY, GOVERNANCE, AND ADMINISTRATION **2**

2. PROGRAM AUTONOMY, GOVERNANCE and ADMINISTRATION

STANDARD 2: The program shall have the authority and resources to achieve its mission, goals and objectives.

INTENT: Landscape architecture should be recognized as a discrete professional program with sufficient financial and institutional support and authority to enable achievement of the stated program mission, goals and objectives.

A. Program Administration

Describe the location of the program related to institutional academic structure and to other administratively related programs. Is the program a part of a Department of Landscape Architecture or is it a component of a multidisciplinary department or school? If it's a part of a complex academic unit, what are the other disciplines and degrees offered within the unit? What are the other units in the larger division and/or college?

If the landscape architecture program is a part of a multidisciplinary unit, describe the administrative structure of the unit, including a description of who is designated by the central administration as the person with primary authority for budget, faculty personnel review, and faculty instructional assignments. If these duties are held by more than one person, explain how the landscape architecture program administrator effects or influences those decisions. The SER author may choose to use an organizational chart or other graphic to illustrate these relationships.

The BLA program is housed in the Department of Landscape Design and Ecosystem Management (LDEM), which in turn is housed within the Faculty of Agricultural and food Sciences (FAFS). FAFS is one of the seven faculties in the University which are managed by the provost of the University. The following organizational chart (Figure 1 and Figure 2) shows the overall university structure with the BLA program highlighted.

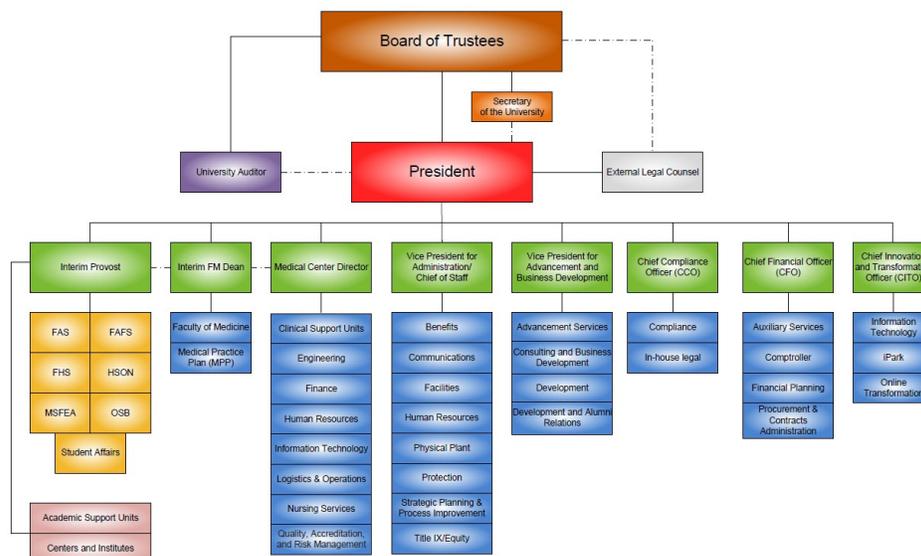


Figure 1: University administrative organizational chart

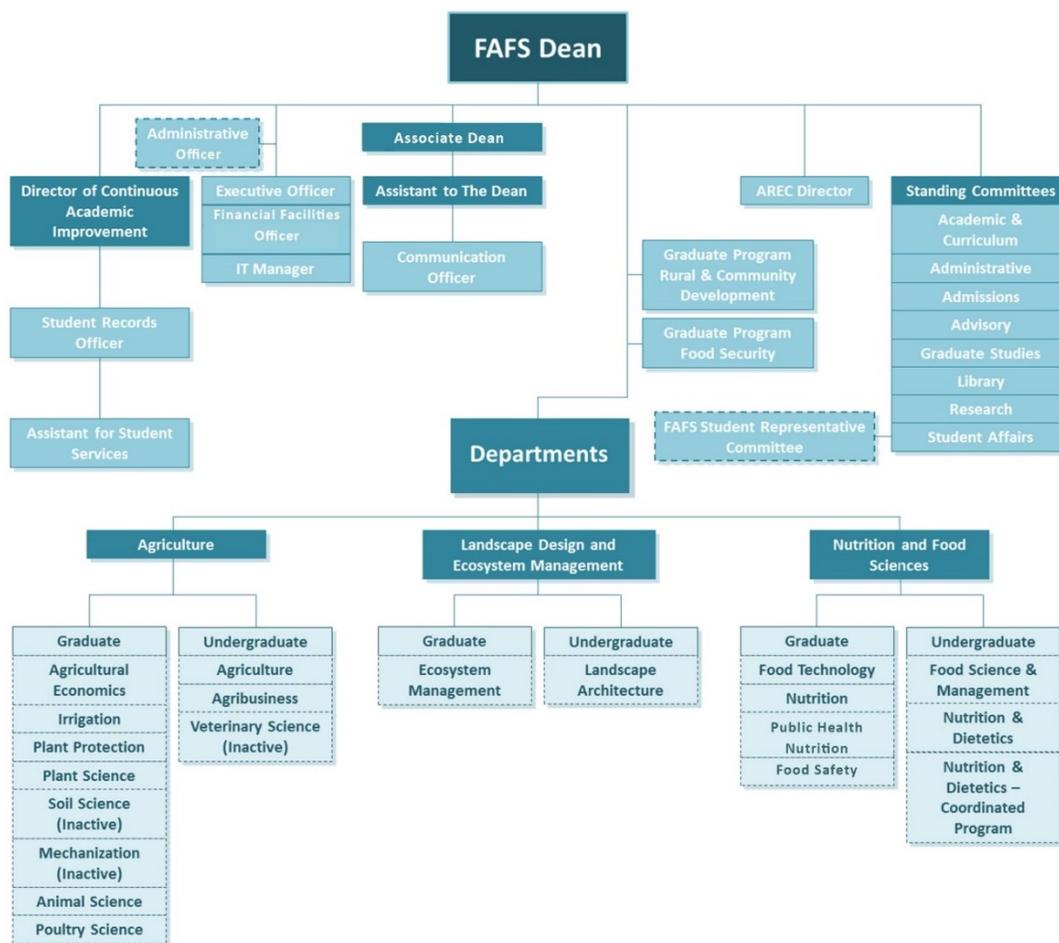


Figure 2: FAFS administrative organizational chart

The LDEM Department also houses an Interfaculty Graduate Masters in Ecosystem Management (MSES in Ecosystem Management). The LDEM Department is one of three departments in FAFS, along with the Department of Agriculture and the Department of Nutrition and Food Sciences. All departments offer undergraduate and graduate degrees in their fields. Table 5 lists the degrees offered by all departments within FAFS.

Table 5: Degrees offered by the FAFS

Department of Landscape Design and ecosystem Management (LDEM)	Department of Agriculture (AGRI)	Department of Nutrition and Food Sciences (NFSC)
<i>Undergraduate Degrees</i>		
Landscape Architecture (BLA) and Diploma Ingenieur Agricole	Agribusiness	Food science and Management
	Agriculture and Diploma Ingenieur Agricole	Nutrition and Dietetics
		Nutrition and Dietetics Coordinating program (NDCP)

Graduate Degrees		
Environmental Science (Major: Ecosystem Management)	Agricultural Economics	Food Safety
	Animal Science	Food Technology
	Irrigation	Nutrition
	Plant Protection	Public Health Nutrition
	Plant Science	
	Poultry Science	
Graduate Degrees/Diplomas offered by FAFS		
	Food Security	
	Rural Community Development	

The LDEM department, through the department chair develops the yearly operating budget, which is shared with the LDEM faculty members and then presented to the Dean of FAFS for approval by the FAFS and university administration. The chair has the authority and discretion to develop and use its budget, which is allocated annually by the FAFS Dean after consultation with the LDEM Chair, and after the Department's requested budget - prepared by the Chair and Program Administrator (currently the same person) - have been reviewed. The Dean is primarily responsible for recruitment of full time faculty members and major equipment purchases and consults the Faculty (College)'s Advisory Committee on these matters. Hiring of part-time faculty and purchase of supplies and some equipment is handled at the departmental level and directly approved by the LDEM chair. While final appointments of faculty is done by the Dean of FAFS, the request for professorial lines, faculty searches, and interviewing is done at the level of the department in close coordination with the Dean's office. Final negotiations and appointments of faculty are done by the Dean. Teaching allocation is the sole responsibility of the department chair and is done every semester in consultation with faculty members.

1. Is the program seen as a discrete and identifiable program within the institution?

As per above, the BLA is recognized as a discrete and identifiable program in the Department, Faculty and University. The University Registrar's office and the Faculty of Agricultural and Food Sciences (FAFS) Students' Services provide reporting on students' enrollment, credit hours, and all necessary information pertaining to academic standing for the BLA program, indicating its recognition within the institution.

The LDEM department, within which the BLA program resides, was established in 2007 as a discrete and identifiable unit within FAFS. It has complete control over its teaching and operating resources. The Department has the authority and discretion to use its budget, which is allocated annually by the FAFS Dean, after consultation with the LDEM Chair, and after the Department's requested budget - prepared by the Chair and Program Administrator - have been reviewed. While the Dean is primarily responsible for recruitment of full time faculty members and major equipment purchases and consults the Faculty's Advisory Committee on these matters, hiring of part-time faculty as well as purchase of supplies and some equipment is handled at the Departmental level.

2. Does the program administrator hold a faculty appointment in landscape architecture? If not, where is he/she appointed?

Dr. Yaser Abunnasr, who currently holds a Faculty appointment in Landscape Architecture, is the current BLA Program Coordinator (effective Fall 2018/2019). The Program Coordinator oversees the general performance of the program and supervises academic and administrative staff in Landscape

Architecture, and reported to the Chair of the LDEM Department, who in turn reports to the Dean of the Faculty of Agricultural and Food Sciences (FAFS). Dr. Abunnasr has been appointed as the Chairperson of the LDEM department effective January 2020. He is currently the Chair of LDEM and the BLA program coordinator at the same time (Please refer to *Volume 1, Appendix 6 - Chairpersons Manual*).

3. How does the program administrator exercise the leadership and management functions of the program? Describe the primary responsibilities and authority of the administrator.

These include seeking, promoting, maintaining and enhancing the resources of the BLA Program.

The Program Coordinator is responsible for assessing and enhancing program performance and representing the program and department in Faculty (FAFS) and university occasions and in external groups. The aim of the BLA program coordinator is to enhance and develop the academic objectives and teaching outcomes of the program. His duties also include management, planning and implementation tasks including seeking accreditation, encouraging workshop participation, seeking membership to relevant professional entities, as well as managing student communication and student related issues.

The BLA Coordinator tasks include the following:

- 1- Develop the strategic direction of the program
- 2- Enhance the voice of the program across the FAFS and the University
- 3- Enhance overall teaching pedagogy and outcome of the program
- 4- Lead program registration and accreditation processes
- 5- Conduct periodic curriculum assessment and review
- 6- Develop and enhance out of class teaching activities
- 7- Support visibility of the program
- 8- Coordinate the program advising process
- 9- Mentor new design faculty

The program coordinator leads and takes decision in an open and participatory manner. Decisions are taken with involvement of faculty members who are empowered in line with shared governance and subsidiarity approaches.

B. Institutional Support

1. Is funding available to assist faculty and other instructional personnel with continued professional development including support in developing funded grants, attendance at conferences, computers and appropriate software, other types of equipment, and technical support?

These activities have been impacted by COVID-19 and the other crises the country is going through. Updates on this section are found in Addendum G. Below is the input from the original SER.

Funding has been sufficient to meet the operational needs of the department and to support professional development activities and other faculty requirements. At the level of the department, the program administrator, in collaboration with faculty members, forecasts program needs and submits a compiled request. Budget allocation is then discussed in a departmental meeting so that voting faculty members can rank the proposed major needs and arrive to a consensus on the final list. Non-voting faculty members such as visiting professors and instructors are also consulted. New faculty receive a

computer equipped with essential software. In addition, they are eligible to 5000USD research seed money (this amount increased to 10,000USD effective AY 2019/2020). The Department relies on various forms of funding to assist the faculty in developing funded grants, attending conferences, advancing research, updating and maintaining computers, appropriate software, other types of equipment, and ensuring adequate technical support. Funding resources for faculty development, research leaves, and research funding include the following:

- **Faculty Research Leaves:**

- *Short- and long-term faculty development grants:*

Offered for full-time professorial faculty members to support their development as researchers. This leave requires a faculty member to either present his/her research results at an international conference through papers, abstracts, posters, etc. (short-term; maximum 7 days) or to visit another university to collaborate with a researcher in the same discipline (long-term; 2-8 weeks). Both short- and long-term faculty development grants are administered by the Dean's Office in each faculty/school. Faculty members are eligible for short-term leaves on a yearly basis, provided that they have acceptance to present an abstract/poster. As for long-term leaves, faculty are eligible for them every other year, provided they have an invitation from a researcher overseas to collaborate on research and provided they have shown proof of productivity from previous leaves such as the presentation of posters or the production of research articles that are based on the above collaborations.

- *Special leave with pay*

Faculty frequently present or participate in conferences either on their own expense, which tends to be the exception, or as invited speakers, session moderators, or keynote speakers, in which case they take a special leave with pay, meaning that their salaries will be still be paid as usual and no additional funding is incurred by the university. A special leave with pay has a limit of 5 working days and requires an indication of how the missed teaching will be compensated. Faculty members average one special leave per year. There is potential for more given that not all of the faculty members request this type of leave. This is a healthy indicator and shows a certain level of self-reliance on the part of faculty for participation in international/regional conferences and is a definite sign of the valuable expertise of LDEM faculty, which earns them the invited conference participation.

- *Research Leave*

AUB offers one or two semester research leaves for faculty members for every six years of service. Financial support is provided for one semester with the second semester to be arranged by the faculty member.

- **University Research Board (URB) Funding:**

The mission of the University Research Board (URB) is to encourage and support quality research across all disciplines at the American University of Beirut. The URB promotes basic, innovative and applied research; inter-and multi-disciplinary research; production of scholarly and creative works. The URB advises the Provost on the implementation of policies pertaining to research and research funding, and recommends to the Provost the allocation of research funds from available University sources via the Faculty Research Grants Program (FRGP). URB funding may also be awarded to help faculty members supplement funding (i.e. gap funding) for an on-going project, as well as for projects involving new technology development that are close to commercialization (i.e. close to proof of concept). The URB provides two internal opportunities for research funding.

- The first is the **URB Fund**, a competitive peer-reviewed process of funding open to all faculty members. It supports research projects for one or two years for a maximum annual amount of 10,000USD (20,000USD for two years). The faculty at LDEM have been continuously successful in securing these funds in the past five years.
- The second is the “**Collaborative Research Stimulus**”, managed by the URB and intended for collaborative research across faculties (colleges) to foster interdisciplinary research. This fund was started in 2016-2017 with a maximum funding amount of 40, 000USD for a maximum of two years. It is a stimulus for faculty members to conduct prototype research with the aim to develop proposals for larger amount funds.
- **Other Institutes and Centers at the University providing faculty support**
 - *The Center of Teaching and Learning (CTL)* also offers a competitive grant of maximum 8000USD for research in learning and teaching equally open to all faculty members.
 - The *Masri Institute* for Energy research also offers a competitive grant for faculty members focused on issues related to energy such as engineering, building efficiency, planning and land use. Usually, grants are for a maximum of two years with maximum annual grant of 10,000USD.
 - *The Issam Fares Institute* for policy also offers several grants in their departments (environment & climate change, gender studies, policy, etc...) with varying grants and durations equally open to all faculty members.

Table 6 summarizes the grants received by faculty members during the past six years highlighting total amounts for internal and external grants.

Table 6: Local and International grants received by faculty members during the past six years

Year	Number of active/new Local grants	Local grants Total Amount (USD)	Number of active/new international grants	International grants Total Amount (USD)	Total amount of grants (USD):
2018/2019	4	71,450	7	1,349,983	1,431,433
2017/2018	6	475,560	2	249,704	725,264
2016/2017	2	15,000	3	285,525.45	300,525.45
2015/2016	5	53,467.64	9	798,680.74	852,148.38
2014/2015	6	58,467.64	8	851,572.83	910,040.47
2013/2014	4	32,800	6	672,431.34	705,231.34
Total amounts:	27	706,745USD	35	4,207,897USD	4,924,643USD

- **IT Fund:** Technical provision on hardware and software needs is supported by the university’s Information Technology Unit and support team. The Chief Information Officer (CIO) reviews and approves/rejects all requisitions that relate to information technology purchases such as computers, printers, and software. The University IT office has three technicians within the FAFS to solve/address day-to-day issues.

- **Revolving Fund:** The LDEM Department also draws from a revolving fund from which the money supplied is a result of specific departmental activities, such as yearly plant sales. The department makes use of this funding to provide its faculty members and staff with minor office needs, minor supplies and educational purchases.
- **Capital Fund:** The capital budget allocated for the LDEM Department covers major equipment purchases and renovations (above 5,000USD), and other significant expenditures over a two-year period. Budgetary needs for the program are determined annually and decisions are taken by faculty members. For example, in the past two years, the budget for a laser cutter to be installed in the newly renovated model-making and printing room was secured to support students and faculty academics and research activities. The room and installations are projected to be completed by the beginning of the Spring semester AY 19-20.
- **Operating Fund:** The day-to-day operations of the university are primarily funded through unrestricted funds, and each year the Board of Trustees approves this funding through the annual Operating Budget upon the recommendation of the university's Budget Committee. Yearly budgets help support day-to-day activities such as office supplies, computer peripherals, RA budgets, student work-study programs. These items are significant in support of overall faculty activities.

2. What are student/faculty ratios in studios? How are student faculty ratios influenced by the program? What is considered normal/typical within the institutional culture or practice?

The landscape architecture program aims to maintain the faculty/student ratio between 1:8 and 1:10. The program seeks to sustain this ratio to ensure that full-time professorial rank faculty members can sustain the quality teaching required. This is achieved by regularly appointing experienced, academic or professional, part-time faculty along with full-time faculty, to balance any deficiencies that may arise from maintaining this ratio range. The rule that is followed is that for the first 8 to 10 students in a studio, one instructor is assigned. When the number of students is between 11 and 20, another instructor is added, and so on. However, the ratio for the Final Year Capstone Project (FYP) was agreed to be set between 1:6 and 1:7 and two part-time instructors are usually hired in addition to the assigned full-time design instructor. This is to ensure proper advising of each independent project, and the ability to cover various areas of expertise. We usually have a cap on new students entering the program at 30 per year, such that a maximum of 25 new applicants are accepted into the program, leaving room for transfer students from within AUB, the number of which may vary (5-10 transfer students per year) depending on the accepted number of new applicants.

3. Is funding adequate for student support, i.e., scholarships, work-study, etc.?

AUB has a strong financial aid program to assist its students, who could not otherwise meet the cost of tuition. AUB has devised several types of financial assistance programs to cater to the needs of a broad range of undergraduate and graduate students. These include the following:

- **Need-Based Grants:** Need-based financial aid grants are outright grants of assistance for undergraduate students based on financial demonstrated need. Application forms are available at the Office of Financial Aid. In 2018-2019 the University was able to award grants to 76 percent of the enrolled students who applied for need-based financial aid. The average grant award to an undergraduate student was \$9,171 per year.
- **Need-Based Student Loans:** The student loan program was designed to allow an increase in the overall financial assistance provided to eligible students. These, however, will partially assume the responsibility of this aid by repaying the loan part after graduation. The loan component is added as an option such that the student may refuse the loan while keeping the financial aid grant. The loan currency is US Dollars and the interest is 3% as per Central Bank provisions, which will

be charged on the student during the period of enrollment, the grace period and the entire repayment period. The annual loan award is determined by AUB and will not exceed 30% of the tuition fee. The total amount of the loan will depend on the eventual repayment ability of the student (parents) as judged by the bank. Students will have to repay the loan after graduation for up to 10 years following a grace period of one year.

- **Scholarships :**

- ***AUB Merit Scholarships***

In 1999, the Board of Trustees of AUB established an AUB Merit Scholarship Program. This program enables the University to award full-tuition merit scholarships each year to ten new undergraduates with outstanding academic qualifications. AUB merit scholarship awardees are selected from among the newly admitted undergraduate students on the basis of academic achievement and promise alone; no application for financial aid is required. Awards are renewable for each undergraduate year provided that the student maintains a minimum cumulative 85% average.

- ***The Lebanese Bacculaureate Merit Scholarships***

In 2006, AUB and the National Council for Scientific Research (NCSR) signed a cooperation agreement whereby the best three students in each of the four sections of the Lebanese Bacculaureate would be granted a full scholarship. The NCSR would provide 10 million Lebanese Pounds (~6,600 USD) for each student while the AUB would cover the remaining amount of the tuition in addition to the living expenses including boarding or transportation based on the student's need.

- ***MasterCard Foundation Global Scholars Program***

A partnership between the American University of Beirut and the MasterCard Foundation (MCF) in Canada. The program provides full scholarships to graduate and undergraduate academically promising students with limited financial capacity and who are sensitive to their communities' concerns, proactive in their environment, and believers in their ability to make a difference. Undergraduate scholarships are open to nationals of Lebanon and refugees and displaced living in Lebanon.

- ***The USAID- University Scholarship Program (USP)***

The USP program is funded by the United States Agency for International Development (USAID) offering merit-based scholarships to financially-disadvantaged and academically eligible public school graduates from across Lebanon. These scholarships enable students to pursue their undergraduate studies at AUB while developing their leadership skills and a passion for promoting their communities. The USP program is open to Lebanese citizens who have attended a public high school in Lebanon for the last three years of their secondary education. The scholarship provides full tuition, housing or transportation allowances, books, a laptop, medical insurance and stipends, as well as intensive English classes and academic support, if needed.

- ***The MEPI Tomorrow's Leaders Scholarship Program***

The Tomorrow's Leaders Scholarship Program, funded by the U.S. Department of State U.S.- Middle East Partnership initiative (MEPI), is for capable and highly motivated high school seniors in the Middle East and North Africa who are from underserved backgrounds. The program will provide four-year university scholarships and internship opportunities at select institutions of higher learning in the Middle East to students who have the potential to become leaders.

- ***US Loans & GI Bill***

U.S. citizens attending AUB may be entitled for the William D. Ford Federal Direct Loan Program to assist them financially in their education. Most of the information provided in the Federal Direct Loan Section comes from The Guide to Federal Student Aid booklet distributed by the U.S. Department of Education. Hard copies are available as well at AUB's Financial Aid Office. In addition, the FAFSA (www.fafsa.ed.gov) website provides considerable information and online help.

- ***US Federal Financial Aid***

US financial aid includes several types of programs only for US citizens, however AUB only participates with the Federal Direct Loans and Direct PLUS Loans. The Direct Loans made through this program are referred to as Direct Loan Funds. Direct Loan Funds come directly from the Federal Government, and include: Subsidized Loan, Unsubsidized Loan, and Direct PLUS Loans. These loans are repaid to the U.S. Department of Education's Direct Loan Servicing Center. Student loans are borrowed money that must be repaid, with interest, just like car loans and mortgages. The maximum Direct Loan amount that the student can borrow each Academic Year depends on his/her academic level in school and whether he/she is a dependent or independent student. Students who demonstrate financial need are eligible for a subsidized Direct Loan to cover some or all of that need.

Work-Study programs: AUB provides its students with an opportunity to work in its different faculties and departments through the Work Study Program (WSP). Student selection and employment are subject to preset rules and regulations and students are paid based on a fixed scale depending on the work type they perform. Employment through the WSP is a continuous process throughout the semester. The LDEM department funding includes work-study and assistantships as well as financial aid provisions which are deducted from the university revenue at the end of each fiscal year. The budget allocated to the department for student work scholarship for the AY 2018/2019 was 3,536USD.

- **Graduate Fellowship and Assistantship Program (GFAP):** Fellowships covering tuition and stipends are available for students at the graduate level in return for assisting faculty members in teaching and/or research for a specified number of hours per week in an academic department. Recipients are selected on the basis of academic record and departmental need. The budget allocated to the department for graduate fellowships (GFs) for the AY 2018/2019 was 55,785USD. Effective 2018/2019, new FAFS rules were put into action regarding tuition coverage of Graduate Assistants. All Masters Students applying for Graduate Assistantships are eligible for a coverage of up to 18 credits of the total 30 credits in the program.
- **Graduate Research Assistant (GRA):** A Graduate Research Assistant (GRA) is a GF who is assigned duties in a research or creative work project with a stipend typically covered from a grant; a GRA stipend can also be covered from available faculty/school research funds. GRA duties include involvement in research activities and providing various forms of research-related support under the direct supervision of a faculty member. The duties vary depending on the nature of the project and the research grant's source of funding. GRA duties can overlap with work related to the student's thesis; in such cases, it is natural for both to overlap and for the overall effort to be more than the hours covered per week by the GRA stipend.

4. Are adequate support personnel available to accomplish program mission and goals?

Adequate support is available to accomplish the programs mission and goals. As indicated in the organizational chart (*Volume I, Appendix II*), the LDEM department has two full time staff: an administrative officer and a departmental research assistant. The administrative officer has extensive experience in FAFS and provides support in departmental administrative and academic duties, scheduling, communications, events and activities planning. The administrative officer also supports students during the registration process and coordinates final project jury paneling. The departmental research assistant mainly provides support to the Chair and the BLA coordinator with the BLA continuous assessment process. Additional support in office work, research work and in the Eco-Unit area is provided by work-study undergraduate students, while graduate assistants, whose numbers vary according to yearly available University funding, support faculty members in research and/or teaching. During AY 2018-2019, twenty-four graduate assistants were awarded and nine work-study undergraduate students were available at the Department. The Faculty's Information Technology Personnel assist the department with technology issues. Furthermore, there is an Eco-Unit faculty supervisor (M. Fabian) responsible for the Eco-Unit production and management for student activities, research and experimental purposes. The supervisor is assisted by an Eco-Unit technician.

C. Commitment to Diversity

1. How does the program demonstrate its commitment to diversity in the recruitment and retention of students, full-time faculty and staff?

The program and the department are committed to diversity by adhering to the University's policies. These strategic policies are determined at the University level for faculty, staff and student recruitment. According to AUB's strategic plan, the university's aspirations are as much global as regional. AUB believes that international diversity plays a vital role in the AUB learning experience because it stimulates dialogue and increases understanding of people, cultures and perspectives. AUB is an equal opportunity employer for academic and non-academic employees regardless of their gender, race, religion, color, national origin, disability, marital status, age, creed or citizenship except as required by Lebanese Law. This policy applies to all terms and conditions of employment including but not limited to, recruitment, selection, compensation, demotion, transfer, lay-off, termination, and rates of pay or other forms of compensation, benefits, and selection for training. FAFS, the program and department, demonstrate this diversity through applying this strategy in the recruitment process when advertising for faculty and staff positions. From the total eight full-time faculty members who were at LDEM during AY 2018/2019 (7 professorial and 1 instructor), 5 were female and 3 were male; 4 were international (Italian, Polish, Hungarian, American/Iranian) and 4 were Lebanese as per Table 7 below.

Table 7: Faculty Diversity during AY 2018/2019*

Full-Time Professorial Rank	Male	Female	Total
International	1	2	3
Local	2	2	4
Total	3	4	7

Full-Time Instructor Rank	Male	Female	Total
International	0	1	1
Local	0	0	0
Total	0	1	1

**Note that these numbers are reflective of the faculty in AY 2018-2019, prior to the departure of Dr. Mehran Madani from the Department.*

At the level of students, the recruitment process is mostly controlled at the level of the Office of the Registrar. Accordingly, students in the program benefit from the university strategy through the following proactive initiatives:

- Offering Scholarship programs such as the USP (University Scholarship Program):
This program offers 60 students from the Lebanese Public Schools and the Lebanese Technical Schools from all the 26 districts of Lebanon the opportunity to pursue higher quality education at AUB. For more information please refer to the link:
<https://www.aub.edu.lb/usp/Pages/default.aspx>

- Offering Preparatory programs such as the UPP (University Preparatory Programs):
UPP is a high intensity English Language program that provides undergraduate and graduate students with the opportunity to become more comfortable with their AUB education and its content, and to take control of their own learning under the guidance of their instructors

For More Information, please refer to the link: <https://www.aub.edu.lb/fas/upp/Pages/default.aspx>

- Involving academic and administrative units in the development and implementation of a cohesive, institution-wide diversification plan:
- Establishing parallel professional programs that appeal to regional students not aiming for Lebanese syndicate memberships.
- Reintroducing doctoral programs at AUB, which is one recent step intended to bring students of all nationalities to the University.
- Expanding meaningful student-exchange agreements to attract international and regional students.
- Broadening and institutionalizing market intelligence to identify gaps and devise responses that improve AUB's regional position in higher education.
- Bolstering existing outreach initiatives and creating new ones to connect with a larger audience such as expanding summer programs to introduce AUB and its campus to students from high schools and universities outside of Lebanon.
- Developing methods of attracting more male students to the program, seeing as the department includes high percentages of female versus male students (AY 2018/2019 females 78% and males 22%).
 - In parallel, the Faculty of Agricultural and Food Sciences has included, in its strategic plan, actions to tackle and meet the target set by the university to encourage and increase the student body diversity. These actions include: Facilitating the enrollment of students from different socioeconomic status groups by Targeting scholarships to students from rural areas.
 - Attracting international students from the region by targeting scholarships to students from other countries in the region and undergoing outreach to their schools in collaboration with Admission's Office.
 - Enhancing marketing efforts to promote programs to both High School students and Freshman students enrolled at AUB.

D. Faculty Participation

1. Does the faculty make recommendations on the allocation of resources and do they have the responsibility to develop, implement, evaluate, and modify the program's curriculum and operating practices?

Faculty members discuss and vote on various departmental and program-specific issues such as resource allocation, new hires, curricular revisions, policies and practices during departmental meeting. The modification, evaluation and development of the BLA program's curriculum are the responsibility of an LDEM Ad Hoc Committee. This committee's recommendations are discussed and approved by the LDEM Faculty Members at departmental meetings and retreats. Those recommendations are related to curricular changes, such as, introduction of new courses, modifications in course contents and teaching approaches, program learning outcomes assessment and evaluations, assessment of students learning and space expansion needs etc. Individual faculty also led departmental initiatives such as the promotion of department visibility or development and design of academic space.

2. Does the faculty participate, in accordance with institutional guidelines, in developing criteria and procedures for annual evaluation, promotion and tenure of faculty?

Yes, the faculty participate in decisions regarding faculty reappointment, promotion, and tenure which are determined on the basis of the performance and record of the faculty member and are considered in an ordered and deliberate review process. In accordance with the new policy to reinstate tenure (during Academic Year 2017/2018) the department follows the university's guidelines for appointment, reappointment and tenure.

3. Does the program or institution adequately communicate and mentor faculty regarding policies, expectations and procedures for annual evaluations, and for tenure and promotion to all ranks?

Promotion and tenure expectations are officially communicated via e-mails/letters from the Provost, The University's Academic Personnel Policy, and at the departmental level through LDEM's Tenure and Promotion Guidelines. Less officially, the program and institution mentor faculty in a number of ways. The Chair organizes individual meetings with every faculty member to discuss goals, tenure and promotion as appropriate. Policies and procedures on academic rank, promotion and tenure, sabbatical leaves and leaves without pay, and consulting opportunities are administered by the advisory and the administrative committees of the university. These regulations are also posted on AUB's Human Resources Website on the following link:

<https://www.aub.edu.lb/hr/Pages/policies.aspx>

In parallel, the new faculty recruits are acquainted with all such policies and procedures by the aid of The Office of the Provost and the New Faculty Orientation (NFO) program. The LDEM department has an appointed senior faculty member who serves as mentor to new faculty.

4. Does the faculty participate, in accordance with institutional guidelines, in developing and applying criteria and procedure for the appointment and assessment of program and academic unit leadership?

Yes, the faculty participate in the appointment and assessment of the academic unit leadership. Usually, the process for appointing a new academic unit leader is initiated by the the dean of the faculty who completes consultations with the unit's faculty members to assess the performance of previous leadership and to nominate new ones.

5. Does the program or institution adequately communicate and mentor faculty regarding policies, expectations and procedures for annual evaluations, and for tenure and promotion to all ranks.

Yes, the institution mentors faculty on policy, expectation, and procedure. This is achieved through an orientation workshop given upon-hiring, as well as communication of expectations for reporting annual evaluation from the respective academic unit.

E. Faculty Numbers

- 1. Describe the faculty resources (as either full-time positions dedicated to the program, full-time positions split between programs with a percentage committed to the landscape architecture program or part-time positions within the program). Describe how the program meets the appropriate standards:**
 - a. An academic unit that offers a single first-professional degree program at the emerging or Initial Accreditation status has at least three FTE instructional faculty who hold professional degrees in landscape architecture, at least one of whom is full-time.**
 - b. An academic unit that offers a first-professional degree program at both the bachelor’s and master’s levels at the emerging or Initial Accreditation status has at least six FTE instructional faculty, five of whom hold professional degrees in landscape architecture, at least two of whom are full-time.**
 - c. An academic unit that offers a single first-professional degree program at the continuing full Accreditation status has an FTE of at least five instructional faculty. At least four of these faculty members hold a professional degree in landscape architecture and at least three of them are full-time.**
 - d. An academic unit that offers first-professional degree programs at both the bachelor’s and master’s levels with continuing full Accreditation status has an FTE of at least seven instructional faculty, at least five of whom hold professional degrees in landscape architecture and are full-time.**

The Faculty resources meet the program requirements based on criteria (E.1.a) above where three FTE instructional faculty are required. The BLA program at the LDEM included during AY 2018-2019, five full-time instructional Landscape Architecture faculty with professional degrees in Landscape Architecture (Table 8).

Table 8: Faculty in the Landscape Architecture Program (AY 2018-2019)

Teaching & Research Staff			
Full time			
Rank	Name	Degree	University
Professor of Ecosystem Management/ Department Chairperson (until January 26, 2020)/ ECOM Program Coordinator (effective January 27, 2020)	Rami Zurayk	DPhil in Soil Science	University of Oxford, UK

Associate Professor of Landscape Architecture/ BLA Program Coordinator/ Department Chairperson (effective January 27, 2020)	Yaser Abunnasr	MLA and Ph.D. in Planning	University of Massachusetts Amherst, MA, USA
Professor of Landscape Horticulture/ Chair of AUBotanic	Salma Talhouk	DPhil in Horticulture	Ohio State University, USA
Assistant Professor of Landscape Architecture	Maria Gabriella Trovato	Ph.D. in Landscape Architecture	Università degli Studi "Mediterranea" di Reggio, Italy
Assistant Professor of Landscape Architecture	Mehran Madani (resigned effective Fall 2019/2020)	MLA and Doctor of Design	Washington State University, USA
Assistant Professor of Landscape Architecture/ Associate Dean of Student Affairs	Nayla Al-Akl	MLA	Harvard University Graduate School of Design, USA
Assistant Professor of Landscape Architecture	Beata Dreksler (Visiting Assistant Professor from AY16/17 until AY 18/19; reappointed as Assistant Professor effective AY 19/20)	MLA and Ph.D. in Landscape Architecture	Warsaw University of Life Sciences (WULS), Poland
Instructor/ Greenhouse supervisor	Monika Fabian	MSc in Horticulture	Mediterranean Agronomic Institute of Chania, Greece

2. Are student/faculty ratios in studios typically not greater than 15:1?

Yes, the student/faculty ratios in studios are lower than 15:1. The BLA aims to maintain the ratio in studios between 8:1 and 10:1. The program seeks to sustain this ratio to ensure that full-time professorial rank faculty members can sustain the quality teaching required. This is achieved by regularly appointing experienced, academic or professional, part-time faculty (mostly from the landscape architecture or relevant design fields) along with full-time faculty, to balance any deficiencies that may arise from maintaining this ratio range. The rule that is followed is that for the first 8-10 students in a studio, one instructor is assigned. When number of students is between 11 and 20, another instructor is added, and so on. However, the ratio for the Final Year Capstone Project (FYP) was agreed to be set between 1:6 and 1:7 and two part-time instructors are usually hired in addition to the assigned full-time design instructor. This is to ensure proper advising of each independent project, and the ability to cover various areas of expertise.

3. Does the strategic plan or long-range plan include action item(s) for addressing the adequacy of the number of faculty?

Annually, the Department develops a hiring plan that responds to enrollment, instructional needs, and university priorities; after approval at the level of the Faculty, this plan goes to the upper administration as a request for new hires. The Faculty (College)'s long-range plan provides direction in terms of areas of excellence in future hiring. The latest long-range plan (2019-2025) includes the following action points for its recruitment goal:

- Uphold high academic standards for appointment of new faculty; adopt rigorous promotion and renewal criteria.
- Increase the competitiveness of faculty compensation packages to allow recruitment and retention of the very best faculty; raise the average salaries of existing faculty.
- Seek international faculty with demonstrated, proven excellence.
- Identify critical gaps in FAFS expertise in order to inform recruitment

The Faculty also states some of its Key Performance Indicators (KPIs) as number of visiting faculty from top international institutions per year and number of international applicants to advertised faculty positions.

4. Is the number of faculty adequate to achieve the program's mission and goals and individual faculty development?

Yes, the faculty number is adequate to meet the program's mission and goals through the diversity of expertise and experience as well as appropriate teaching assignment allocation. The full-time faculty have varied specializations and areas of expertise that allow the program to address its various requirements. Out of the seven professorial full-time faculty, five have a background in design and two in the sciences. The design faculty have varied academic and professional experience that address the studio design sequence ranging from small to large scale design; from rural to urban contexts; and advise and guide the capstone project courses. In addition, the design faculty members cover the site engineering sequence, history and theory as well as technical-oriented courses. The two faculty members based in science cover the areas of horticulture, geomorphology, soils, and plants. Part-timers (academic or professional), who are either landscape architects, architects, urban designers, planners or engineers, usually support design courses (where full-time faculty members are always leading), surveying, and descriptive drawing. In this manner, the varied expertise of all faculty members supports diversity of opinion and teaching methods supporting students' critical thinking, decision making, and forward-looking ideas (See Table 9)

The program seeks to balance teaching assignments and ensure that faculty teach required courses. Our typical teaching load is two courses per semester. For design faculty, it is typically a studio and a lecture course while science faculty teach two lecture (including or excluding laboratory component) courses. We usually offer 13 LA courses for each semester across all 4 years of study. With 7 full time faculty members this covers the core teaching load. We also maintain a ratio between 1:8 to 1:10 students in our design studios by supporting leading full-time faculty members with qualified and experienced part-time instructors. By ensuring that full-time faculty members lead core LA courses, we ensure that the mission and goals of educating future landscape architects are met. This teaching assignment also allows faculty members to take research leaves and present in conferences without jeopardizing the quality and rigor of teaching, as well as supporting individual faculty development.

Table 9: LDEM Full-time and Part-time Faculty during AY 2018/2019

Teaching & Research Staff		
Full-time		
Rank	Name	Specialty
Professor, Department Chairperson (until January 2020)	Rami Zurayk	Soils, Ecosystem Management and Food Security
Associate Professor of Landscape Architecture/ BLA Program Coordinator/ Chairperson (effective January 2020)	Yaser Abunnasr	Landscape Architecture, Planning, Architecture
Professor	Salma Talhouk	Landscape Horticulture, Nature Conservation
Assistant Professor of Landscape Architecture	Maria Gabriella Trovato	Landscape Architecture
Assistant Professor of Landscape Architecture	Mehran Madani (resigned effective Fall 2019/2020)	Landscape Architecture
Assistant Professor of Landscape Architecture	Nayla Al-Akl	Landscape Architecture
Assistant Professor of Landscape Architecture	Beata Dreksler	Landscape Architecture, Landscape planning and design
Instructor/ Greenhouse supervisor	Monika Fabian	Horticulture
Part-time		
Senior Lecturer	George Battikha	Landscape Horticulture and Botany
Senior Lecturer	Rania Abboud	Geographic Information Systems and Planning
Lecturer	Dima Rachid	Landscape Architecture
Lecturer	Halim Nader	Civil Engineering/ Surveying
Lecturer	Wissam Melhem	Architecture/Urban Design
Lecturer	Ramzi Mezher	Architecture/Landscape Architecture Studies
Lecturer	Noura Badran	Illustration and Graphic Representation
Lecturer	Joelle Baroud	Landscape Architecture/Sustainable Urban Development
Senior Lecturer	Mona Khechen	Urban planning and development
Lecturer	Salwa Sabbagh	Landscape Architecture/ Urban Design
Lecturer	Sara Hage	Landscape Architecture/ Urban Development

Teaching & Research Staff		
Part-time (continued)		
Lecturer	Cornelia Krafft	Scenography/ Fine Arts
Lecturer	Balsam El-Ariss	Architecture and Design
Senior Lecturer	Nadim Farajalla (Director of the Climate Change and Environment Program at the Issam Fares Institute for Public Policy and International Affairs (IFI) at AUB 2008-to date; Associate Professor at LDEM 2007-2016)	Environmental Hydrology/ Water management
Associate to the department (until February 2019)	Jala Makhzoumi	Landscape Architecture/ Ecological Planning/ Urban Design



PROFESSIONAL CURRICULUM 3

3. PROFESSIONAL CURRICULUM

STANDARD 3: The first professional-degree curriculum shall include the core knowledge skills and applications of landscape architecture.

- a. In addition to the professional curriculum, a first professional degree program at the bachelor's level shall provide an educational context enriched by other disciplines, including but not limited to: liberal and fine arts, natural sciences, and social sciences, as well as opportunities for students to develop other areas of interest.
- b. In addition to the professional curriculum, a first professional degree at the master's level shall provide instruction in and application of research and or/scholarly methods.
- c. A first professional degree at the master's level that does not require all students to have an undergraduate degree before receiving the MLA shall meet the requirements for both a and b.

INTENT: The purpose of the curriculum is to achieve the learning goals stated in the mission and objectives. Curriculum objectives should relate to the program's mission and specific learning objectives. The program's curriculum should encompass coursework and other opportunities intended to develop students' knowledge, skills, and abilities in landscape architecture.

Only paragraph (a) above is relevant to this review

A. Curricular Expression of the Mission and Objectives

(This criterion isn't directed towards the evaluation of the Mission and Objective, but rather on how the curriculum is developed and delivered in carrying out the expectations of the Mission and Objectives.)

1. How does the curriculum address the program's mission, goals, and objectives?

The department's program reflects the strengths of the faculty and mirrors the program's mission to graduate lifelong learners and critical thinkers who adopt a holistic view of the landscape, and who are equipped with interdisciplinary scientific and creative skills, to start as entry-level landscape architects and to become, with experience, successful professionals. The program mission and the future objectives go hand-in-hand. These objectives are the basis of the curriculum of study, which in turn integrates the different course sequences with specific program/course learning outcomes. To integrate the mission in the curriculum, the department developed a series of key program learning outcomes (PLO) from the mission statement. These program learning outcomes are further dissected into course learning outcomes (CLO). The CLOs are included in every syllabus in the curriculum and they relate to the PLOs as well as to the method of instruction and assessment to achieve these CLOs. The PLOs and CLOs are assessed every semester based on a four-year assessment plan. This assessment also provides insight on the extent the mission statement, goals and objectives are being effectively taught in each course. In this manner, the mission is clearly integrated into the course learning outcome of each course. Within the professional curriculum, students are introduced to planning and design policies, as well as concepts and practices that meet human, social, and economic needs, while respecting the ecological integrity of the environment. The profession-specific

curriculum is enriched by the University's General Education requirements, covering a range of classes in the arts and sciences. The BLA program combines 27 credits in electives and language courses under General Education and 9 credits of electives from within the Faculty (College) with 108 credits in required BLA courses within our Department. Combined, the total of 144 credits over four years and three summers provides a fundamental education that integrates the mission, goals and objectives at all levels of the curriculum.

The required General Education courses are mandated by the university and subdivided into the major categories of languages (English and Arabic, with International Students having the option to substitute the Arabic requirement with a Humanity course), humanities, natural sciences, social sciences, quantitative thought, and writing. The writing requirement is usually fulfilled by the capstone project required report explaining and detailing the project. Further, the professional curriculum, through its multi-faceted studios, and the history and theory courses, supports the general education in the arts and sciences that is necessary for a career as a landscape architect.

The core landscape architecture courses are organized into six course sequences: Design Studio (DS), Science Factors (SF), History and Theory (Cultural Factors) (HT), Presentation Skills (PS), Technical Skills (TS), and Professional Skills (PRS). The course sequences are meant to support and achieve the BLA program goals and objectives as follows:

- ***To provide up-to-date landscape architectural skills and knowledge emphasizing issues and constraints in the Middle East region.*** This is achieved through offering a curriculum comprised of a well-balanced set of courses and experiences which incorporate local and regional perspectives such as Landscape Appreciation and Site Analysis (LDEM 263), Landscape Ecology (LDEM 218), Sustainable Water Management Techniques (LDEM 231)
- ***To maintain an academically active and highly qualified group of faculty who are leaders in their field and possess a strong sense of engagement.*** This is achieved by continuous faculty presentations at regional and international conferences, as well as maintained faculty recognitions through international awards. This is also achieved by improving the teaching environment and body structure, and increasing faculty/staff satisfaction. It is also achieved by creating a teaching and research environment conducive towards excellence and achievement. For example, four years ago, the department was housed in another building where studios were insufficient, two studios, each being shared across two years, and offices scattered on several floors. The department moved to a new facility providing four studios, and all faculty offices and facilities are now housed within two floors, allowing better interaction and collaborations across faculty members and students, as well as providing a suitable physical environment to improve academic achievement at all levels. The strong sense of engagement is further achieved by adopting promotion and tenure policies at the Department that require all faculty members' engagement in the evaluation of these components.
- ***To encourage out of the box thinking while emphasizing up-to-date tools and technology of the profession.*** During classes and studio reviews, desk-critiques, and presentations, students are encouraged to take risks and adapt creative design solutions, using the latest graphical representation tools, from computer software to hand-built and 3D printed models. Thus, students learn to articulate and transform environmental, social, and economic issues into material form and design. For example, during the Urban Landscape Design studio (LDEM 228; Spring 2017) urban ecological principles were integrated in the analysis process providing hybrid approaches to represent urban ecosystems that include landscape architecture, urban design, and urban ecological analysis tools. This work was inspired by the work of Marina Alberti. The re-introduction of the elective LDEM 261: Spatial Structure and Movement taught by Scenographer Cornelia Krafft was also an added value to the program as it encouraged students to explore different ways of interacting with space.

- ***To offer a dimension of sustainability, experiential and service learning to educate future landscape architecture professionals who adopt a holistic view of landscape.*** The curriculum enhances applied and student-centered learning, strengthens the link with the university's center for civic engagement and community service through joint projects, and has a mandatory internship requirement. The department also secures funds to sustain outreach and experiential teaching, and dedicates a percentage of its budget expenditures to educational experiential and outreach activities originating from departmental activities. For example, students have participated in workshops that reinforce working with refugees (M.G. Trovato); collaborated with other Lebanese universities in in-situ workshops in urban regeneration in the city of Tripoli, Lebanon (Y. Abunnasr), and participated in the Garden Show Spring Festival held yearly in Beirut (N. Al-Akl, M. Fabian, B. Dreksler). In addition, the Landscape Architecture Student Society (LASS) provides a platform for students to engage in community projects across the country. Students have voluntarily designed and worked with the Municipality of a mountain village (Aley) to design and implement a local trail; participated in Community Park Day in Hawd El Wilaya Park (2019), and they participate yearly in the global event of Park(ing) Day by turning a vehicular parking space into a temporary Parklet/Landscape Installation.
- ***To emphasize interdisciplinarity highlighting, the relationship between landscape architecture and other disciplines.*** This is achieved by infusing the curriculum with interdisciplinary courses and hands-on experiences and providing opportunities for the students to interact with students in other disciplines at the university through studios, projects and electives. This is also done by encouraging the faculty to engage in University wide interdisciplinary centers. For example, in design studios, science, engineering, and urban design faculty members are usually invited to give lectures to the students, participate in the studio desk critique, and participate as jury members (LDEM 241 and 242; LDEM 228). This allows students and faculty to interact beyond their disciplinary silos. Similarly, science faculty members in LDEM have adopted some design studio methodologies in their courses (LDEM 217 and LDEM 211) such as presentations, graphical representations, and project based assessments.
- ***To impart a sense of cultural sensitivity and professional and environmental ethics to students.*** This is achieved through the professional practice courses that are given to students throughout the curriculum, in which professional values and ethics are articulated. Students are also offered the opportunity to participate in responsible community development and preservation. These courses usually include presentations by practicing professional landscape architects or designers that emphasize the ethical, professional and cultural sensitivities. For example, in 2018 representatives from 'desert INK', a landscape architecture firm based in Dubai, gave a lecture on the development of a temporary park in Dubai. The presenters showcased the projects and their design, focusing on the stakeholders involved and the ethical and professional decision making processes.

Updates on the PLOs/CLOs assessment are found in Addendum G (p. 30 and p. 66-196)

2. How does the program identify the knowledge, skills, abilities and values it expects students to possess at graduation?

The BLA faculty members annually review the studio curriculum to ensure that it encompasses the necessary knowledge, skills, abilities, and values that the department expects its students to possess at graduation. For example, in the last few years faculty members have, in particular, attended to the overall studio sequence to provide the best build-up of knowledge from basic design instruction to more complex issues and design thinking. This has resulted in a curricular map (*Volume 3, Appendix 21 PLO/CLO Assessment Plan*) providing the overall sequence and knowledge to be acquired for every year. The department also consults with alumni on specific curricular concerns, because many

of them employ AUB's BLA graduates and are major contributors in the field. This feeds into the program and course learning outcome (PLO/CLO) plan, (*Volume 3, Appendix 21 PLO/CLO Assessment Plan*) that provides the basis for assessment of learning outcomes for selected courses. All courses are assessed during a four-year cycle. The results define where improvements are required and where certain skills or abilities need more emphasis (or less emphasis). Accordingly, learning objectives for each course are determined or adjusted as per this assessment. The PLO/CLO assessment is based on program and course learning outcomes that were developed during several retreats. These PLO/CLOs identify program knowledge, skills, abilities and values that students should acquire upon graduation.

As a result of these reviews, the faculty has determined that the BLA program should provide an understanding of the physical, cultural, and biotic determinants of design through studio work that concentrates on "reading" and understanding extant physical landscapes as a prerequisite to planning and design interventions. This is done through a series of design courses (LDEM 204 Studio: Cultural Landscape Design), (LDEM 216 Studio: Landscape Garden Design), (LDEM 246 Studio: Natural Landscape Design) and (LDEM 263 Landscape Appreciation and Site Analysis). Core professional skills also include communication, which is central to the BLA program. Students' abilities to communicate graphically are developed through the required studios that require a range of visual exploration and representation techniques, in addition to (LDEM 252: Computer Aided Design). Written Communication is addressed in history and theory courses (LDEM 207: Landscape Architecture History I), (LDEM 208: Landscape Architecture History II), and (LDEM 260: Contemporary Issues in Landscape Architecture), all of which require a substantial amount of writing, as do several of the junior and senior studios that culminate in reports, in addition to two GE English courses. All studios and some courses require students to make oral departmental presentations, and many also require students to make oral presentations to invited professionals and community stakeholder.

The BLA program provides a basic working knowledge of the profession's processes, practices, and techniques through all studios and through courses such as Professional Practice (LDEM 290), Site Engineering I (LDEM 247), Site Engineering II - Construction Material (LDEM 248), Site Engineering III - Design Implementation (LDEM 249), Geographic Information System (GIS) (LDEM 251), Soils in the Landscape (LDEM 217), and plant course series (LDEM 219 and LDEM 221).

B. Program Curriculum

1. How is the program curriculum guided by coverage of:

History, theory, philosophy, principles and values

Design history; design theory; criticism; sustainability, resiliency, stewardship;

Health, safety, welfare

Design processes and methodology

Critical thinking; analysis; ideation; synthesis; site program; iterative design development;

Design communication

Systems and processes – natural and cultural (related to design, planning and management)

Plants and ecosystems sciences; built environment and infrastructure; human factors and

Social & community systems; human health and well-being

Communication and documentation

Written communication; oral communication; visual and graphic communication; design and construction documents; numeracy, quantitative problem-solving and communication; community and/or client engagement

Implementation

Construction technology and site engineering; site materials; use and management of plants and vegetation; policies and regulation

Computer applications and advanced technologies

Visualization, and modeling; communication (conceptual and construction drawings);
Geospatial analysis

Assessment and evaluation

Site assessment; pre-design analysis; landscape performance; post-occupancy evaluation;
Visual and scenic assessment

Professional practice

Values; ethics; practice; construction administration

Research and/or scholarly methods (for masters' level degree programs)

Quantitative & qualitative methods; framing research questions; literature/precedent review;
research integrity and protection of human subjects; communication of research

- **History, theory, philosophy, principles and values:** Two History Courses are offered in the BLA Program: Landscape Architecture History I (LDEM 207) and Landscape Architecture History II (LDEM 208), along with one theory course, Contemporary Issues in Landscape Architecture (LDEM 260). In these courses, the built and the natural environment are studied historically and thematically in terms of human and environment, human and land, shelter, urbanization, recreation, and territory. Students are also exposed to the trends, culture, art, and drivers impacting historical periods and theoretical paradigms. The General Education requirements also include two Humanities courses which expose students to different topics be it within FAFS or at different faculties, ranging from Civilization Sequence, Philosophy, Archeology, to many more. A new LDEM elective focused on gender and women was developed during AY 2020/2021 by N. Al-Akl to respond to university-wide emphasis on gender courses. This course named 'Landscape Architecture: Gender, Women, and Inclusion' (LDEM 272) places the concept of inclusion and gender at the center of explorations of landscape architecture. It will be offered during AY 2021/2022 for the first time.
- **Design processes and methodology & Assessment and evaluation:** The studio design sequence is organized in a sequential manner from residential scale gardens in first year to large regional urban scales in third year. In addition, and across all studios, students are always required to analyze and understand the smaller and larger scales in relation to their intervention scale, an approach adapted from landscape ecological principles. In addition to being incorporated into studio-design courses, pedestrian and vehicular circulation, grading, drainage, and storm water management are further emphasized in the Site Engineering and Implementation, and Surveying and Base Map Development courses as well as in one water course (Sustainable Water Management Techniques, LDEM 231) for grading, drainage, and storm water management. For example, in the Site Engineering I (LDEM 247) course, students study the techniques essential to the horizontal and vertical development of site designs with an emphasis on grading, cut and fill calculations, road alignment, storm-water drainage and management, erosion control, road alignments and earthwork. In the Site Engineering-Design Implementation (LDEM 249) course, which is the last course in the Site Engineering/Construction Sequence, students are introduced to various elements and standards of construction and measurement such as floor, shelter and outdoor space elements and materials. In addition, Landscape Ecology (LDEM 218) course provides a thorough understanding of scale (temporal and spatial).

- **Systems and processes – natural and cultural (related to design, planning and management):** Natural and cultural systems including principles of sustainability are addressed in many courses (sciences and design) in the BLA Program and they are cross cutting themes central to the program.
 - *Natural:* In the Landscape Horticulture (LDEM 211) course, students are taught how to select plants appropriate to site and purpose and are introduced to concepts and applications of environmental horticulture and its contribution to the well-being of humans and nature. In the Sustainable Water Management Techniques (LDEM 231) course students are exposed to theoretical as well as practical concepts of sustainable water management techniques as well as water and energy conservation. In Soils in the Landscape (LDEM 217) students are introduced to the role of soils in landscape resilience and ecological services and the relevance of soil surveys for landscape architects.
 - *Cultural:* In the Landscape Appreciation and Site Analysis (LDEM 263) course students are introduced to the cultural landscapes of the Mediterranean, taking the Levant as a laboratory. The Landscape Architecture History I (LDEM 207) course surveys the evolution of structures, settlements and landscapes in the western world and the Mediterranean region including the Arab world. The Landscape Architecture History II (LDEM 208) course explores the evolution of human settlements and structures in the landscapes and survey the development of outdoor space and man's effort to control his physical environment in the Western world and the Mediterranean including the Arab world. The Contemporary Issues in Landscape Architecture (LDEM 260) course addresses recent trends in landscape architecture that cover the multitude of approaches, in order to broaden the students' theoretical knowledge, to encourage their critical and analytical abilities, and to reinforce their understanding of systems and of the landscape as a cultural expression.

At the design level, both cultural and natural systems are simultaneously addressed with focus. First on small scales in design studios at the lower level, such as in Landscape Garden Design (LDEM 216), that allows students to analyze, interpret, and manipulate natural elements of vegetation, landform, water, etc.

In the Natural Landscape Design (LDEM 246) course students are introduced to public space design and the concept of Public Park and Plaza design and the importance of open space in the urban and peri-urban areas and are taught the methods to successfully integrate cultural concerns into design projects.

In the Cultural Landscape Design (LDEM 204) course students are able to recognize ecological and sustainable design strategies. Landscape Ecology (LDEM 218) course focuses on detecting and characterizing social and natural drivers influencing landscapes and landscape dynamics focusing on the interplay between spatial patterns and ecological processes. The elective course the Environment and Sustainable Development (LDEM 203) introduces students to the basic principles of sustainable development at the nature-society interface.

Plants and Ecosystems: The two-course sequence in Plant Material (LDEM 219 and LDEM 221) enables students to acquire the needed knowledge related to plants and ecosystems. In the Landscape Planting Design (LDEM 222) course students learn to combine elements of art and science to create a functional, aesthetic and spatial experience of the outdoor space through plants and other construction materials. In the Landscape Ecology (LDEM 218) course, students get introduced to the major concepts, questions, and methods of ecology as well as the scientific study of how organisms interact with their nonliving environment and with other organisms.

Landscape Architecture workshop: In Spring 2019/2020, the department introduced a new course entitled ‘Special Topics in Landscape Architecture – Project/Workshop’ (LDEM 298). The course presents the application of landscape architecture ideas as a process of engagement and building among various professional contexts. It offers the chance for students to participate in opportunities directly related to the practice of landscape architecture, which may not be offered otherwise by the program curriculum. As such, the course aims at introducing conventions and circumstances that may be encountered throughout one’s career while stimulating new and creative, alternative dimensions of practice in a global, inclusive and universal context. Course content focuses primarily on hands-on and operational aspects of practice through themed projects such as workshops, design competitions, travel experience, or research by design projects. The course is open to students who are interested in expanding their perspective of the field of landscape architecture through examining new areas of study related to practice, international collaborations, and cultural exchange. The course will allow students to participate in multidisciplinary teams, as well as work on real projects under the supervision of a faculty member. This course is currently being offered for the first time in Spring 20/21 (more info is found in Addendum G, p. 28).

- **Communication and Documentation:** These tasks are integrated into a wide variety of classes and into all studio courses. The Landscape Descriptive Drawing (LDEM 201) course provides students with instruction in a variety of hand drawing techniques to provide them with the confidence to sketch and communicate their preliminary design ideas. Landscape Technical Drawing (LDEM 200) course provides students with hand drawn technical skills and understandings of basic geometries, perspective, scaled plans and sections, and highlights the importance of line weights in drawings (This course is a prerequisite to use AutoCAD and other digital drawing software). In addition, the Computer Aided Design (LDEM 252) course provides instruction in the use and organization of drawings in digital form at the technical level. The Surveying and Base Plan Development (LDEM 291) course provides hands on exercises in the field as part of site inventory that is translated into solid base plans. All design studios stress on the quality of graphical representation through lectures and through allocating assessments to this dimension of student work.

The studio structure is designed so that students have ample opportunities to practice their visual and verbal presentation. Students make major presentations to the department and guest critics twice a semester, while verbally and graphically communicating their ideas a minimum of sixteen times before they graduate during the eight studios they take. In addition, internal interim pinups and presentations provide preparation for students for these milestone presentations culminating in the capstone presentation in the Spring of the fourth year. Some studios require the preparation of a final report to the client, including LDEM 228, Urban Landscape Design (See examples of Studio Reports in *Volume 5, Appendix 26 -Student Work LDEM 228*).

Students are required to take two English Language courses with the second course focused on writing. In addition, the University requires that every department offers a writing class within the major in the junior year. The Capstone Research course (LDEM 241) fulfills this requirement as the final outcome of the course is a full design research report, which emphasizes writing content and style appropriate to the field of landscape architecture.

- **Implementation:**
 - Design Implementation: The studio sequence incrementally exposes each student to the fundamental knowledge and skills of landscape architecture technology and stresses mainly on the concepts, methods and materials used in the design and implementation process. Materials, Methods, Technologies and Application are studied through several course sequences. All aspects related to plants are covered in several courses: Landscape

Horticulture (LDEM 211), Plant Material I and II (LDEM 219, LDEM 221), Botany and Plant Ecology for Landscape Architects (LDEM 210). Developing base plans and site surveying (LDEM 291) introduces students to site inventory and development plans for existing site conditions and completed in using AutoCAD (LDEM 252). Three Site Engineering courses (LDEM 247, 248 and 249) are organized to deliver essential knowledge on grading, alignments, drainage etc. in Site Engineering I, Construction material in Site Engineering II, and full construction documents/implementation in Site Engineering III.

- *Public Policy and Regulation:* Professional practice (LDEM 290) introduces students to basic regulatory policy and overall design standards that are emphasized across all studios. Design Studio V (LDEM 228) is focused on the Landscape Architecture in the urban context. A core part of the analysis and implementation is learning public policy and regulation and its impact on the urban landscape. Design Studio VI (LDEM 246), Natural Landscape Design, introduces students to public policy in relation to conservation, protection and management of natural landscapes. Similarly, Studio IV (LDEM 204) introduces the same for Cultural Landscapes. The capstone project also requires students to incorporate public policy and regulation in their research phase (LDEM 241) and respond to these considerations during their design phase (LDEM 242).
- *Construction Documentation and Administration:* Site Engineering II/Construction Material (LDEM 248) course, Site Engineering/Design Implementation (LDEM 249) course and Professional Practice (LDEM 290), as explained previously, cover those aspects.
- **Computer applications and advanced technologies:** The BLA students take a Computer Aided Design (LDEM 252) course as well as a GIS (LDEM 251) course. The knowledge and skills acquired in these two courses are used by students throughout the advanced studio-design courses.
- **Professional Practice:** The Professional Practice (LDEM 290) course introduces students to professional office structure, management, and organization. It is comprised of lectures, readings, final exam, and research (assignments, reports and projects) components. Students conduct in-depth research of practice offices, visit these offices, and interview designers. Key topics include ethics, compensation, contracts, and business plan.
 - *Professional Values and Ethics:* The professional values and ethics are discussed in the professional practice course as stated above. In addition, students are exposed to issues emerging from interacting and working with contractors during Site Engineering III (LDEM 249).
- **Research and/or scholarly methods:** In Spring 2019/2020, the department introduced a new course entitled ‘Special Topics in Landscape Architecture - Tutorial (LDEM 299). This course focuses on developing research and communication skills for research and/or professional topics relevant to the field of landscape architecture. The tutorial provides opportunities for undergraduate students to pursue directed study relevant to their chosen topic when existing courses do not offer the required subject matter. It covers special topics developed under the direction of a faculty member using a tutorial format. The student will work closely with her/his advisor to choose the topic, develop it and submit all requirements. This course is being offered for the first time during current Spring term 2020/2021.

2. How does the curriculum address the designated subject matter in a sequence that supports its goals and objectives?

a. Core Curriculum

The courses in the BLA program are organized as sequences with upper level classes building on earlier introductory classes. The program has six sequences (I-VI) built around specific educational goals: Design Studio Sequence (DS), Science Factors Sequence (SF), History and theory sequence (Cultural Factors) (HT), Presentation Skills Sequence (PS), Technical Skills Sequence (TS), and Professional skills Sequence (PRS). However, these units are not independent of the other educational sequences. Instead, they rely on a body of knowledge and skills that move across educational sequences, build on one another, and become increasingly complex as the curriculum progresses from the first to the fourth-year levels.

Below is an explanation of the BLA requirements, the six educational sequences, and descriptions of each course within those four sequences. Included in the course descriptions are the prerequisites required where applicable and brief listing of learning outcomes for each course. Please refer to (*Volume 4, Appendix 25*) for detailed information about each course syllabus.

i. Design Studio Sequence (DS) (8 courses, full-semester studios for 8 semesters Including the capstone project research and design for the last two semesters)

This is the core of the landscape architecture program. In the first year, students begin the four-year studio sequence where they learn and apply the principles, methods, processes, and techniques of landscape architecture design. Each studio provides progressively more complex problems with each studio divided into short and longer-term assignments. Typically, each studio has a different main instructor (supported with one or two part-time instructors) to ensure a diverse range of project types, methods of exploration, and points of view. Generally, studio instructors are assigned based on a faculty to student ratio of 1:8 to 1:10 and for the capstone project a ratio of 1:6 to 1:7).

• LDEM 202 - Studio I: Landscape Design Fundamentals

Course Description: This course is the first of two fundamental design courses (the second is LDEM 216). It is a foundation for subsequent design courses. It introduces students to theories of design through readings, analysis and hands-on projects. The course is structured as a series of short exercises and is divided into two parts: Part 1: Fundamental Elements of Landscape Design This course is an exploration into the modes of space which are two-dimensional surfaces, three-dimensional objects, spatial enclosure and the open continuous landscape. The emphasis is on the media of landform, water, plants and structures as defining agents of human space in the garden and the landscape at large. The form and character of the space is further determined by the context of the site and the nature of spatial geometry with studies of form, pattern, texture, tone and color. Part 2: Basics of Design. This studio introduces students to reading and responding to the site. Goals include learning to experience and record the landscape, design in response to the site, think creatively, generate design ideas and understand design as a process, gain knowledge of design precedents and principles, and learn tools and techniques of visual expression. Students will learn through in-class exercises, reading assignments and design projects. Studio time is divided among lectures, field trips, studio design work, desk critiques, pin-ups and presentations.

Pre-requisite: None

Learning Outcomes: understand and apply fundamental design concepts; develop creative thinking skills; apply basic landscape elements in theoretical design conditions; develop basic plan, section,

and 3D drawing skills of landscape projects; support independent thinking processes; and introduce students to the fundamentals of oral and visual skills. Applying 3D presentation (model) skills and mastering oral skills through communicating or formulating ideas and concepts of landscape architecture orally, textually, graphically, and through multiple media. Applying creative skills and aesthetic skills through constructing relationships between the elements of landscape architecture.

- **LDEM 216 - Studio II: Landscape Garden Design**

Course Description: This course is the second of two design introductory courses. It is a foundation for subsequent courses that explore project design in varied contexts and scales. It introduces students to theory and practice of landscape design and site planning by doing, observing, reading and reflecting. Students apply knowledge acquired from LDEM 202 on real site contexts with an emphasis on site design. Focus is on two dominant landscape design types: the park (public) and the garden (private). Students will analyze case studies and relevant readings pertaining to both landscape typologies.

Part 1: The Park The focus is on the application of spatial theory and design process to a specific site context. Work will develop map-reading skills at various scales and strengthen drawing, lettering and cross-section representation skills. The emphasis is on landform design in a public park setting (urban and non-urban).

Part 2: The Garden The garden is a personal, direct and intimate expression of landscape architecture. It is explored here as a contemporary art primarily through the design of individual sites and, secondarily, through guided research and discussion sessions which explore important works and design theory in the genre. The emphasis is on developing an informed and creative personal approach that inspires while solving practical problems on real sites. The focus here is on residential gardens or gardens pertaining to institutions.

Pre-requisite: LDEM202

Learning Outcomes: Develop skills in visualization, representation, and communication: drawing, models, orally, and verbally; Describe the elements and principles of design; create a typical site inventory and explain the concept of opportunities and constraints based on site analysis; identify and describe the characteristics of a design theme, and apply the process of form composition and identify factors of spatial composition and landscape design process across scales.

- **LDEM 222 - Studio III: Landscape Planting Design**

Course Description: The course introduces students to the basic principles of designing with plants. Landscape Architecture combines elements of art and science to create a functional, aesthetic and spatial experience of the outdoor space. One initial purpose of designing with plants is to understand how to blend technology (the built environment) into the natural surroundings and to bring natural elements into the built environment. In order to work toward a desirable landscape design and hence successful planting plan, students will develop working knowledge of artistic elements, design principles and basic horticultural knowledge of plants. Successful plant composition and layout is obtained with acknowledgement of the importance of plants as a design material that enhances the definition and spatial experience of outdoor spaces.

Prerequisites: LDEM 216, LDEM 211 and LDEM 219

Learning Outcomes: Identify regional and local plant and planting design related issues; Generate planting designs responsive to place, culture and local values; Produce designs responsive to environmental issues; Develop graphic skills in representing and communication of planting design,

planting strategies and their related characteristics (diagrams, sketches, plans, sections, perspectives and axis); Develop oral skills in presenting projects, concepts and ideas; Assess natural and human landscapes; Demonstrate understanding of impact of soil and land conditions on planting design; Demonstrate understanding of water resources and implications on planting design; Integrate notions of temporality in planting design; Demonstrate understanding of planting design as an integral part of sustainable landscape design; Demonstrate understanding of impact of plants on human well-being; Demonstrate understanding of principals of planting implementation; Demonstrate understanding of principals of irrigation design.

- **LDEM 204 - Studio IV: Cultural Landscape Design**

Course Description: Part 1: Cultural Landscapes The cultural landscape studio introduces students to the process of research, planning, design, and management of historically and culturally significant landscapes through selected real-world site projects. Part one introduces methods of assessment, approaches and policies (local and international), case studies of similar projects as well as historical analysis of the study area.

Part 2: Historic Preservation and Design The course explores landscape design proposals for sites within historically significant areas. Emphasis is on methods of analysis and design development. Graphic and photographic documentation of existing built forms serve as the basis for design proposals. Students engage in the following five steps in the process of their study: 1) Students investigate a landscape's site history using primary and secondary resources. 2) They analyze, document and evaluate existing conditions. 3) They interpret the significance of the natural, historic and cultural importance of the landscape site. 4) They recommend appropriate treatment strategies. 5) Finally, they present the findings of this research process.

Prerequisite: LDEM 222

Learning Outcomes: Introduce basic understanding of cultural landscapes; design contextual, sustainable and culturally sensitive landscape designs; apply tools and methods to read, appreciate, and design cultural landscapes; recognize multiplicity of landscape; question all issues pertaining to landscape in their inquiry from social to spatial programming and from theory to practice; further develop oral and visual skills; apply tools to record and understand the multiple layers of landscape (i.e. geology, geography, physical, ecological, and human); and reinforce professional collegiality, mutual respect, and collaboration.

- **LDEM 228 - Studio V: Urban Landscape Design**

Course Description: The focus of this studio is "site design in the urban context." As such, it will enable students to explore the particular challenges of designing in complex urban environments. By their nature, urban environments have multiple layers and meanings and are influenced by an array of forces. Urban landscapes are an amalgam of myriad social, cultural, political, economic and ecological processes on physical space. Designing in the urban context therefore requires sensitivity to these many layers and influences. Creative response to the challenges of urban environments requires careful attention to the landscape narratives students choose to tell, and how users of a space learn and discover new things from a site.

Part 1: Understanding and Analyzing Urban Landscape Systems The purpose here is to briefly overview basic concepts of urbanism (transportation, infrastructure, zoning laws, real estate markets, economic development, social issues and so on) with strong emphasis on understanding urban open spaces and networks through readings. Students will analyze case studies of similar contexts and analyze urban landscape systems pertaining to the study area. Part 2: Study Area An application of

urban design theories to various scales of urban design, with special focus on civic scale design elements and spatial and functional requirements. The end goal is to design a landscape system or site with an urban context.

Prerequisites: LDEM 204 and LDEM 222.

Learning Outcomes: Analyze urban landscape systems as integral to design and planning propositions; apply the concept of connectivity (physical, social and ecological) across urban and site scale propositions; Construct relationships between elements of the urban landscape by integrating physical, environmental, ecological, cultural, and social considerations in urban landscape design and planning; integrate skills in site design and implementation by applying the understanding of multiple scales to analysis and design propositions; incorporate principles of landscape history and theory by apply a holistic approach to develop responsive design projects; communicate ideas and concepts of landscape architecture orally, textually, graphically, and through multiple media by mastering oral and visual skills in project presentations. Integrate skills in site design and implementation by producing project analysis and designs that address fundamental issues relevant to the context of inquiry.

- **LDEM 246 - Studio VI: Natural Landscape Design**

Course Description: This course examines the relationship between ecological landscape design and natural elements/resources. The emphasis is on understanding natural and human/ cultural systems and the interactions across. Of primary importance is understanding of ecological processes that occur within. Students will learn the significance of these systems and their potential contribution to sustainable environments while highlighting the threats and opportunities from anthropogenic impacts. As a design studio, students will explore landscape planning and design from the regional to the site-development scale and they will learn how to integrate ecological design and planning frameworks within their design proposals to balance human use and ecological integrity. This will require the ability to synthesize information about natural features, cultural resources, and development patterns to create spatial landscape strategies that address the unique problems and opportunities of a chosen study area.

Prerequisite: LDEM 218 and LDEM 228

Learning Outcomes: Enhance critical thinking and problem solving skills; enhance understanding of site inventory/analysis and landscape design process; develop understanding of physical and social environments issues associated with sustainable landscape architecture; develop knowledge of sustainable design criteria for urban public spaces; improve skills to analyzing spatial settings and programming techniques in landscape design; improve graphical skills in visualization, representation, and communication including drawing, modeling, writing, and speaking; and established an intellectual pursuit of design solutions through theoretical, conceptual, philosophical, and practical knowledge.

- **LDEM 241 - Studio VII: Landscape Capstone Project I - Research**

Course Description: This course is intended to assist students in selecting an individual capstone project, finding and organizing appropriate information needed for the project, and establishing parameters and questions for the design and development of the project. The studio focuses on an approved design problem requiring individual work, which will serve as a comprehensive examination. Preparation and presentation include a written and graphic problem statement, analysis and detailed plans or other approaches approved by the instructor.

Prerequisites: LDEM 228 and LDEM 246.

Learning Outcomes: Integrate regional concerns (environmental, cultural, social, and economic) into landscape architecture projects by formulating clear problematic, theme and statement pertinent to project and context; integrate value and ethics in professional practice by producing designs responsive to local values, culture, social and environmental issues; communicate ideas and concepts of landscape architecture orally, textually, graphically, and through multiple media by mastering professional level oral and visual skills in project presentations; integrate plants and plant communities as a component of sustainable landscapes by synthesizing ecological values and principles into project analysis; demonstrate understanding of environmental, cultural, social, and economic issues affecting the wellbeing of society by synthesizing project analysis and inventory to develop concept designs in line with project statement; integrate skills in site design and implementation; incorporate principles of landscape history and theory by synthesizing case studies and literature into principle pertinent to project statement.

- **LDEM 242 - Studio VIII: Landscape Capstone Project II -Design**

Course Description: This course includes the Final Year Project (FYP), conducted with a faculty advisor, and includes collection, analysis and interpretation of project information. The final studio covers a variety of projects that may include landscape design projects involving fine arts, urban design and town planning. Students are expected to achieve a comprehensive understanding of ideas, processes and concepts. This is the capstone project where students demonstrate their acquired design skills and knowledge. They are expected to develop their design, produce presentation drawings and defend their ideas orally at a professional level. Students are assessed by department faculty. Note: This course fulfills the capstone writing intensive requirement for the Landscape Architecture major.

Prerequisite: LDEM 241.

Learning Outcomes: Demonstrate understanding of the overall creative design process; produce project designs that address fundamental issues relevant to the region or address a design inquiry; develop projects that respond to specific site and landscape constraints and opportunities; integrate physical, environmental, ecological, cultural, and social considerations demonstrate ability to apply what is required at each design phase and its deliverables; integrate skills in site design and implementation by applying design process and principles at the landscape and site scales; master visual and oral skills in communicating project ideas, project rationale and outcome.

- ii. **Science Factors Sequence (SF) (8 courses)**

This is the second core focus of landscape architecture program. The sequence provides students with the knowledge of ecological, geological, soils, and water systems with in-depth knowledge of plant material and horticulture.

- **LDEM 210 - Botany and Plant Ecology for Landscape Architects**

Course Description: This course tackles key concepts, principles and current issues in botany, plant ecology and plant conservation and discusses their application to the Middle East region and to landscape architecture. The course is structured to include peer teaching, debates, and discussion of articles and case studies. Upon completion of the course, students will have solid knowledge and a reference base to readily integrate natural and human made vegetation into their designs.

Prerequisite: None

Learning Outcomes: Interpret the natural landscape layer by categorizing and mapping ecosystems, habitats, and vegetation communities; Integrate plants and plant communities as a component of sustainable landscape design; Demonstrate understanding of regional environmental concerns regarding biodiversity and plant conservation and how to integrate them into landscape architecture

projects; Outline plans responsive to the protection and / or re-creation of natural ecosystems and native vegetation communities; Demonstrate basic knowledge of projects in nature conservation, Build experience in team work.

- **LDEM 211 - Landscape Horticulture**

Course Description: This course covers basic principles of selection and management of landscape plants. Students will learn how to select plants appropriate to site and purpose, and will be introduced to concepts and applications of environmental horticulture and its contribution to the well-being of humans and nature. The course relies on hands-on field projects, site visits, essays and photo-documentation.

Prerequisite: None

Learning Outcomes: Integrate plants and plant communities as a component of sustainable landscapes by describing how plants are named and categorized according to their shape, physical qualities; explain how plants respond to their environment; categorize plants based on their use in the landscape; integrate skills in site design and implementation by demonstrating basic gardening skills including production and maintenance of plants commonly used in the landscape; demonstrate ability to propose groups of plants for specific conditions; describe how landscape can contribute to urban greening.

- **LDEM 214 - Landscape and Geomorphology**

Course Description: This course provides crucial insights on how landforms and hence landscapes develop in space and time. It introduces students to the geomorphological underpinnings of landscape formation and trains them to read the natural and anthropogeomorphic aspects of landscapes.

Prerequisite: None

Learning Outcomes: Describe natures of rocks and minerals; explain earth formations and surfaces processes; list the various geomorphic processes of landscape formation; explain the mode of action of landscape forming processes especially tectonics, hydrology, slope and climate; investigate regionally relevant anthropogeomorphic processes of landscape formation; and present findings using the appropriate geomorphologic terminology.

- **LDEM 217 - Soils in the Landscape**

Course Description: This course will examine soils as integral components of the landscape and as a medium for landscaping activities. It is designed to help students 1) acquire a good understanding of the relationship between geology, landform, soil, vegetation and landscape, and 2) implement management actions essential in landscaping, such as soil preparation, soil amendment and fertilization. Emphasis will be placed on soils as a component of Mediterranean ecosystems and land mosaics with special focus on soil resources in Lebanon. Labs and field trips will be organized in order to observe and analyze soils in the environment, and to manipulate soil substrates for optimizing plant growth.

Prerequisite: LDEM 214 for LDEM students

Learning Outcomes: Assess natural landscapes: soils, and ecosystem; assess human landscapes: brownfields; explain the relationship between rocks, soil, landform, vegetation and landscape; recognize soil physical and morphological features and understand their role in the design of open space; determine soil physical and chemical characteristics needed in landscape design and management; prepare a soil survey map from primary and secondary sources; recognize the different soils of Lebanon and list their characteristics; understand the specificity of urban soil and their role in

sustainable landscape design; and recognize nutrient deficiency symptoms on different plants and propose remedial actions.

- **LDEM 218 - Landscape Ecology**

Course Description: Students will be introduced to the discipline of landscape ecology. The course will focus on the interplay between landscape patterns and ecological processes at large (landscape scale). It also focuses on detecting and characterizing social and natural patterns of influence on landscapes and landscape dynamics. Implications of landscape pattern and landscape management will also be covered. Case studies will be selected from different Mediterranean environments where the co-evolution of human communities with the natural settings have permanently shaped and modified landscape structures and ecosystem functions. The course will also explore applications in relevance to landscape architecture and planning.

Prerequisites: LDEM 210 and LDEM 217

Learning Outcomes: Understand ecological dynamics and landscape patterns in response to drivers and pressures; integrate regional concerns (environmental, cultural, social, and economic) into landscape perceptions, assess and understand the role of human activities in shaping the landscape (protected areas, restoration of degraded sites), develop an appreciation of the importance of honesty and integrity in scientific conduct; use and make use of psycho cognitive tools in understanding environmental problems to include the human dimension of the landscape in their perceptions; communicate ideas and concepts of landscape ecology orally, textually, graphically, and through innovative multiple media supports; understand the structure and function of landscapes in Lebanon in view of the various pressures exerted on them; demonstrate ability to assess sustainability in urban development; understand the tools for landscape ecological analysis; and demonstrate understanding of conservation ecology and restoration ecology in landscape management.

- **LDEM 219 - Plant Material I**

Course Description: This course will introduce students to the botanical and horticultural dimension of designed landscapes by focusing on the species and cultivars that have a landscape interest. In the process of learning about landscape plants, students will be introduced to the taxonomic, horticultural, ornamental and landscape aspects of approximately 300 plants during the sessions. Emphasis is placed on major categories of herbaceous plants and woody plants used in landscape including trees, shrubs, vines, flowering plants, ornamentals and hedge plants commonly utilized in this region by a combination of experiential activities, discussions, online resources and homework assignments. Students will also learn the proper selection and usage of these plants in landscape situations, plant assets and liabilities, alternative plants for various situations and cultural aspects.

Prerequisites: None

Learning Outcomes: Integrate plants and plant communities as a component of sustainable landscapes by demonstrating ability to identify plants, proposing the use of plants as integral to design, and demonstrating understanding of the relationship of plants to their environment.

- **LDEM 221 - Plant Material II**

Course Description: This course will introduce students to the botanical and horticultural dimension of designed landscapes by focusing on the species and cultivars that are used in edible and medicinal native and urban gardens. In the process of learning about landscape plants, students will be introduced to the taxonomic, horticultural, ornamental and landscape aspects of approximately 150 plants during the sessions. Emphasis is placed on major categories of herbaceous plants, as well as on

woody ornamentals, fruit trees and native plants used in the landscape including trees, shrubs and vines. Students will also learn the proper selection and usage of these plants in landscape situations, plant assets and liabilities, alternative plants for various situations and cultural aspects.

Prerequisites: None

Learning Outcomes: Integrate plants and plant communities as a component of sustainable landscapes by demonstrating ability to identify plants, proposing the use of plants as integral to design, and demonstrating understanding of the relationship of plants to their environment.

- **LDEM 231 - Sustainable Water Management Techniques**

Course Description: The course will focus on water as a scarce resource in Lebanon and the region. Students will be exposed to theoretical and practical aspects of sustainable water resources management as related to landscape design, namely in the areas of demand efficient water use and management. Students will learn about efficient indigenous and exotic landscape irrigation, surface and subsurface drainage design, rainwater harvesting and water conservation.

Prerequisites: None

Learning Outcomes: Integrate skills in site design and implementation by developing cost estimates for various water conservation schemes; design Landscape irrigation systems, and identify suitable best management practices in water resources management; and demonstrate understanding of environmental, cultural, social, and economic issues affecting wellbeing of society by calculating the water budget in various landscapes.

iii. History and Theory Sequence (HT) (3 courses)

Designers continue to be informed by the works that preceded them. This sequence provides students with the knowledge of built works of the past and present, and the social, economic, technological, and aesthetic forces that influenced their design and construction.

- **LDEM 207 - Landscape Architecture History I**

Course Description: This course aims to explore significant transformation in landscape architecture history and present a range of information to enable the development of alternative, diverse and nuanced communication tools for issues of the landscape. A series of lectures combined with literature study and a visual and textual project analysis aims to guide students to be able to analyze, evaluate and understand historic landscapes and their impact on our contemporary landscape and society today.

Prerequisites: None

Learning Outcomes: Analyze and synthesize principles of landscape history by demonstrating knowledge in landscape architecture history and theory. Construct relationships between the various elements of landscape architecture by developing a sense of aesthetics, critically evaluating concepts, and applying analytical skills. Communicate ideas and concepts of landscape architecture history orally, in writing, graphically, and through multiple media by demonstrating oral, written, and graphical communication skills. Interpret the historical landscape in terms of layers by analyzing spatial and symbolic aspects of designs in the context of given landscape and demonstrating knowledge of landscape hierarchies and changes over time in terms of composition, structure and processes.

- **LDEM 208 - Landscape Architecture History II**

Course Description: The course will explore the development of designed landscapes and manifestations of landscape architecture from the 18th century to the present. By investigating the complex relationships between people and their environments, it will shed light on the shaping of outdoor space and the evolution of human settlements within built and natural settings. The course will provide a critical and historical understanding of landscape architecture as ideology, experience, spatial form and profession. It will focus on pioneers within the field and on historical examples of gardens, parks, community spaces and environmental planning strategies, which explain landscape designs as products of cultural, political, social and environmental influences.

Prerequisites: LDEM 207

Learning Outcomes: Analyze and synthesize principles of landscape history by demonstrating knowledge in landscape architecture history and theory. Construct relationships between the various elements of landscape architecture by developing a sense of aesthetics, critically evaluating concepts, and applying analytical skills. Communicate ideas and concepts of landscape architecture history orally, in writing, graphically, and through multiple media by demonstrating oral, written, and graphical communication skills. Interpret the historical landscape in terms of layers by analyzing spatial and symbolic aspects of designs in the context of given landscape and demonstrating knowledge of landscape hierarchies and changes over time in terms of composition, structure and processes.

- **LDEM 260 - Contemporary Issues in Landscape Architecture**

Course Description: This course addresses recent trends in landscape architecture that cover the multitude of approaches, in order to broaden the students' theoretical knowledge, encourage their critical and analytical abilities, and sharpen their understanding of systems and the landscape as a cultural expression. The course discusses recent interventions by landscape architects in different parts of the world and assesses them in relation to their natural, cultural and socioeconomic contexts. At the same time, students are asked to critically evaluate the current open space situation in Beirut and discuss ideas and approaches related to it.

Prerequisites: (Only for LDEM students): LDEM 207 and LDEM 208.

Learning Outcomes: Students, will become conversant in the seminal readings within the framework of interdisciplinary theories of landscape architecture; develop an understanding of how to engage in critical evaluation and synthesis, particularly in regard to interdisciplinary landscape theories; cultivate the ability to engage in the analysis of methodological, theoretical and substantive connections within their area of interest; and be exposed to the broader cultural meanings inherent in the major transformations in landscape discourse that emerged over the past several decades, by examining the ecological, socio-cultural, technical and theoretical contexts.

iv. Presentation Skills Sequence (PS) (4 courses)

- **LDEM 200 - Landscape Technical Drawing**

Course Description: This is a course in descriptive geometry and graphic communication in landscape architecture. Students learn to use drawing tools. They acquire techniques of representation of 3D and space on 2D surfaces, including orthogonal (plans, sections and elevations), paraline (axonometrics and isometrics) and perspective drawings that cover construction of shades and shadows, as well as representation of open space, trees, and elements of the natural and built landscapes. Students are introduced to the basics of manual and digital drawing techniques. The

technical drawing techniques are regulated by a set of worldwide conventions used to clarify and visualize ideas and design process.

Prerequisites: None

Learning Outcomes: Recognize and apply domestic and international technical drawing conventions; Master the range of tools to produce necessary drawings to represent a landscape project (plans, sections, elevations, axonometric, and perspectives); Apply principles of orthographic, pictorial, and auxiliary projection techniques; recognize spatial relationships and articulate the physical environment in graphic form; and understand the range of applicable graphics used during the various stages of the design process.

- **LDEM 201 - Landscape Descriptive Drawing**

Course Description: The focus of the studio is to emphasize visual thinking techniques and graphical information representation. Through the use of multiple media to sketch and draw the landscape, students learn to understand their environment through developing skills in mapping information, understanding their relationships and graphically representing it.

Prerequisite: None

Learning Outcomes: Expose students to the multiple media for free hand drawing; interpret the outdoor environment and develop hand drawn representations; produce sketches of simple and complex objects; produce sketches and drawings of outdoor natural and built environments in addition to human figures; understand the principles of sketch composition; compose sketches using different basic media (pencil, pen, pastel, charcoal); observe and understand themes and concepts and translate into graphic representations; and develop a sense of aesthetics.

- **LDEM 251 - Geographic Information System (GIS)**

Course Description: This course acquaints students with classical and modern methods of landscape analyses as well as assessment and changes in landscape structure using ArcGIS and its extensions. Students will be gradually introduced to the subject both to acquire and integrate geographic data, and to learn how to analyze and interpret the results. All topics are demonstrated on selected tasks. The goal of this course is to explore various approaches to modeling landscape pattern and change. The focus is on the design and use of computerized geographic information systems for land planning and design decisions and on understanding, describing and predicting land-use and land-cover. The course will move between social and ecological processes and applications of the models. Students will learn to evaluate the trade-offs associated with use of a particular modeling approach within a given situation, and to implement (at least minimally) several of the approaches discussed.

Prerequisite: None

Learning Outcomes: Understand the basic principles of geographic information systems; apply GIS tools to landscape and ecosystem analysis; create and analyze maps and geographic information using GIS; apply data conversion and metadata; edit spatial and attribute data; understand and apply statistics, geometry and data operations tools; define and analyze spatial data; import GPS and CAD data into ArcGIS platform; joining and relating spatial databases; and identify and relate map projections and coordinate systems.

- **LDEM 252 - Computer Aided Design**

Course Description: This is an introductory course that covers Computer Aided Design digital drawings to develop skills for landscape architects to communicate, create and implement. The course

includes lectures and computer labs focused on learning the basic commands for drawing in two dimensions including: absolute and relative coordinates; working in layers, paper and model space; manipulation of text and plotting. The focus is on understanding the software environment and basic applications of AutoCAD and on using relevant tools of this graphic design software to develop high quality landscape design graphic outputs, such as diagrams, perspectives, sections, plans and 3D models. These skills will enable students to employ computer graphic design tools in landscape architecture studios throughout the rest of their degree courses.

Prerequisite: None

Learning Outcomes: Apply 3D presentation (models) skills; Master technical drawing, Master rendering techniques.

v. Technical Skills Sequence (TS) (6 courses)

This course provides students with the skills and knowledge required to implement landscape architectural projects. The courses includes instruction in graphic and written communication, land form manipulation, construction materials, site engineering, and professional practice.

• LDEM 247 - Site Engineering I

Course Description: This is the first of the three courses in the LDEM Site Engineering sequence. This course focuses on the study of techniques essential to the horizontal and vertical development of site designs; emphasis on grading, cut and fill calculation, storm-water drainage and management, erosion control, road alignments and earthwork. This is a lecture course with intensive exercises for engineering calculation and drawing techniques.

Prerequisite: None

Learning Outcomes: Develop technical skills in landform and surface manipulation; Apply basic principles, processes, and techniques that are expected from an entry-level landscape architect dealing with site engineering issues; apply the principles of storm water management; apply the principles of road alignment; and apply techniques of site layout and dimensioning.

• LDEM 248 - Site Engineering II - Construction Material

Course Description: This is the second of the three courses in the LDEM Site Engineering sequence. This course will serve as a capstone to landscape architectural construction with emphasis on understanding and preparing complete sets of construction documents for landscape architecture projects. It includes methods and procedures necessary for transforming a design idea into a set of construction drawings that is accurate, precise and clearly understood; and the principles, processes and techniques of site engineering for the “hard” and “soft” elements of landscape architecture and surfaces, including wood construction, free-standing and retaining walls, pavement, steps, decks, lighting and planting irrigation. Students will also implement their designs through hands-on experience.

Prerequisite: LDEM 247

Learning Outcomes: acquire knowledge about hardscape and materials used in landscape architecture project construction; apply techniques of graphic representation of hardscapes as well as development of technical documentation of landscape projects; and understand physical constraints and aesthetical considerations of soft and hard materials.

- **LDEM 249 - Site Engineering III - Design Implementation**

Course Description: This is the third and last of the three courses in the LDEM Site Engineering sequence. This course includes presentation and classification of landscape construction and materials: in particular, material types and measurement standards of construction elements. Floor elements, such as paving materials, pedestrian ways, stairs and ramps, are emphasized. Border and enclosure elements, such as walls and fences, are studied. Shelter elements, such as pergolas and gazebos, are explored. Water elements, such as ponds, waterfalls, pools and fountains, are studied. Outdoor space, furniture and ornaments, such as benches, litterbins, lighting elements, pedestrian bridges and decks, are focused upon. Interactions between materials, buildings, spaces and humans will be explored. Research studies and case studies will be conducted for designing original landscape construction and material. This studio course will focus on lectures, exercises and projects dealing with landscape equipment, and design methods. In addition, students have exposure to measuring quantities and defining specifications.

Prerequisites: LDEM 247 and LDEM 248

Learning Outcomes: Understand the methods of assembly of landscape materials (hard and soft) for the purposes of describing (in drawings) a design to a contractor; apply principles and skills of preparing and collating construction drawings; and develop a typical landscape construction working drawing package and prepare a preliminary cost estimate.

- **LDEM 263 - Landscape Appreciation and Site Analysis**

Course Description: This course introduces students to specific landscapes of Lebanon and teaches them how to read spaces by analyzing the interrelationship between natural conditions, human settlement and land use over time. The course is based on an integrated view of the landscape, taking into consideration both natural and cultural components. Students will be exposed to different approaches to perceiving, reading and interpreting the landscape.

Prerequisite: LDEM 291

Learning Outcomes: Introduce students to the basic understanding of landscape character assessment; apply tools and methods to read, appreciate and represent the landscape taking the Levant as a laboratory; understand and document the multiple layers of the landscape; improve observation skills to develop comprehensive site inventories and analysis; develop visual and graphical thinking skills; and evaluate social aspects of the landscape and its impacts on landscape formation and character.

- **LDEM 265 - Landscape Management**

Course Description: This course is designed to help students develop landscape management and maintenance expertise as well as practical skills by building on knowledge acquired in previous science courses (landscape horticulture, soils in the landscape and sustainable water management techniques), and learn implementation and management actions essential to landscaping.

Prerequisites: LDEM 211, LDEM 217 and LDEM 231.

Learning Outcomes: Demonstrate understanding of the relationship of plants to their environment; Apply principles of horticultural techniques; Apply principles of soil management; Apply principles of irrigation design; Apply principles of drainage and storm water management; Prepare standards and specifications and BOQ; Prepare contracts; Prepare professional reports.

- **LDEM 291 - Surveying and Base Plan Development**

Course Description: The course focuses on the fundamentals of plane surveying: basic measurement of distance, angles and elevations. It also focuses on the use of basic surveying equipment, such as total stations, levels and tapes, theodolites field notes; and basic computations, such as traverse closure and determination of areas. It is comprised of lectures and studio projects dealing with earthwork estimating, storm water management, site surveys, site layout, and horizontal and vertical road alignment. Students will survey a site, collect and analyze data and transform measurements into a base plan essential for any design process. This will include features such as topographic contours, spot levels, structures, vegetation, water ways and utilities.

Prerequisites: None

Learning Outcomes: Develop an understanding of introductory knowledge of the principles of surveying; apply the principles of surveying; carry out fieldwork measurements and produce base plans while working in teams, to understand the definition of base map; describe the different methods of primary data collection; apply the acquired skills and knowledge and record observed information.

- vi. **Professional Skills Sequence (PRS) (2 courses)**

Students are taught how design firms operate, ethics of the profession, and experiencing the work environment. These are taught in two courses, one classroom based and the second as an internship in a design office.

- **LDEM 290 - Professional Practice**

Course Description: The course discusses the professional practice of landscape architecture. It is structured to give students an overview of the professional opportunities, roles and responsibilities within which graduates of the program will most likely practice their trade. The course will be structured as a series of lectures, workshops, discussions and presentations from practicing landscape architects, engineers and other professionals who will expose students to different aspects of the trade. It introduces basic issues in the practice and profession of landscape architecture, challenging the student to critically examine professional, ethical, economic, political, social and other issues in the current practice. It covers the different typologies of landscape projects, firms and clients, and introduces the full cycle of a landscape project from award and conception to construction and site supervision.

Prerequisites: None

Learning Outcomes: Demonstrate understanding of professional practice and ethics; gain knowledge of contemporary practice and landscape trends; demonstrate understanding of business structures including firm and project typologies; apply communication skills with employers, clients and subcontractors; demonstrate skills in project management; demonstrate ability to develop scope of works; prepare professional reports; develop budgets and bills of quantities; demonstrate a preliminary understanding of contracts relating to clients and sub-contractors; analyze working drawings; structure tender documents; and develop verbal and graphic presentation skills.

- **LDEM 292 - Internship (Practicum)**

Course Description: The objective of the landscape architecture internship is to offer students the opportunity to broaden their educational experiences by actively participating in a professional landscape architecture, planning and/or engineering office environment. The intention is to provide an

opportunity for exploring the world of landscape architectural practice through professional and reflective activities that address educational goals and objectives.

Prerequisites: LDEM III standing and LDEM 290

Learning Outcomes: Demonstrate basic understanding of professional practice and ethics, organization of the office, relationship between trades, and people dynamics within the firm; interpret the internship experience as it relates to the academic curriculum and identify lessons learnt; demonstrate basic working knowledge of working drawings, bills of quantities, and specifications and the interrelationship between them; prepare a professional report reflecting on and summarizing their internship experience; develop professional oral and presentation skills as they relate to the internship experience; demonstrate understanding of business structures including firm and project typologies; apply communication skills with colleagues, clients and consultants; relate design exercise with management strategies; demonstrate basic knowledge of legal and regulatory aspects of sites.

b. Courses and credit hours required for graduation:

The following **Tables (10 and 11)** list all courses and respective credit hours required for graduation.

Table 10: Courses and credit hours required for graduation

Departmental Required Courses	Number of Credits
Design Studio Sequence (DS)	40
Science Factors Sequence (SF)	21
History and Theory Sequence (HT)	9
Presentation Skills Sequence (PS)	14
Technical Skills Sequence (TS)	19
Professional Skills Sequence (PRS)	5
Total Departmental Required Credits	108
University General Education Requirements	Number of Credits
English	6
Arabic*	3
Social & Humanities Sciences	12
Natural Sciences	3
Faculty of Agriculture & Food Sciences Electives	9
Quantitative Thought Elective	3
Total General Education Required Credits	36
Total Program Credits	144

*The Arabic course requirement can be substituted for a Humanities elective in the case of international students.

Table 11: Core courses and credit hours required for graduation (Organized by sequence)

Departmental Required Courses (Organized by Sequence)	Number of Credits
<i>Design Studio Sequence (DS)</i>	40
LDEM 202 Studio I: Landscape Design Fundamentals	4
LDEM 216 Studio II: Landscape Garden Design	4
LDEM 222 Studio III: Landscape Planting Design	4
LDEM 204 Studio IV: Cultural Landscape Design	6
LDEM 228 Studio V: Urban Landscape Design	6
LDEM 246 Studio VI : Natural Landscape Design	6
LDEM 241 Studio VII: Landscape Capstone Project I	4
LDEM 242 Studio VIII: Landscape Capstone Project II	6
<i>Science Factors Sequence (SF)</i>	21
LDEM 210 Botany and Plant Ecology for Landscape Architects	3
LDEM 211 Landscape Horticulture	3
LDEM 214 Landscape and Geomorphology	3
LDEM 217 Soils in the Landscape	3
LDEM 218 Landscape Ecology	3
LDEM 219 Plant Material I	2
LDEM 221 Plant Material II	1
LDEM 231 Sustainable Water Management Techniques	3
<i>History and Theory Sequence (HT)</i>	9
LDEM 207 Landscape Architecture History I	3
LDEM 208 Landscape Architecture History II	3
LDEM 260 Contemporary Issues in Landscape Architecture	3
<i>Presentation Skills Sequence (PS)</i>	14
LDEM 200 Landscape Technical Drawing	4
LDEM 201 Landscape Descriptive Drawing	4
LDEM 251 Geographic Information System (GIS)	3

Departmental Required Courses (Organized by Sequence)	Number of Credits
LDEM 252 Computer Aided Design	3
Technical Skills Sequence (TS)	19
LDEM 247 Site Engineering I	3
LDEM 248 Site Engineering II	3
LDEM 249 Site Engineering II	4
LDEM 263 Landscape Appreciation and Site Analysis	3
LDEM 265 Landscape Management	3
LDEM 291 Surveying and Base Plan Development	3
Professional Skills Sequence (PRS)	5
LDEM 290 Professional Practice	3
LDEM 292 Internship (Practicum)	2

c. Typical Program of Study

Students enter the University and the Program at a level equivalent to sophomore. The Freshman Year is waived by the Lebanese Law because students take more than two years of high school for their Lebanese Baccalaureate diploma, French Baccalaureate, and International Baccalaureate. Therefore, the total program credits do not include freshman credits typical of US universities.

The typical program of study constitutes 144 credits covered over four years including three summers. The typical lecture class is three or four credits, with 2.5 contact hours per week. Some lecture courses offer labs and therefore have additional contact hours. All Landscape Architecture studios full semester in length with 4 or 6 credits each. 4 credit studios have 8 contact hours per week and 6 credit studios have 12 contact hours per week.

Table 12 below shows the standard curriculum for students for a four-year course of study. Courses designated as (GE) satisfy the University's General Education requirement.

Table 12: Standard 4-year course curriculum

First Year					
Fall Semester	Cr.	Spring Semester	Cr.	Summer Semester	Cr.
LDEM 202-Studio I: Landscape Design Fundamentals	4	LDEM 216-Studio II: Landscape Garden Design	4	LDEM 252 - Computer Aided Design	3
LDEM 200 - Landscape Technical Drawing	4	LDEM 201- Landscape Descriptive Drawing	4		

LDEM 214 - Landscape and Geomorphology	3	LDEM 217-Soils in the Landscape	3	LDEM 219 - Plant Material I	2
LDEM 207- Landscape Architecture History I	3	LDEM 291-Surveying and Base Plan Development	3		
ENGL 203- Academic English (GE)	3	LDEM 211- Landscape Horticulture	3		
Total Credits	14		14		5

Second Year					
Fall Semester	Cr.	Spring Semester	Cr.	Summer Semester	Cr.
LDEM 222 - Studio III: Landscape Planting Design	4	LDEM 204-Studio IV: Cultural Landscape Design	6	LDEM 249 - Site Engineering III - Design Implementation	4
LDEM 210 - Botany and Plant Ecology	3	LDEM 208 - Landscape Architecture History II	3		
LDEM 247 - Site Engineering I	3	LDEM 248-Site Engineering II - Construction Material	3	LDEM 231- Sustainable Water Management Techniques	3
LDEM 221 - Plant Material II	1	LDEM 263 - Landscape Appreciation and Site Analysis	3		
Humanity Elective (GE)	3				
Natural Sciences Elective (GE)	3				
Total Credits	17		15		7

Third Year					
Fall Semester	Cr.	Spring Semester	Cr.	Summer Semester	Cr.
LDEM 228- Studio V: Urban Landscape Design	6	LDEM 246 - Studio VI: Natural Landscape Design	6	LDEM 292 Internship (Practicum)	4
LDEM 251- Geographic Information System (GIS)	3	LDEM 265- Landscape Management	3		
LDEM 218- Landscape Ecology	3	LDEM 290- Professional Practice	3	FAFS Elective	3
Social Science Elective (GE)	3	Quantitative Thought Elective	3		
Total Credits	15		15		5

Fourth Year			
Fall Semester	Cr.	Spring Semester	Cr.
LDEM 241 - Studio VII: Landscape Capstone Project I	4	LDEM 242- Studio VIII: Landscape Capstone Project II	6
LDEM 260 - Contemporary Issues in Landscape Architecture	3	Arabic Elective	3
FAFS Elective (GE)	3	FAFS Elective	3
Social Science Elective (GE)	3	Humanities Elective	3
ENGL 204 (GE)	3		
Total Credits	16		15

3. How do student work and other accomplishments demonstrate that the curriculum is providing students with the appropriate content to enter the profession?

The curriculum demonstrates this in several ways. Most studios invite guest reviewers to the end-of-studio presentations. The guest reviewers typically include professionals and working alumni who provide feedback on student work, as well as give feedback whether directly or indirectly to the faculty regarding the suitability of the studio content and final outcomes in working toward entering the profession.

The Professional Practice course includes review of resumes and other job seeking skills, and often brings in professional speakers to talk with students about their career path and look at student work and give advice. In addition, students get to conduct in depth study of a firm or designer to understand the profession. The Faculty (College) is also developing its career resources by providing job seeking skills and networking with the profession.

The internship course requires students to develop professional level portfolios and go through the process of applying for internships. Upon completion of their internships, an assessment report of students' skills, knowledge and performance by the employer is directly sent to the instructor in charge. These assessment reports are shared with the students and used to improve preparation of students to enter the profession. In addition, students have access to portfolio assistance from all faculty on need basis.

Student work is on display twice a semester during reviews. These are times when all faculty can see the work that is being produced in each of the studios and chart the students' progress. In addition, students are required to compile their work for every studio and develop it into a professional portfolio presenting their work and their reflection, visually and in written form.

There are also examples of student accomplishments through competition entries, studio professional reports, and capstone project reports. For professional studio reports, refer to the Urban Landscape Studio (LDEM 228) report in Volume 5 Appendix 26 (Students Work in Design Studios) completed during Spring 2019 under the supervision of Dr. Mehran Madani. Capstone project report examples are also in Appendix 26 (Students Work – LDEM 242) supervised by Maria Gabriela Trovato and part-time faculty Mona Khechen, and Balsam El-Ariss. The below examples show some competition achievements by students and recent alumni:

- **WLA Awards Shortlist** - Alumna Tara Kanj (BLA '19) shortlisted for the 2019 WLA Awards for her LDEM 241 Final Year Project (FYP). Her advisers were Maria Gabriela Trovato, Balsam Ariss, and Mona Khechen. https://worldlandscapearchitect.com/student-2019-wla-awards-shortlist/#.XZr_KFUza70
- **WLA Awards Shortlist** - Alumna Mariam Bazzi (BLA '17) shortlisted for the 2018 WLA Awards for her LDEM 241 FYP. Her advisers were Sandra Frem, Nayla Al-Akl, and Beata Dreksler.
Link: <https://worldlandscapearchitect.com/student-project-the-wetlines-mariam-k-bazzi/#.XZrnA1Uza72>
- **WLA Awards Shortlist** - LDEM 241 Final Year Project (FYP) in Fall 2016 titled “Tyre’s Interactive Waterfront” by alumna Loubna Sasso (BLA '17) made the shortlist for the WLA Award successfully to the top 11. Her advisers were Nayla Al Akl, Beata Dreksler and Sandra Frem. For further info, please refer to the link below:
<http://worldlandscapearchitect.com/announcing-the-shortlist-for-the-wla-awards/#.WNpuGFV97cs>
- **IBDAA Competition Win - An award-winning project by first year students in spring 2016**, Team “Designability”: Hussein Ghazi, Ghida Sbeity, Sara El Samman, and Sarine Semerjian, were awarded the first prize for the Arts and Humanities category at the International Biodiversity Day at AUB (IBDAA) Competition, where students come up with innovative ideas focusing on biodiversity and environmentalism. Mehran Madani and Hala Chmaitelly were the advisors of the team “Designability”. For more information please refer to the link:
http://www.aub.edu.lb/fafs/fafs_home/NewsEvents/Pages/2016IBDAA.aspx
- **UNIDO International Competition Shortlist** -Second year student Thea Maroun (BLA '19) was shortlisted in the UNIDO international competition for her work in the fall 2016 studio, LDEM 246: Natural Landscape Design. Her advisers were Dr. Mehran Madani along with Basma Ibrahim:
https://www.aub.edu.lb/fafs/fafs_home/NewsEvents/Pages/2016_LDEMStudentReceivesUNIDOHonorAward.aspx
- **Third Place, CIU HABITAT International Competition (Sponsored by HABITAT III)** - AUB student team members included MUPP/MUD students Israa Darwish and Diala Makki, LDEM alumna Nour Farhat (BLA '16), and fifth year architecture student Louai Kaakani. Team co-leaders Yaser Abunnasr (LDEM), Mona Fawaz (Planning) and Habib Debs (Practicing Architect/Urban Designer, URBI) for the project titled ‘Flood Pulse: From Threat to Opportunity: Capitalizing on Water Flows in Guasmo Sur’ responded to the competition theme "Challenges of Marginal Habitat in the Contemporary Southern Globe: Resilient Communities”. The third place responded to the need to resettle informal settlement dwellers in the city of Guasmo Sur (Ecuador), a vulnerable community living in mangrove swamps that experiences regular flooding.
- **Honorary mention at the “International Prize of University Projects in Schools of Architecture and Landscape” at the International Biennial of Landscape Barcelona, Spain.** - The Landscape Design and Ecosystem Management Department at the FAFS, AUB, led by Dr. Maria Gabriella Trovato, presented the results of two different activities carried on during the 2014-2015 academic year, under the topic of “Landscape in emergency”: LDEM 228, Sarafand Informal Settlement Landscape project, which aimed to facilitate community, children and youth interaction through the design of open spaces. Instructors Dr. Maria Gabriella Trovato, Balsam Ariss, Students Rim Hazimeh (BLA '16) and Joude Masbout (BLA '16). International Operative Landscape Workshop ‘e-scape. Refugee settlement’, May 2015, Al Tyliani Informal Settlement Landscape project, led by Dr. Maria Gabriella Trovato in collaboration with professors coming from University of Belgrade, AUC, Penn University, ALBA, University of Guelph, Università Mediterranea di Reggio Calabria and with the support of Center for Civic Engagement and

Community Service, AUB and International Federation of Landscape Architects (IFLA). In eight days on site, fifteen AUB students and ten international professors created public spaces on the open areas of the IS using a participatory approach.

More information is also provided in Addendum G, p. 40.

4. How do the curriculum and other program opportunities enable students to pursue academic interests consistent with institutional requirements and entry into the profession?

LDEM's goal is to educate future landscape architects who are not only competent professionally, but who are also well rounded and knowledgeable in other fields. The Program is designed to include a total of 36 elective credits (27 that fulfill General Education Requirements and 9 credits of FAFS electives). The department encourages students to pursue minors in areas of their interest across the university. The department is currently developing another undergraduate program related to Ecotourism. Students have minored in Fine Arts, Media Communication, Business Administration to name a few. The choice of a minor is not obligatory and students can choose their electives to gain a broader educational experience as well. Information from a wide range of subjects is drawn upon in the History and Theory Sequence and the overall curriculum.

A minimum of 15 credit hours completed in regular graded courses, and a minimum grade of 70 is required by the University for a Course to count toward the fulfillment of a minor. The Department also offers a variety of electives that are considered as FAFS Electives. Refer to (Volume 2, Appendix 15 (FAFS List of Elective Courses). Three courses (9 credits) are required to fulfill the FAFS elective requirements which are consistent with both the institutional and professional requirements. The department faculty are actively engaged in university centers such as the Nature Conservation Center (NCC) and the Center for Civic Engagement and Community Service (CCECS). Through these affiliations, students are involved in various projects focusing on native conservation, community service and civic engagement, and regional policy issues.

Also, the Landscape Architecture Students Society (LASS) at the AUB provides landscape architecture students with the opportunity to further their interactions within different cohorts and with alumni and professionals in the field, as well as work on various projects within and outside the campus. LASS also exposes students to related professional disciplines, facilitating their path to establish themselves later on in the working field.

C. Syllabi

1. How do syllabi include educational objectives, course content, and the criteria and methods that will be used to evaluate student performance?

The FAFS has a standard form for course syllabi. The BLA program abides by this form. The course syllabi list educational objectives in tabular form at the beginning of each course syllabus and related to program learning outcomes and methods of instruction and assessment. The course content is listed in both the syllabi and course description listed in the university catalogue. The same catalogue brief description is included in each syllabus for consistency. Criteria and methods of evaluation including list of assignments, projects and exams are also listed with evaluation criteria and grading system. Below is a typical syllabus outline:

- Course Title/Course Number & Credits
- Instructor Name/Room Number/Office Hours/Email
- Class Time/Location

- Prerequisites / Co-requisites
- Course/Catalog Description
- Course Objectives
- Course Learning Outcomes & General Overview
- Student Evaluation
- Text Books and References
- Required Textbook
- Additional Reading Material
- Course Policies
- Course Outline

The department follows the university grading system to evaluate student work which is fully explained in the evaluation criteria section included in the courses' syllabi. Please refer to Volume 4, Appendix 25 Appendix 21(Syllabi) of individual courses.

Effective Spring 2019/2020, course syllabi were adapted to virtual or blended learning.

2. How do syllabi identify the various levels of accomplishment students shall achieve to successfully complete the course and advance in the curriculum?

The levels of accomplishment are tied to the learning objectives for the course which are in turn mapped against the program learning outcomes. These include the skills and knowledge that are necessary to complete the course and advance in the curriculum. For example, in Landscape Horticulture (LDEM 211), and Plant Material I and II, (LDEM 219 and LDEM 221), students are required to learn the relationship between the natural and underlying physical landscape in order to be able to assess and interpret landscape suitability and sensitivity for plant design in subsequent courses in the studio sequence, such as Studio III: Landscape Planting Design (LDEM 222). These areas of knowledge are tested in the exams for the course. In addition to the final grade of the course, there is an added evaluation criterion for the design courses, which is stated in the University Catalogue: "The following design courses are part of the program requirements. There is a grade average requirement for: LDEM 202, LDEM 216, LDEM 222, LDEM 204, LDEM 228, LDEM 246, LDEM 241 and LDEM 242. A student should maintain a combined average of 70 in two consecutive design studios within a given year. Failure to achieve this will result in the student having to repeat the design studio in which s/he received the lowest grade."

Syllabi are expected to state requirements for successful completion and criteria that will determine a student's grade. Students must complete all required courses with a grade of 65 or higher. Student academic success is tracked by the FAFS Student Services Office. Students experiencing difficulties are required to meet with their advisor before being assisted by the aforementioned office.

D. Curriculum Evaluation

1. How does the program evaluate how effectively the curriculum is helping students achieve the program's learning objectives in a timely way at the course and curriculum levels?

As a professional degree program, the Department is committed to ensuring that our undergraduate students have the necessary technical skills and abilities to work successfully in an office and to become a registered landscape architect in regional and international organizations. The program evaluates the effectiveness of the curriculum first by identifying the skills and abilities that students are expected to possess in order to graduate and to enter the profession in the program learning objectives (PLOs) tables for the curriculum. Secondly, the achievement of the learning objectives is

evaluated during studio reviews, where faculty members are asked to attend and participate as reviewers or through grade. This feedback is reinforced through programmatic faculty meetings, student evaluations, and reviewers/alumni/professionals' feedback. Assessment of effectiveness of courses and curriculum is an ongoing process that includes all faculty members and students. It takes at least six forms as follows (a-f):

a. Bi-Weekly Faculty Meetings

The landscape architecture faculty regularly meets with the department chair to work on issues relative to the evaluation of courses, courses sequences, course contents, program philosophy and students concerns about the program. These meetings intend to ensure that the program and educational objectives are meeting the program mission in course content and learning objectives.

b. Twice a Year (At end of each semester) PLO/CLO Assessments

Each semester, the department assesses a selected number of program learning outcomes and prepares assessment reports on a semester and yearly basis. These reports are reviewed by the offices of the dean and the provost. This exercise follows a three-year assessment plan which is developed by the department to measure and evaluate the expected knowledge, skills and progress towards achieving the program's learning objectives and the suggested improvements in teaching and student performance at the course and curriculum levels. Refer to Appendix 21 (PLO/CLO Assessment Plan) and Appendix 22 (PLO-CLO Report of Fall 2018 & Spring 2019). In the semester based report, a list of PLOs is selected and evaluated throughout core courses and cover the four years. Both direct and indirect evaluations are adopted against set targets to ensure specific set of knowledge and skills and timely student progress into the program. The information generated by the assessment exercise is circulated to faculty and measures to address shortcomings are discussed and agreed upon in department meetings and/or retreats.

c. Student Evaluation/Course Evaluations (ICE)

During course evaluations, which are conducted towards the end of the course, students evaluate their learning outcomes through the university's ICE (Instructor and Course Evaluation) system. This evaluation includes questionnaires designed to evaluate the instructor, the course, and student development/learning in the course. They contain questions and prompts catered to the Department and the type of course given (Studio, Lab, or Lecture) and are answered anonymously. Evaluations are given to the individual faculty and are reviewed by the department chair. Individual faculty have worked to integrate changes to their courses as a result of the course evaluations, improving the curriculum and mode of course delivery.

d. Program Meetings with Students

It is departmental policy for every program director to conduct an open meeting with all students in their program every semester. These meetings serve to identify issues that are of concern to students in specific courses or with the curriculum in general. They also serve to let us know what aspects of the program are going well and to keep communication open between faculty and students.

e. Departmental Retreats

The landscape architecture faculty conducts day-long meetings once a year to focus on program evaluation and curriculum review. The faculty generates the agenda for these meetings chaired by the chairperson/program director. These opportunities for open and honest communication between faculty members are important to the long-term health and growth of the program and department.

f. Departmental Studio Reviews

These public presentations provide the faculty with a better level of understanding of the specific strengths and limitations of all studios thus enabling the Department address any inferred revisions more effectively. Instructors also organize post-studio evaluations with students in the class, meeting immediately following the presentations. This allows for an honest and open discussion that is directly related to the studio review.

2. How does the program demonstrate and document ways of:

a. Assessing students' achievements of course and program objectives in the length of time to graduation stated by the program?

Student assessment of course and program objectives and the length of time for graduation is monitored and documented in several ways.

- *Monitoring progress towards graduation and assessment upon graduation:* The Student office at FAFS monitors the progress of all FAFS students towards their graduation. The stated period for graduation for the BLA program is 4 years with an allowable additional year for students with special needs or incomplete or failed courses. For example, our data maintained by the student office for the class entering during the AY 2015-2016, shows a 92% retention from the first to the final year graduated in 2019. The remaining students either changed major or failed the year. Students are not allowed to matriculate from one year to another unless they demonstrate success in all their courses as per university requirements. In addition, and specifically for the BLA program, students are required to attain an average of 70 percent in every two consecutive studios. The exit survey conducted with the senior class every year includes questions about the academic experience and overall achievement during the academic year towards the program's mission. Some recent results from 2019 for the graduating BLA class (21 students) show 85.7% satisfaction with the overall academic experience. The following table provides a breakdown of these replies.

How satisfied are you with your overall academic experience?		
	Count	Percentage
Very Satisfied	4	19.05%
Satisfied	14	66.67%
Dissatisfied	3	14.29%
Very Dissatisfied	0	0.00%

Table 13: Exit survey question of graduating seniors during academic year of 2018-2019

- *Student achievement of course and program objectives during the four year period of studies:* Students are assessed at the end of each semester towards the extent that they have met course and program learning objectives (PLO/CLO). This is based on a four year plan that is required by the university where all courses are assessed during each cycle. The assessment is conducted through direct and indirect tools allowing more robust results. The results are compiled in yearly reports. In addition, design studio presentations (interim and final juries) allow an overall assessment of each student during each semester providing a clear idea of the progress of students towards achieving academic objectives. In addition, our personal knowledge of each

student (due to the small cohort of students) allows faculty members to monitor progress and give advice when necessary. Usually, the course and program learning objectives are matched and listed at the beginning of each syllabus; in turn, the PLO/CLOs are derived from the mission and objectives of the program.

b. Reviewing and improving the effectiveness of instructional methods in curriculum delivery?

Instructional methods are reviewed from several perspectives. Student course evaluations (ICE scores) have specific questions related to effectiveness of teaching methods. These provide both qualitative and quantitative feedback on instructional style and methods. In addition, individual faculty have worked with the University's Center for Teaching and Learning (CTL) and IT Academic department which offers classes, workshops, and seminars on teaching, as well as reviews and evaluates teaching methods within a particular class.

The achievements of course and program objectives for the studio courses are documented through the mid and end of semester presentations which are attended by both faculty and guest critics. Faculty attendance and evaluation of the outcomes of the studio and achievement of course learning objectives are extremely useful for both the instructor and faculty as a whole in determining the course of action for improvements or changes to the particular course and curriculum. In addition, these reviews also allow us to see how a particular cohort or class of students is progressing towards graduation. For the other courses in the curriculum, we rely on our faculty meetings, retreats, and program meetings to discuss achievements. Since many of our courses are prerequisites for other courses in the sequence, it allows faculty to evaluate if students have achieved the necessary competency to advance in higher-level courses. At a more formal level, assessment of the program and course learning objectives (PLO/CLO) is carried out every semester based on a four year plan. After each assessment, a report is prepared by the department, highlighting successes and deficiencies. These in turn are compiled into yearly reports. In each report, clear steps are defined to either continue with the successful achievements or address emerging problems. The follow up of these steps is monitored by the department and the University Assessment Unit to ensure achievement of these remedial steps. The PLO/CLO assessments allow for refinements in the curriculum allowing improved and enhanced delivery of academic material. For example, during Fall of AY 2016/2017, the faculty voted to replace the 'Geomorphology' course (GEOL 210) which was given in the Geology Department. The assessments showed that it did not meet the PLO/CLOs of the program since it was not designed for BLA students. As such, the course was replaced by a new one titled 'Landscape and Geomorphology' (LDEM 214) designed and offered within the department.

At the departmental level, as a professional degree program, the department is committed to ensuring that our undergraduate students have the necessary technical skills and abilities to work successfully in an office and to become registered landscape architects (in Lebanon and the USA). The program evaluates the effectiveness of the curriculum first by identifying the skills and abilities that students are expected to possess in order to graduate and to enter the profession in the learning objectives tables for the curriculum. In addition, the achievement of the learning objectives is evaluated during studio reviews, where faculty are asked to comment in a written survey about whether learning objectives were met. This feedback and evaluation is reinforced through programmatic faculty meetings, student evaluations, and alumni feedback.

Other methods of review are included and identified in section D.1 above.

c. Maintaining currency with evolving technologies, methodologies, theories and values of the profession?

The department faculty are expected to keep updated within their respective fields through regular engagement with the academic and professional communities. This is achieved through publication of peer reviewed articles in refereed journals and books, participation in regional and international conferences, and engagement in professional practice through local, regional, and international consultancies.

Faculty are also encouraged to engage in interdisciplinary activities especially those related to appropriate technologies of environmental conservation, community well-being and development, and local, regional, and international policy.

Regional and international collaborations are actively sought with peer academic institutions. Partnerships with public and private institutions that are direct or indirect beneficiaries of the profession are also actively pursued.

Furthermore, some faculty members are/were international members in organizations related to the profession such as the ASLA (Dr. Yaser Abunnasr, Ms. Nayla Al Akl, and Dr. Mehran Madani), IFLA (Ms. Nayla Al Akl, Dr. Beata Dreksler, and Dr. Maria Gabriella Trovato), APAC (Dr. Beata Dreksler), ECLAS (Dr. Maria Gabriella Trovato), OALA (Dr. Mehran Madani), CSLA (Dr. Mehran Madani), AAH (Dr. Mehran Madani), and CIVILSCAPE's (Dr. Maria Gabriella Trovato). In addition, several faculty members have attended and/or presented in society based conferences such as the ASLA (Ms. Nayla Al Akl 2013, Dr. Yaser Abunnasr, 2007) IFLA (Dr. Beata Dreksler 2011 and 2012, Dr. Maria Gabriella Trovato 2011-2018, Dr. Yaser Abunnasr 2011) and CIVILSCAPE's (Dr. Maria Gabriella Trovato 2017-2018) conferences and meetings.

The Department is also now a member of the European Council for Landscape Architecture Schools (ECLAS) as of 2019.

At the student learning level, the following instructional procedures are incorporated into studios and demonstrate why studios are central to the BLA program's educational objectives:

- **Physical Modelling:** Students are encouraged to learn the principles of designing spaces through physical models. This helps them understand the spatial implications of decision-making in the process of design.
- **Verbal Presentations:** Students learn to present verbally their designs as part of their studio work. They practice throughout the semester during informal reviews. In their final presentations, they present their projects in front of the LDEM faculty, faculty from other departments, guest critics (including professionals in the field as well as clients), and LDEM students from other studios. Faculty solicit feedback from LDEM students and alumni, as well as the private sector, to identify weaknesses and gaps mainly at the internship and final jury level. These drawbacks are further reviewed during departmental meetings and retreats.
- **Design Problems Rooted in Reality:** Many of our studios engage the students in design problems with real world problems.
- **Case-Study based learning:** Studios require strong case study component at the outset, which intend to expose the students to state of the art approaches, theory and design criteria.
- **Digital Literacy with software:** LDEM encourage that all entering students own a laptop. This is to start using digital technology and learn digital presentation skills from the beginning of the program. For students who do not have a laptop, the LDEM has computer labs that are equipped with the required software such as AutoCAD, ArcGIS, Adobe CC, SketchUp and others.
- **Drawing on multiple course learnings:** In the Studio courses, students are encouraged to implement the science techniques learnt in science courses, and vice versa.

- **Technological Innovation and Contemporality:** BLA aims to incorporate new technologies to broaden and deepen the scope of research, encouraging students to stay up-to-date with the newest techniques and methods of implementation and practice.

Example: LDEM 228 in Spring 2017 benefitted an agreement between AUB and ESRI, where students used mobile application interface with GIS to conduct user survey for their projects.

Further, faculty members research areas of creative works, allowing them to explore new technologies, methods, and theories. This is done through extensive literature reviews, planning studies, and applications to practice.

Although LDEM is working on initiating a lecture series, students and faculty currently participate and attend in the City Debates Lecture Series held by the Architecture Department. An additional evidence of the currency of the program is reflected by the career marketability of graduates of the program in Lebanon and the MENA Region.

3. How do students participate in evaluation of the program, courses, and curriculum?

Students evaluate each course and its learning objectives at the end of every course. The indirect assessment executed for the annual PLO/CLO report is compared with the instructor's direct assessment to identify any gaps that require improvement. The annual PLO/CLO report is available in Appendix 22 (PLO-CLO Report Fall 2018 & Spring 2019). In addition, the ICE evaluation for individual courses provides the basis for targeted review of said courses. These evaluations include a set of standard questions for studio, science, and theory courses. Students are given the opportunity to give anonymous confidential feedback and subjective comments on individual courses and faculty member performance.

In the PLO/CLO Assessment, students from all the years participate in an indirect evaluation that assesses the students' perception of their own individual level regarding a specified skill and/or knowledge. Students are also required to reflect on the program as a whole after their internship experience using the "Student Evaluation of Internship Experience" where they present their perception of strengths, weaknesses, and gaps of the program as compared to their short professional experience. Refer to Volume 3, Appendices 14 (Student Handbook) and Appendix 18 (Internship Evaluation Forms).

Current students also participate in surveys to assess the general quality of their learning experience through which they answer questions about their overall academic experience. These surveys are periodic and administered on need basis. Please Refer to Volume 3, Appendix 24 (Students Survey 2019).

Graduating students are given the opportunity to comment on their overall experience at the program through the Exit Survey. This provides valuable information for feedback on the entirety of the program. Please Refer to Volume 3, Appendix 23 (Senior Surveys 2012-2019).

E. Augmentation of Formal Educational Experience

1. How does the program provide opportunities for students to participate in co-curricular activities, internships, off campus studies, research assistantships, or practicum experiences?

There are a variety of opportunities that students are involved in which are considered supplemental and which strengthen the educational experience of students. **Updated information reflecting the current situation can be found in Addendum G, p. 21-27.**

Work Study Experience

As part of its financial aid program, the University provides full-time undergraduate and graduate students the opportunity to participate in the Work Study Program. Students contribute toward their educational expenses while developing job skills in various campus offices and centers. Students at LDEM are involved in multi-extracurricular activities enrolling in the Work Study Program which engages them in different activities including production and maintenance of plants, participation in garden show events, assisting in research, and administrative tasks.

Community Service Learning, Field Trips and AREC Visits

The program has stressed on community service projects as studio case studies and projects mainly in the Final Year Project. Recently, the LDEM department has developed a Regional Community Service Elective Course with the main objective of community service design approach which provides an opportunity to promote the students' civic and social obligations and interaction as well as the involvement of students in different natural/ecological and cultural settings. This course includes field visits and a three-week accommodation at the site of design intervention and implementation.

In addition, the hands-on approach of the BLA program is reflected in the various field trips required within the different BLA courses including landscape appreciation, landscape horticulture, landscape ecology, soils, water, and even studio design classes. These field trips aim to augment the classroom experience with immersion in the landscape and all its related layers and components.

The Advancing Research Enabling Communities Center (AREC) is located in the main agricultural valley in Lebanon, Bekaa (85km from Beirut) and provides the program with a living laboratory to elevate its teaching. Visits to AREC provide a hands-on teaching experience for one to two weeks. It is an immersive experience within the center and with its surrounding communities. Courses such as Landscape Appreciation, Landscape Management, Water and Site Engineering utilize this center during summers.

Internships

This is considered a professional opportunity that the students pursue before their graduation, offering them the chance to participate in the landscape architecture practice. This includes practicum and hands on experience in public entities, private firms, professional offices, planning agencies, and NGO's. The LDEM department is currently formalizing a connective network with such agencies and organizations to further aid students in their internship by which the department informs students about requests for interns from those professional bodies. This is solidified by the department's inclusion of a 2 credit internship course, with these credits calculated towards the attainment of 144 total credits for program completion and graduation. In the past four years, BLA students have participated in international and local internships. Please refer to Volume 3, Appendix 20 (List of Internship Firms).

Exchange Programs and Study Abroad

This includes off-campus and international opportunities which introduce students to different cultural, natural, and social venues in addition to different history, planning, contemporary, and design approaches. The international exchange program is established between AUB and international universities via the Office of International Programs (OIP) which was founded in 2010. AUB's exchange partners include universities from North America, Europe, and Africa.

Outside of these partner entities, students at AUB also have the option of studying at any accredited university in the world for one semester, assuming that they can do coursework in the language of instruction and that they can find courses which AUB faculty will approve as counting towards their degree requirements or electives. Such programs include: Berkeley Summer Sessions, Concordia University (Canada) Summer Sessions, London School of Economics Summer, McGill University

Summer Sessions, Salzburg Academy on Media and Global Change, and the “Washington Semester” Study and Internship program (Fall or Summer semesters).

Faculty Initiated Workshops and Activities

Students participate in various extracurricular activities, workshops, and competitions throughout their time in the BLA program. Examples from the past 6 years include:

2019

- LDEM students travelled with Assistant Professor Nayla Al-Akl to Ajloun, Jordan (June 21-29), to participate in an intensive program to develop projects for sustainable tourism in Jordan. **Under the framework of the Middle East Social Innovation Lab (MESIL)**, the interdisciplinary and intercultural exchange considered ways to sustainably safeguard unique cultural and natural landscapes.
- Several senior students participate in the ‘**Landscape Planning and Nature Conservation of the Cultural Landscape of Slavonic Workshop**’ in Prague, Czech Republic with Dr. Yaser Abunnasr.
- Two students accompanied Dr. Yaser Abunnasr on a workshop on **integrated energy planning** and the use of the C-maps in Amman, Jordan.

2018

- The graduating class participated in the ‘**Urban Regeneration in the City of Tripoli**’ workshop hosted by Azm University in Tripoli, Lebanon, looking at the historic city’s old Souks and cultural landmarks.

2016

- **Honorary Mention at the “International Prize of University Projects in Schools of Architecture and Landscape”, International Biennial of Landscape Barcelona, Spain.** The Landscape Design and Ecosystem Management Department at the FAFS, AUB, led by Dr. Maria Gabriella Trovato, presented the results of two different activities carried on during the 2014-2015 academic year, under the topic of “Landscape in emergency”.

2015

- **UNESCO Atelier Terrain in Montreal, Canada:** Three senior students, accompanied by Julie Weltzien, participated in an international competition, the annual WAT (Workshop Atelier/Terrain) of the UNESCO Chair in Landscape and Environmental Design of the University of Montreal (CUPEUM) UNESCO Atelier Terrain in Montreal, Canada.
- **International Operative Landscape Workshop ‘e-scape. Refugee settlement’, May 2015,** Al Tyliani Informal Settlement Landscape project, led by Dr. Maria Gabriella Trovato in collaboration with professors coming from University of Belgrade, AUC, Penn University, ALBA, University of Guelph, Universita’ Mediterranea di Reggio Calabria and with the support of Center for Civic Engagement and Community Service, AUB and International Federation of Landscape Architects (IFLA). In eight days on site fifteen AUB students and ten international professors created public spaces on the open areas of the IS using a participatory approach.

2014

- **Venice Biennale Workshop 2014:** An interdisciplinary teaching one week workshop lead by Yaser Abunnasr was conducted at the Swiss Pavilion that brings together landscape

architects and architects (14 students and 4 instructors) to address urban sprawl on the adjacent mountain slopes to Greater Beirut. The process was very exploratory where daily morning meetings between instructors and students were carried to inform daily work. Daily objectives were preset but the actual activities were open ended. A daily diary to record the process was recorded with specific attention to modes of integration and differing ways of thinking. Invented Landscapes.

- **Distance Learning, Simultaneous Overseas Teaching:** Exploratory collaboration between AUB/LDEM (Yaser Abunnasr) and UMASS Amherst/LARP (Dr. Jack Ahern). Two classes, two universities, and 9,000 km apart, face to face via internet: the aim was to have full classroom capability (visual and audio) through live discussions and learning teaching. Students from both universities were teamed for joint projects to conduct research, develop a paper, power point and poster presentations over a full Spring semester in 2014.

2013

- **LandWorks Seminar:** The department organized a seminar by landscape architects, Stefan Tischer and Annacaterina Piras, on 'LandWorks', the operative workshop for the international festival of ephemeral artistic installations, on April 18, 2013. The seminar presented LandWorks Sardinia 2011 and 2012 which resulted in site specific experimentation with artistic installations valorizing particularly sensitive places in western Sardinia and which our students were part of.
- **Landscape Dialogues 2013:** The department organized in collaboration with the CCECS, 'Landscape Dialogues 2013' featuring the outcome of an interdisciplinary collaboration between AUB students from the department of landscape design and ecosystem management (LDEM IV), and AUC (American University in Cairo) students from the department of Rhetoric and Composition on April 8, 2013. The student teams used the final year LDEM students' projects as the basis for their collaboration. They conducted joint field visits to project sites, exchanged ideas, debated issues, and learned to work in a cross-disciplinary environment. The student project themes are: Landscape Heritage, Militarized Landscapes, Right to Landscape, Landscape and Ecosystem Health, and Landscape and Development. The event was organized by final year design studio teachers, R. Shibli, N. Akl and M.G. Trovato, to allow students to showcase their collaborations and their joint visions for change.
- **Jounieh by Bike:** Students promoted Xeriscaping and the use of native plants in landscape design during the event. They gave out bouquets of native plants that can be found in different Lebanese landscapes to bikers and passersby during the event.

In addition to exposing students to workshop opportunities, the department engages students with outreach opportunities encouraging sustainability and inter-disciplinarity, the service agenda of the Department includes providing professional consultancies as regional/local experts and community services in the following:

- Planning and implementation of community-based initiative in landscape and livelihood
- Design and construction of school and learning environments
- Design and implementation of public parks
- Post conflict assessments
- Assessments and strategies for bio-diversity conservation and the management of protected areas
- Wet utility infrastructure designs for public and private sector

Through these Outreach initiatives with students, children, seniors, and municipalities, LDEM students engage in first-hand activities that tie landscape to the community.

2. How does the program identify the objectives and evaluate the effectiveness of these opportunities?

The objectives behind off-campus activities are to expand students' professional experience and skills beyond their classroom learning. We evaluate and review these opportunities with the larger curriculum objectives in mind. The effectiveness of these opportunities is evaluated through our review of students' reports and work as well as informal meetings between students and their advisors after the experience.

The Program assesses these opportunities in several ways. Work-study activities are assessed by the supervising faculty member through end of semester report time allocated and productivity and work behavior are discussed during faculty student meeting. Community Service Learning, field trips, and AREC visits are assessed through the outputs of these activities. If students are taking them for credit, reports and presentations are the primary means of assessment. After field trips and/or AREC visits, students are required to submit reports to demonstrate their understanding of the activity objectives. These outputs are graded. The internship evaluation is based on three components: reports, oral presentation and evaluation forms.

Two evaluation reports are required by the students:

- Report 1: "Mid-Evaluation Report or Mid-Evaluation Poster", a regularly activity report/poster reflecting on work done, relating to the learning experience, learning outcomes and foreseeing a work plan for the second part of the internship.
- Report 2: "Final Report", includes text and graphics explaining the internship experience, firm introduction, work duties, interaction with supervisor, team and client, links to classroom experience, best experience/areas of improvement and next steps. The report includes documentation of main work conducted and project and task description.

Class conference call: is a Video-based conference-call-style meeting, typically done through GoToMeeting/Skype that is given during the middle of the summer period to allow students in local and international locations to have face to face discussions, present their work so far, and compare/evaluate their different experiences.

Class Oral Presentation: is a 15 to 20minutes class presentation that highlights the internship experience. The power point presentation reflects the student's learning experience and all information and reflection from the final report. The presentation includes photographic documentation of all points showing the students' work, experience, and the main activities the student took part in. The presentation is given to all LDEM students in order to share knowledge, expose students early on to the internship culture, experience, and challenges, and allow them the time and information to plan ahead for their own future professional experience.

Evaluation Forms: Two evaluation forms are required for the internship.

Evaluation Form 1: Student Evaluation by Employer which is provided to the employer upon starting the internship. The form is considered as confidential and is sealed and signed by the firm supervisor. It includes the employer's evaluation of the students on the following: dependability, work performance, initiative, work attitude, technical knowledge and skills, ability to contribute to the design, punctuality and attendance, ability to get along with others, progress and ability to learn, professionalism, and an overall rating of the student.

Evaluation form 2: Internship Evaluation by Student. It includes the students' evaluation on the following: their own preparedness for the internship, their exposure to opportunity to learn and practice skills, if they believe they gained new knowledge related to the field and adequate guidance

from the supervisor/employer, if they felt they were exposed to cooperation with fellow workers, reaching learning outcomes, if they recommend the same internship to other students, their overall rating of their internship experience. They are also required to list the job and duties that they have performed by order of importance, share three principals that they learned in the classroom and that they have applied in their work experience, and identify a certain area of the field that they feel they need more training in. All of the above qualitative methods of evaluation are reflected in the quantitative assessment which is based on the grade that the student attains in the internship.

Evaluation of workshops organized by faculty members are evaluated and graded based on set outputs (reports, presentations, and design drawings) if taken for credit. If activity is not taken for credit, reports and presentations are informally assessed, with student reflections on their experiences discussed in groups.

3. Do students report on these experiences to their peers? If so, how?

Students involved in Study Abroad programs and courses present their experiences and projects to their fellow students. For-credit internships are followed by brief reports and presentations that are shared with their peers. In addition, outside the scope of the internship course requirements, some students have conducted department and class presentations about their internship work and the process that lead to pursuing and attaining certain internships. Students voluntarily present the latter for the benefit of the more junior cohort to help students who are applying for future internships to prepare and have a smooth and successful internship-seeking process and a productive internship experience, as well as share these interns' insights with the larger student body. Since Program students have a strong network of relationships with their classmates, much of the reporting on off-campus activities is also spread by word of mouth. The Landscape Architecture Student Society also provides a venue for sharing these experiences through peer presentations and through their Facebook page.

F. Coursework: (Bachelor's Level, if responding to Standard 3a or 3c, above)

1. Do students take courses in the humanities, natural sciences, social sciences or other disciplines?

General Education and Departmental Electives are part of the BLA program curriculum as AUB encourages liberal art education, which includes humanities, social sciences, and natural sciences. Students are also encouraged to pursue a Minor in any field of their interest; such minors are offered by various departments including business, sciences, humanities, and social science.

This approach enables students to acquire the analytical skills and habits of life-long learning that they will need to compete successfully in the twenty-first century.

General Education courses (GE) distribution requirements are intended to expose students to a range of intellectual experiences during their time at AUB. Students are given the opportunity to make choices and to question and test what they believe are their career goals and their intellectual interests. The GE courses comprise 36 credits of the total 144 credits required by the BLA. These are distributed as follows:

- Humanities: 6 credits
- Social Sciences: 6 credits
- Natural Sciences: 3 credits
- Arabic: 3 credits in Arabic (except those formally exempted who have to replace it with any Humanities course)
- Quantitative Thought: 3 credits

- FAFS electives: 9 credits.
- English Communication Skills: 6 credits

G. Areas of Interest: (Bachelor's Level, if responding to Standard 3a or 3c, above)

1. How does the program provide opportunities for students to pursue independent projects, focused electives, optional studios, certificates, minors, etc.?

All students can propose an independent study or practicum for academic credit. They need to find a faculty sponsor to work with to supervise the work. Students can also find internship where they are working in the field either for academic credit or for a stipend. If an undergraduate has an interest in taking a graduate studio, that is possible to arrange.

Students are encouraged to pursue a minor, which is offered by various departments in the university. A minimum of 15 credit hours completed in regular graded courses, and a minimum grade of 70 is required by the University for a Course to count toward the fulfillment of a minor. Students may consider Fine Arts, Archeology, Business, and Environmental Policy ... etc.

In addition, the LDEM department offers elective courses, for example the list of courses below is currently offered to students on a regular basis. Please Refer to Volume 2, Appendix 15 (FAFS List of Elective Courses)

- Spatial Structure and Movement (LDEM 261)
- Healing Gardens: Theoretical Perspectives and Applications (LDEM 262)
- Interior Landscaping (LDEM 264)
- Ornamental Plants for Dry Landscapes (LDEM 270)
- Green Infrastructure for Resilient Landscapes and Cities (LDEM 302), graduate and senior undergraduate standing

The opportunity of studying abroad for a semester also allows the students to engage in different class and studio atmospheres, in addition to being exposed to various natural, ecological, environmental, social, and cultural contexts, and having the adequate teaching to be able to deal with them.

The Final Year Project, or the Capstone Project, is considered the main opportunity for students to pursue an independent project in the field of landscape architecture, with emphasis on the individual research interest and landscape element that the student is interested in.

In their final projects, students demonstrate their acquired research and design skills and knowledge, as well as their implementation of their learnings in an autonomous-yet-guided manner. They are expected to develop their design, produce presentation drawings, and defend their ideas orally at a professional level. Students are assessed by department faculty.

2. How does student work incorporate academic experiences reflecting a variety of pursuits beyond the basic curriculum?

The Department endeavors to foster an environment where faculty first lead by example with funded research projects and, for a few BLA students, provide in-house opportunities for students to work with faculty. More importantly, the Department provides an open environment where students are aware that faculty are open to helping them search out their own opportunities, whether in their coursework, internships, or study abroad. Students know that the support is there for them to make things happen. This has resulted in students working with faculty on research, entering competitions, and working on independent studies and practice.

Student work in-studio often goes beyond the basic curriculum to include community engagement and service learning. The capstone project is designed with its two courses (LDEM 241 and LDEM 242) to encourage students to address issues beyond the basic curriculum requirements. The capstone project is seen as a threshold towards the profession and thus students are directed towards subjects and issues that are current and require integrating skills including and beyond what is learned in the

curriculum. These topics may include current issues such as coastal land grabbing in Beirut, ecological loss due to urbanization, archaeological sites, and refugee-centered topics due to the recent crisis in Syria. These are intended to be integrative and immersive experiences for students where they are expected to go beyond their comfort zone. This is further supported by the diversity of the faculty members' backgrounds, which support the interdisciplinary experience, leading to tangential teaching and introduction of substantial academic scholars. In addition, the fact that many faculty are engaged in the practice of the profession makes it easier to connect between classroom, field, and case studies and thus making the experience and learning more explicit.

H. Research/Scholarly Methods: (Master's Level, if responding to Standard 3b or 3c, above)
Not Applicable



STUDENT AND PROGRAM OUTCOMES 4

4. STUDENT AND PROGRAM OUTCOMES

STANDARD 4: The program shall prepare students to pursue careers in landscape architecture.

INTENT: Students should be prepared – through educational programs, advising, and other academic and professional opportunities – to pursue a career in landscape architecture upon graduation. Students should have demonstrated knowledge and skills in creative problem solving, critical thinking, communications, design, and organization to allow them to enter the profession of landscape architecture.

A. Student Learning Outcomes

Upon completion of the program, students are qualified to pursue a career in landscape architecture.

1. Does student work demonstrate the competency required for entry-level positions in the profession of landscape architecture?

Student work does demonstrate the necessary competency required for entry-level positions in the profession through the gradual build-up of knowledge and skills, as evidenced through studio design projects and related course sequences.

The curriculum is designed for this gradual build-up of knowledge across the four years with the design sequence at the center and other courses contributing to it. This rigorous sequence graduates our students with a solid understanding and competency in technical skills, creative thinking, artistic expression, oral and visual presentations, and research/writing skills. The studio sequence is designed to develop basic design thinking and application skills at the site level (theoretical, garden design). Second year studios focus on cultural and sustainable landscapes, with more complex design thinking processes and design analytical tools. In the third year, scale becomes a focus, with two studios, one focused on urban landscapes and the other on natural landscapes, bringing in conservation and urban design tools as design frameworks. The capstone project sequence in the fourth year, provides the opportunity for students to showcase and implement independent and critical thinking through researching and developing their own design. The outcome of the capstone project is an advanced preliminary design equivalent where students demonstrate competency at critical design thinking, researching their issue, developing design strategies, and developing advanced plans and sections with planting, hardscape and lighting layouts presented orally, visually and in writing. Please refer to Volume 6, Appendix 27 (Students Work – LDEM 242 Reports).

In parallel, the other course sequences also follow the gradual sequence of knowledge build-up, for example, the three-course site engineering sequence (LDEM 247, LDEM 248 and LDEM 249) begin with basic site grading, drainage, road alignment, etc. The second course focuses on hard/construction materials and the third on the development of full design development drawings. The same follows with the two-course sequence of plant material (LDEM 219 and LDEM 221), landscape architecture history and theory (LDEM 207, LDEM 208 and LDEM 260), soils (LDEM 214 and LDEM 217), GIS and AutoCAD.

Throughout their four years of study, students are encouraged to infuse their learnings into their design projects, this culminates in their Capstone Projects being a holistic amalgamation of learnings, showcasing their competency at multi-faceted approaches and multidimensional strategies of design,

and thus proving their eligibility to enter the job market with appropriate skills of research, analysis, design, and graphic representation. The competencies attained at the design, scientific, technical and professional levels provide a good base of competencies for students for entry-level jobs.

2. How does the program assess student work and how it demonstrates students are competent to obtain entry-level positions in the profession?

The program assesses student work in general based on the type of courses. For design studios, presentation and final studio juries are the primary mode of assessment. Usually, criteria of assessment are developed. Students are assessed based on their design approach, depth of analysis and visual presentation. Feedback is usually given to the student either during presentations orally or in written form using rubrics or comment sheets. Other courses are usually assessed based on exams, class projects, reports and papers.

There are several milestones where students are assessed for their competency for entry-level positions.

- Continuous assessment across years as students' advancement is carried out, to ensure that upon arrival to final year, they are capable of carrying the task of the capstone project.
- **Studio Portfolios:** Studio Portfolios are required from each student at the end of every design studio taken. These portfolios are a means for them to demonstrate their learning outcomes, skills in organizing information, written skills, graphic skills, and lessons learnt. They are therefore pushed to think critically about their own work and how to represent it in a different manner, in preparation for their professional portfolios after graduation.
- **Capstone Project:** The capstone project provides a clear indication of how ready students are. It is required from them to bring their learnings and the knowledge amassed from their first 3 years in the program into the development of the project. The project is intended to demonstrate their acquired professional competency and their grasp of the taught material, values, and techniques throughout their previous courses, as well as to display their individual interests and foci within the profession. Jurors from outside the department (academic and professionals) and from the department are invited to assess the work and provide feedback based on a rubric composed by professors for every individual course.
- **Internship Reports:** Professional Practice and summer training reports are yet another major indicator of students' level of readiness for entry-level positions. In addition to the reports prepared and presented by the students themselves, where they critically assess their experiences and learnings during the professional internship of the summer of the third year, employer feedback is also obtained.
- **Advising:** One-to-one advising is carried out to ensure that students have attained certain required levels of competency. Students are always encouraged to talk to their academic advisers and their professors in any regards relating to their professional readiness, and with any concerns they may have about entering the workforce. This allows advisers to have insight into the students' perspective on the matter.

3. How do students demonstrate their achievement of the program's learning objectives, including critical and creative thinking and their ability to understand, apply and communicate the subject matter of the professional curriculum as evidenced through project definition, problem identification, information collection, analysis, synthesis, conceptualization and implementation?

Students demonstrate their abilities to apply the subject matter of the professional curriculum and to communicate the results of their efforts in the design process, first through understanding their learning outcomes, and second through multi-model presentation of their work. Students are made

aware of the course and program learning outcomes through each course syllabus. Course syllabi include a section in the beginning that presents the specific course learning outcomes (CLOs) and how they relate to the program learning outcomes (PLOs). Teaching tools and methods, and modes of assessment are also included in the same tables. The teaching tools/methods are usually the assignments/projects that are carried out in the course. Please refer to Volume 4, Appendix 25 (Course Syllabi).

During the first session of the course, these CLOs/PLOs are discussed in class, demonstrating what students will learn throughout the course and the related teaching modes. When new assignments are started during the course, the CLOs/PLOs are also discussed, making explicit expectations. Students demonstrate their capability to comprehend subject matter and learning outcomes through project/assignment presentations, and one-on-one discussions and submitted material. Regardless of the mode of delivery, students are expected to demonstrate their abilities through a seamless narrative of their design.

The students therefore have a reference to go back to whenever they want to ensure their application of the CLOs. Instructors also guide the students to apply these strategies and ensure their achievement of the learning objectives through desk critiques and interim pin-ups that allow both the student and the instructor to gauge the students' progress and whether they are on the right track to achieving the course's goals.

Design studio courses are either based on three weekly sessions, 4 hours each (6 credits) or two weekly sessions, 4 hours each (4 credits), where students meet with their instructors in form of desk-critiques, informal or formal pin-ups. Students will be given grades for the assignments/ milestones of the studio outcomes.

During formal pin-ups/presentations, faculty, students from other studios/years, graduates and practitioners are invited to engage students in discussion and feedback. Students are expected to introduce the audience to their projects by guiding them through the design process, from the project definition to the data collection, then the analysis and synthesis they did. They cover their interpretation of the user's needs and program requirements, moving to their suggested solution. They explain how responsive it is to the problem they have identified and how they have taken into consideration the social, environmental and cultural aspects of the context.

These studios provide the backbone of our curriculum, enabling students to develop a working knowledge of the information, processes and techniques used in the landscape architecture and planning professions; develop an understanding of the history of peoples' relationships to the land; and of the fundamental theories of planning and design intervention; develop an understanding of the physical, cultural and biotic forces that influence design; and develop the capacity to communicate in a variety of media, verbal, visual and written, with clients, the public, and professionals within Landscape Architecture and related fields. For instance, students explore spatial design at a range of scales, exploring private and public landscapes, by working on projects in our region that present a range of contemporary challenges. They apply sustainable practices to design and planning projects in studio. More broadly, the real-world problems presented within the studio context allow students to apply theory and experience professional and ethical issues first hand.

All other non-studio courses are assessed based on tests, course projects and other activities and assignments pertinent to each course. Please refer to Volume 4, Appendix 25 (Course Syllabi) for all courses syllabi.

4. How does the program assess the preparation of students in the above areas?

Please see section A.3 and A.2 above.

B. Student Advising

The program provides students with effective advising and mentoring throughout their educational careers. **This section has been updated in Addendum G, p. 8 and p. 30-31.**

1. How does the student academic advising and career mentoring program function?

The BLA program is organized so that most students in each class take the same required courses in a given sequence as they move through their undergraduate careers. In order to ensure that all students are well acquainted with the university policies on issues such as registration, advising and other academic issues related to students' life on campus, the following advising related activities are carried out:

All new students are invited and encouraged to attend the New Student Orientation Program (NSOP) when they first join the University. This program provides all students with the necessary information and services to ensure a smooth and successful transition to AUB. This orientation includes presentations about the campus, available academic and students' services, their obligations and expectations. Students also attend a Faculty (college) Orientation Session where the Dean of the FAFS gives a presentation about the Faculty and all services and facilities. The Chairperson of the LDEM department or a faculty representative of the BLA program then introduces the program, and finally, students are assigned individual academic advisors.

Students are supported within the faculty (college) by the FAFS Students Services Office (SSO). This service is provided by the Faculty to help, support and resolve any issues related to registration, petitions, course overloads, probation, academic problems, student activities, and end of year clearance. The SSO is staffed with two senior experienced staff who also coordinate advising issues with students' advisors, student committees, and the Dean's office.

Individual student advising is carried out by the assigned faculty member. Student advising is part of the academic duties of all faculty members. The chair/program administrator is responsible for assigning academic student advisors so that the number of advisees per faculty is maintained between 15 and 20 per faculty per semester.

Each student has an academic advisor who must approve the student's course schedule each semester and personally provide his/her advisees with an alternate pin code for registration (when required), and is there to support when the students have academic issues (failed course, probation, overload, etc). The alternative pin number is a measure mandated by the university policy to ensure that students meet with their advisor and discuss any emergent issues related to their course of study. Names of advisees and their respective advisors are available on the Student Information System (SIS). Advisors maintain their relationship until the students graduate or change their majors. In addition to the academic advisor assigned to each student, a secondary advisor is also assigned to all students. The secondary advisor is consistent across all years and is the department administrative officer.

All Faculty members are required to at least have three weekly office hours to meet with students during weekdays and should be between 8am and 5pm. These are written on course syllabi and posted on faculty doors. In addition, students may have meetings by appointment with the respective

advisors. In addition to the logistical dimension of academics (i.e.: registration), academic advising includes course planning over the academic career, learning difficulties students encounter, academic difficulties with specific instructors, monitoring of academic progress of advisees and in some cases, personal problems impacting academic progress. The online AUB-SIS system provides all information about student academic record. This access to advisors provides the means for effective academic advising and communication, and efficiently helps resolve any issues faced by the students along their academic careers and ensures a smoother and more organized educational journey.

The Mentor program is designed to link students with an advocate from the profession who will provide honest insights as students explore and evaluate their potential career and educational options. This program aims to assist AUB students in choosing their graduate career paths and facilitating their placement process. It also provides guidance on their future profession through sharing their valuable insights with their mentors. Please refer to Volume 1, *Appendix 1 (Advising and Mentor Program)*.

2. How does the program assess the effectiveness of the student advising and mentoring program?

The student meetings (town hall meetings) with the Program Administrator and Chairperson, which takes place each semester, gives students an opportunity to discuss what is going well for them and what is in need of improvement. The Program Administrator and/or the Chairperson facilitates this meeting. Observations, suggestions, and concerns are then shared at faculty meetings and considered in the ongoing process of curriculum development. The BLA Program Administrator and Chairperson monitor and review student academic achievement, making sure that students complete classes with the required university passing grade of 70. During the semester, faculty who have concerns regarding a student's academic performance in a particular class often discuss this with the Program Administrator and Chairperson, who then ask the student to meet to discuss the difficulties, their cause, and how to improve their performance.

The graduating student exit survey, the current students' survey, and the alumni feedback are considered a major tool in evaluating the efficiency and success of the advising and mentoring program. The program also utilizes surveys to assess the quality and effectiveness of advising. Exit survey of the graduating class is conducted on a yearly basis. Current student surveys and alumni surveys are carried out periodically as needed to assess progress and solicit ideas of improvements. Sample of these results are provided in the answers to question B.3 below. Please refer to Volume 1, Appendix 2 (Alumni Survey) and Volume 3, Appendix 24 (Students Survey 2019) for more information. In addition, students are encouraged to share their concerns with the faculty through the Town Hall Meetings with the Dean of the Faculty and the Chairperson of the Department; the raised issues are usually followed up by the student representatives who regularly attend meetings such as the Undergraduate Curriculum and Undergraduate Academic Affairs Committee.

3. Are students effectively advised and mentored regarding academic and career development?

Students are effectively advised and mentored on their academic and career development. The university as a whole has a strong program to ensure student development, and the same program is applied in the BLA program. Additionally, and because the program has a range of 60-90 students every year, students have a more direct relationship to their faculty. This allows extensive exchanges and discussions between advisors and advisees, where faculty members tend to know their students and their capabilities well. Such exchanges occur frequently during formal office hours and meetings as well as informally during classes or even in the corridors. The recent surveys conducted with

current students as well as the averages of exit surveys from 2012-2019 attest to the effectiveness of the system in place.

- **Satisfaction with Academic Advising:**

Graduating Classes: In the Exit surveys, when students were asked “Please indicate the level of satisfaction with overall quality of academic advising”, an average of 73% satisfaction response was achieved for the past seven years. The 2019 Exit survey shows an 82% satisfaction rate. This level of satisfaction shows an overall increasing trend from 2012 as shown in **Figure 3** below.

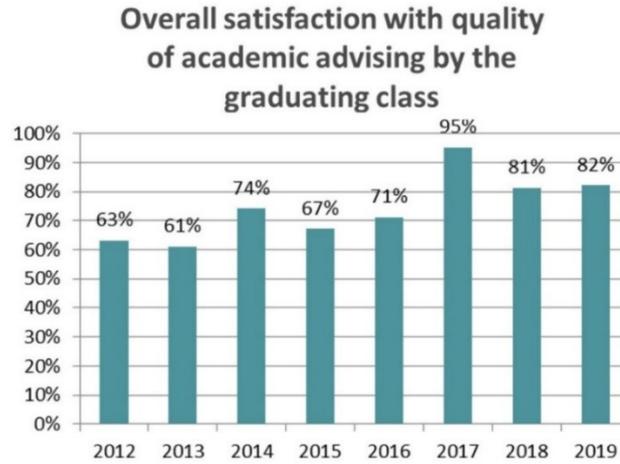


Figure 3: Overall satisfaction with quality of academic advising by the graduating class for Exit surveys from 2012-2019.

Current students: When BLA students from all four cohorts were asked if they agree with the statement: “You are being effectively advised and mentored for your academic development”, 16% of the current students did not answer this question, and out of those who did, students responded with 87% agreement (38 % strongly agree and 49% agree). The Survey results are shown in **Figure 4** below.

You are being effectively advised and mentored for your academic development

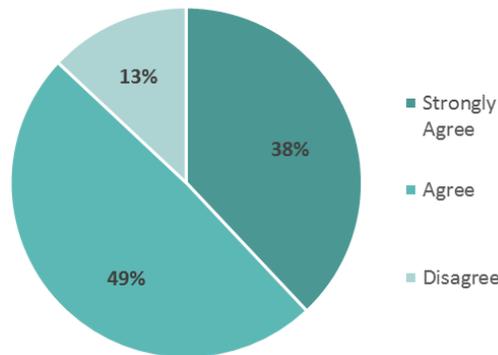


Figure 4: Overall satisfaction with effectiveness of advising and mentoring for academic development by current students AY (2019-2020)

- **Satisfaction with Career Advising:**

Graduating Students: In the Exit surveys, when students were asked to comment on the statement “You are being effectively advised and mentored for your career development ” an average of 61.57% satisfaction response was achieved for the past seven years in 2019. The Exit survey shows for the same question a 48% satisfaction rate. **Figure 5** displays overall satisfaction by the graduating class for exit surveys from 2012-2019.



Figure 5: Overall satisfaction with preparation for employment in major by the graduating class for exit surveys from 2012-2019.

Current Students: When asked if they agree with the statement: “You are being effectively advised and mentored for your career development” current students, barring the 17% who did not answer the question, responded with 87% agreement. (31% strongly agree and 56% agree).

Figure 6 shows the results of this question in the current students’ survey.

You are being effectively advised and mentored for your career development

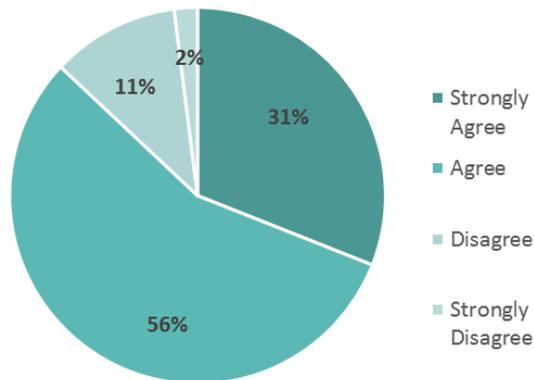


Figure 6: Overall satisfaction with effectiveness of advising and mentoring for career development by current students AY (2019-2020)

These surveys are deployed yearly to current students, graduating students, and alumni to consistently track the performance of the department in accordance with its students' views. The output is discussed at the departmental level and used in the advising strategy moving forward, as the survey questions remain consistent in their content to accurately track the department's performance.

4. Are students aware of professional opportunities, licensure, professional development, advanced educational opportunities and continuing education requirements associated with professional practice?

BLA students are exposed to a range of professional opportunities, licensure as per the Lebanese Order of Engineers and Architects, and professional development. Students are made aware of professional opportunities through multiple venues. Through the professional practice course (LDEM 290) and summer internship course (LDEM 292), students are exposed to the different areas of professional employment at the national and international markets. In both courses, presentations by professionals, research on firms and selection of firms for internships or case study analysis, students go through the process of identifying themselves opportunities beyond the classroom.

In addition, the career office at FAFS continuously provides posts on their social media and email correspondences directly to students and alumni, sharing opportunities from firms. These include professional employment, internships, graduate studies, and scholarships for continuing education. The network of contacts by the faculty and other opportunities are provided. Faculty members usually share these opportunities through the department email system.

At the level of licensure, students are aware of what is required from them at the scale of Lebanon. As mentioned prior, the program is certified by the Ministry of Education as a formal course of study, but not at the professional level. There is no formal recognized body for Landscape Architects in Lebanon. Students graduate as landscape architects from AUB and are registered as "Ingenieur Agricole" or Agricultural Engineer. This current practice will hopefully be changing due to the efforts by LDEM and recognition by the Order of Engineers and Architects. Students are aware of this current situation and the department makes the effort through orientation, lectures, and town meetings to be explicit about it. Accordingly, ASLA requirements for post-studies professional developments and continuing education are not currently applicable in Lebanon.

Although this is the case, LDEM is involved in the recognition of the profession through advocating for a chapter for Landscape Architecture within the Order of Engineers and Architect. A local chapter of IFLA has been established via members of the department and other universities. The organization is named the Lebanese Landscape Association (LELA) recognized by IFLA.

5. How satisfied are students with academic experiences and their preparation for the landscape architecture profession?

In general, students have expressed satisfaction with their academic experience, and feel well prepared for the landscape architecture profession. The Exit Survey from 2012 until 2019, and survey of enrolled students, demonstrates this satisfaction.

- **Satisfaction with Academic Experience**

Graduates of 2019 demonstrated this satisfaction through their Exit survey. When asked "how satisfied are you with the quality of Educational experience?" students responded with 86% Satisfaction (compared to the 2012-2018 average of 83% as indicated in Figure 7 of the exit surveys from 2012-2019).

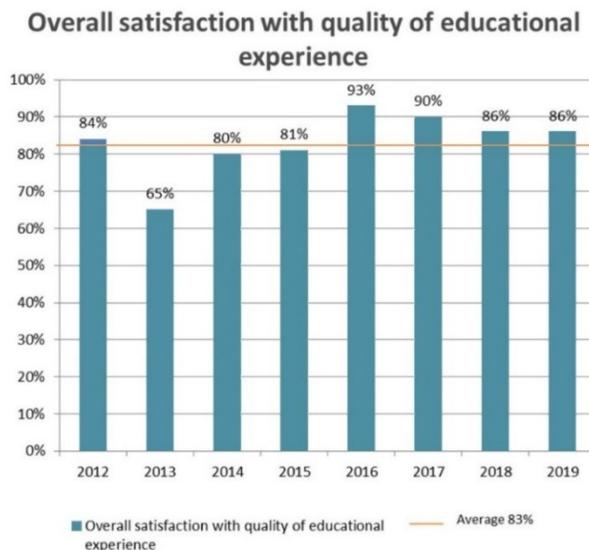


Figure 7: Overall satisfaction with quality of educational experience by graduating class for exit surveys from 2012-2019

When current students were asked “how satisfied are you with your overall academic experience?” responded with 88.8% satisfaction (33 % Very Satisfied and 56% Satisfied).

Figure 8 shows the answers for the question from the current students’ survey.

How satisfied are you with your overall academic experience?

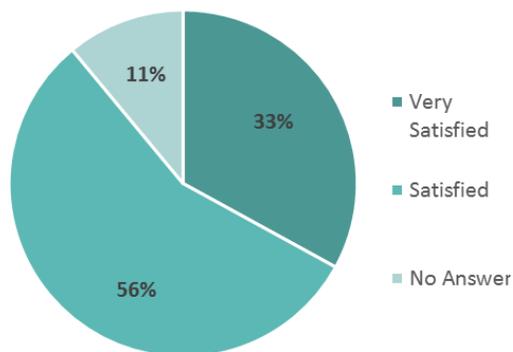


Figure 8: Overall satisfaction with overall academic experience by current students AY (2019-2020)

- **Preparation for the Landscape Architecture field:**

The solid curriculum structure exposes the students to a variety of project scenarios that involve real life issues that they would encounter in professional life. They are taught to see the multilayered problem definition and the multitude of context factors that come in play within a single site or a single intervention. Such an academic approach prepares the students and equips them with the necessary knowledge to be successful professionals. For more information, please refer to Volume 3, Appendix 24 (Students Survey 2019).

C. Participation in Extra Curricular Activities

1. What opportunities do students have to participate in institutional/college organizations, community initiatives, or other activities? How do students take advantage of these opportunities?

The notion of service is embedded in the University Mission, stating the importance of “serving the peoples of the Middle East and beyond”. In addition, the notion of service has always been an aim and goal of FAFS, which has a long history of community engagement and service projects. The program and the University provide ample opportunities for students to participate in institutional/college organizations, community initiative and non-academic activities. At the level of the university and faculty, students have the opportunity in several committees related to student affairs, the student clubs and societies, organizations, committees and several centers that engage community work. **This section has been updated in Addendum G, p. 31-32.**

- **Student governance/committees:**

USFC (University Student Faculty Committee): The USFC operates as a liaison between the student body and administration. It represents all students at the university and provides a forum for expression, discussion and action concerning student rights, privileges and opinions. The USFC is currently comprised of 7 faculty members and 17 students representing all faculties. Its responsibilities include communicating information to students, studying and recommending solutions to university-wide problems, as well as promoting and coordinating nonacademic cultural and recreational activities. Student representatives are elected by their peers and must be in good academic standing, either as full time graduate or undergraduate students. As members of the USFC, student representatives also serve on university committees such as the University Admissions Committee, the Academic Development Committee, the Library Committee, and the University Committee on Student Affairs.

SRC (The Student Representative Committee): The SRC is a student elected committee that represents all FAFS students on a faculty-wide level. It serves as the link between the students and the administration and works on academic, administrative, social, political, and public health issues. The SRC is a committee made up of students who are elected by their classmates, and includes the faculty adviser they choose. Its aim is to plan and organize activities that involve all FAFS students, to foster acquaintances among the student body, and to promote the discussion of issues pertinent to the faculty’s student body. There are two seats out of the total fifteen on the SRC dedicated to Landscape Architecture students, one representing the first and second years, and one representing the third and fourth years.

Five Centers and Initiatives listed below engage and employ students for related community work and projects:

- **Neighborhood Initiative:** The AUB Neighborhood Initiative was established in 2007 to lead AUB’s engagement with its neighborhood. The Initiative encourages AUB faculty and students to become engaged with issues of concern to our neighbors in Ras Beirut through a mix of research, outreach and advocacy activities. For more information please use the link : <https://www.aub.edu.lb/Neighborhood/Pages/default.aspx>
- **Center for Civic Engagement:** The Center for Civic Engagement and Community Service (CCECS) builds bridges between academia, local stakeholders, humanitarian agencies, funders, and policymakers in order to facilitate change in marginalized landscapes while developing the next generation of progressive civic leaders. Utilizing a fully integrated participatory approach,

CCECS harnesses the expertise of AUB faculty and staff, and the dynamism of AUB students, to work closely with targeted communities to design and pilot innovative projects that respond to the most pressing societal challenges. Some of the current projects deal with the crisis of refugees in Lebanon. For more information please use this link:

<https://www.aub.edu.lb/ccecs/Pages/default.aspx>

- ***Nature Conservation Center:*** The AUB - Nature Conservation Center (NCC) is an interdisciplinary academic research center that fosters a range of projects across a multitude of themes, from the Waste Management Program to sustainable entrepreneurship and planning awards, and to many reforestation activities, student debates, and other outlets, which are directed towards bringing up a new generation of people who appreciate nature and aim to protect it. For more information please use the link :
<https://www.aub.edu.lb/natureconservation/Pages/default.aspx>
- ***AUBotanic:*** The AUBotanic committee was formed to enrich the campus flora and tackle the increased stress on plants caused by decreased water availability, poor water quality, and increased building density. For more information please use the following link :
<https://www.aub.edu.lb/botanicgarden/Pages/default.aspx>
- ***ESDU (Environment and Sustainable Development Unit):*** The Environment and Sustainable Development Unit (ESDU) is an inter-disciplinary research and development center specialized in community development and sustainable agriculture hosted at the Faculty of Agricultural and Food Sciences (FAFS) of the American University of Beirut (AUB). Among its ongoing projects are: Regional networking and rural development and food security projects. For more information please use the following link : <https://www.aub.edu.lb/fafs/esdu/Pages/default.aspx>

Students are engaged in these university wide initiatives primarily through their own initiative and interest as well as through encouragement by the faculty and administration. For example, students are elected to some committees such as Student Societies, clubs related to service are initiated by students, and involvement with initiatives and centers is through advertisement of opportunities or faculty recommendations.

At the program and department levels, students are involved through service learning studios and course or through community oriented initiatives. The course titled “Regional and Community Studies” (LDEM 254) is an elective which can be offered during summer terms, where students spend an intensive 3-week period immersed in a community, work with them, identify issues, and propose solutions. This course was developed with the aid of community partners and municipalities and NGOs.

The final year studio or the capstone studio is also, and for a large extent, related to community services by which students choose a project of their interest under directed themes such as: community wellbeing, ecosystem health, ecological management, recreation, heritage conservation, landscape infrastructure, urban greening, landscape and tourism, urban agriculture, quarries, and brownfields. The student formulates and presents a base plan and design for a specific area of different scales. In many cases, such projects are adopted by community partners.

In addition, and depending on instructors, some studios are developed as a participative studio with a focus on community. For example, in her studio course in spring 2015, Dr. Trovato worked with Syrian refugees in the South of Lebanon. In Spring 2016, Dr. Trovato also worked with the underprivileged neighborhood of “El Hay el Jedid” within the larger municipality of Sin El Fil.

There are also few initiatives that are either led by students or involve extensive student participation. Examples include:

Parking Day: Parking Day is an annual international event with participation by the LDEM Department taking place since 2012. During the event, the students transform a parking area on the street into a public park where passersby can come, enjoy the break and interact with the built garden and students. In prior years, the landscape student society has taken the event to Hamra Street.

Beirut Garden Show Spring Festival: Student design and implementation of the department stand under the guidance of an LDEM faculty member. Interactive stands are usually elaborated. Example of ideas exhibited included “A Greenwall for All” in May 2017 which developed the idea of the green wall by providing a design that can be implemented by all with minimal difficulty and that requires minimal skills or maintenance. The design of the green wall was done with the collaboration of the center for civic engagement and community service at AUB as well as the AUB Neighborhood Initiative. The stand also showcased sample works of students from the first till the fourth year. Photos are available if needed. Many of our students also participated in the summer camps organized by the engineering society in 2017 and contributed their skills in projects located in marginalized areas.

Current Students’ survey shows that 65% of the students agree that they have the opportunity to participate in university organizations or committee clubs and 57.5% of the students agree that they have the opportunity to participate in community initiatives. Please see **Figure 9** and **Figure 10** below, and for more Information, please refer to Volume 3, Appendix 24 (Students Survey 2017).

Do you have the opportunity to participate in University Organizations or Committee Clubs?

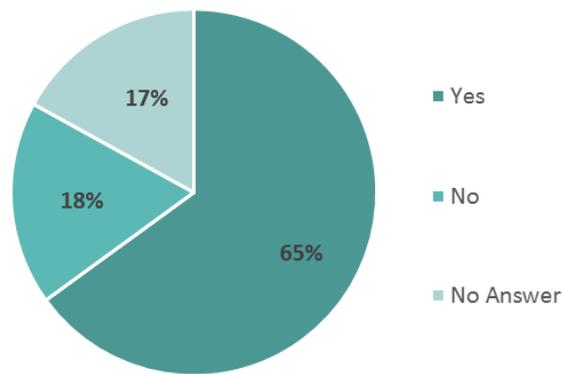


Figure 9: Overall satisfaction with opportunity to participate in university organizations or committee clubs by current students AY (2019-2020)

Do you have the opportunity to participate in Community Initiatives?

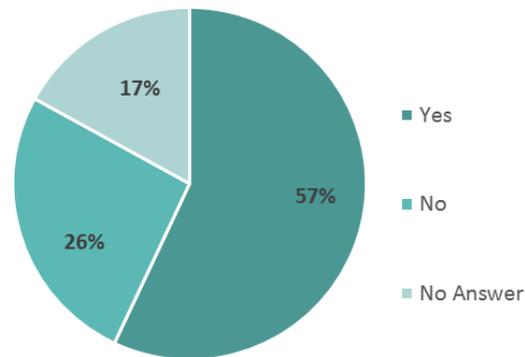


Figure 10: Overall satisfaction with opportunity to participate in community initiatives by current students AY (2019-2020)

2. To what degree do students participate in events such as LABash, ASLA Annual Meetings, local ASLA chapter events, and the activities of other professional societies or special interest groups?

Since the BLA is not accredited by LAAB, student participation in ASLA related activities is near to none. Yet, students are encouraged to contribute to ASLA annual students' awards.

At the local level, students somewhat participate in the Order of Engineers and Architects activities. Again, participation remains low due to the fact that the profession remains informally recognized. On the other hand, students strongly participate in local NGO activities that aim for the protection of landscapes across the country. To name an example, the movement to protect the "Dalieh" in 2017, the only remaining natural coastline in Beirut, witnessed strong student participation through activism, contribution to exhibitions, competitions and awareness campaigns. While these activities are not strictly professional, they do expose students to the realities of the profession and forces they have to address.

The Department and program faculty members have been active in developing and enriching the professional environment with strong student participation. The Department has established a strong tie with IFLA to assist in developing this professional environment. Through conferences (2011-2016), the needs of the profession were discussed. Students were the backbone of these activities with involvement in organization and participation.

As a result, the Lebanese Landscape Association (LELA) was formed in 2016 with strong membership from students. Activities of LELA remain few, but students volunteering, are core to its function and mission.



FACULTY

5

5. FACULTY

STANDARD 5: The qualifications, academic position, and professional activities and individual development of faculty and instructional personnel shall promote and enhance the academic mission and objectives of the program.

INTENT: The program should have qualified experienced faculty and other instructional personnel to instill the knowledge, skills, and abilities that students will need to pursue a career in landscape architecture. Faculty workloads, compensation, and overall support received for career development contribute to the success of the program.

A. Credentials

1. Is the faculty's balance of professional practice and academic experience appropriate to the program mission?

The balance of professional practice and academic experience is appropriate to the program's mission. Faculty provide a range of academic and professional credentials, which allows the program to meet its principle mission which is "to graduate lifelong learners and critical thinkers who adopt a holistic view of the landscape, and who are equipped with interdisciplinary scientific and creative skills to start as entry-level landscape architects and to become, with experience, successful professionals".

The faculty qualifications and activities strongly support this mission, with a focus on both research and scholarly output, as well as the creation of built works, and engagement in exhibitions, community service, and other professional activities.

All full academic landscape architecture faculty have previously practiced or currently engage in practice or both. Several faculty members were full time professionals in the design fields prior to becoming full-time faculty members (Dr. Mehran Madani¹⁰, Beata Dreksler, Dr. Yaser Abunnasr and Nayla Al-Akl). Some faculty members have or are currently engaged in community based projects (Dr. Rami Zurayk, Dr. Salma Talhouk and Dr. Maria Gabriella Trovato), others in landscape related projects (Nayla Al-Akl and Dr. Yaser Abunnasr), or in larger scale planning projects (Dr. Yaser Abunnasr). This keeps skills and contacts with the profession fresh, and allows faculty to bring a wealth of experience and expertise into lectures and studios.

The core faculty are also supplemented by part-time lecturers, typically studio instructors, who are practicing professionals in Landscape architecture or related design fields. For example, Dr. Mona Khechen and Balsam Ariss are urban designers. Mr. Ramzi Mezher is a practicing architect with a diploma in Landscape Studies from ETH Zurich. Sara Hajj is a Landscape Architect and urban designer with strong expertise in plants. This variety of expertise provides solid grounding in professional practice allowing academic instruction to meet requirements of landscape architecture.

In addition, many of the faculty are involved in practice within the university, servicing on and managing initiatives and committees related to planning and design. For example, the current university master plan development work group includes Dr. Salma Talhouk and Dr. Yaser Abunnasr.

¹⁰ As of the Fall Semester of AY 2019-2020, Dr. Madani is no longer a faculty member at the LDEM Department

The AUBotanic (the campus as a botanic garden) committee includes Dr. Salma Talhouk (founder), Ms. Nayla Al-Akl, Dr. Maria Gabriella Trovato, Dr. Beata Dreksler and Dr. Yaser Abunnasr. In addition, the University Architect Committee entrusted to consult the President, COO, and Provost of the University projects includes Dr. Yaser Abunnasr as a key member. This mix of professional and academic experience provides necessary capabilities to teach all aspects of the profession within the program.

2. Are faculty assignments appropriate to the course content and program mission?

Faculty assignments are appropriate to the course content and program mission. Faculty assignments are determined based on faculty expertise and field of interest.

Faculty who hold landscape horticulture or horticulture degrees are assigned to teach plant biology, landscape horticulture, and plant material courses. Landscape architects and planners teach design studios, history, and theory courses, and licensed faculty members and field professionals teach computer application, engineering, construction, and professional practice. Teaching specific studio topics or courses is matched with the appropriate faculty expertise. For example, Dr. Rami Zurayk is a soil scientist teaching the courses on soils and geomorphology for landscape architects that he himself developed. Dr. Salma Talhouk and Monika Fabian also developed and co-taught the plant material courses (currently taught by Monika Fabian). While several faculty members continue to teach design studios consistent with their expertise (Urban Design, Dr. Yaser Abunnasr; Cultural Landscapes, Dr. Beata Dreksler), rotation of instructors for studios is encouraged to ensure originality and new experiences for students. The final decisions on course assignments are usually made by the program administrator and department chair (currently the same person). By convention, course assignments are collectively discussed during the department meetings and assignments are completed consensually with all faculty members present.

To ensure that faculty assignments meet the program mission, overall workload of faculty members are determined by general university policy and LDEM specific policy. As per University guidelines, the full teaching load of all regular professorial faculty is 4-6 courses/year or 12-18 credits. At the LDEM department, this load is translated into one studio course and one lecture course per semester. Reduction of load below this level requires a waiver. Waivers may be granted if a faculty member is heavily involved in research and has secured a buyout, or in specific service or administrative tasks. Normally the load may not be less than one course/semester unless the circumstances are extraordinary, in which case special permission is obtained from the provost. In all cases, the faculty member must remain in residence, even if not teaching. These guidelines do not apply to non-professorial faculty (instructors and lecturers) whose primary tasks are instructional. Normally, the workload for a full-time instructional faculty member is 4 courses or 12 credits per semester. Please refer to Volume 1, Appendix 9 (Faculty Workload Policy) and to Volume 3, Appendix 19 (LDEM Promotion Tenure and Reappointment) for Proposed Department Promotion Criteria and Teaching Load.

The current university policy on division of workload is as follows: 40% research, 40% teaching, and 20% services. As per the new tenure reinstatement starting AY 2017-2018, each department will develop their own guidelines. Those for the LDEM Department are as follows: teaching at 50%, research at 35% and service at 15%. The overall distribution of faculty assignment is in line with the program mission balancing professional teaching with other research/creative work and service.

3. How are adjunct and/or part-time faculty integrated into the program's administration and curriculum evaluation/development in a coordinated and organized manner?

As per university policy, the BLA program includes two ranks of academic positions that are not professorial or tenure-track appointments:

Lecturers and Instructors: They are integrated in the program administration and curriculum development through active involvement meetings, retreats and communication channels.

- *Full-time Lecturers and Instructors:* They are involved in a similar manner as professorial rank faculty in the administrative and academic development. They develop syllabi and course material, propose new courses, attend department meetings and are annually evaluated on performance and output.
- *Part-time Senior Lecturers, Lecturers and Instructors:* They do not contribute in the same manner for overall academic development. They are mostly involved in their own courses that they teach. They may propose new courses, subject to professional faculty approval. Due to their reduced physical presence, this role is less administrative. Part-timers are evaluated on performance as well.

All part-time and full-time lecturers and instructors receive all department communication making them aware of activities, meetings and curricular changes. Full-time lecturer positions have similar position security and teaching and administrative responsibilities to tenure-track faculty, and have promotion opportunities. Lecturers and instructors have a heavier teaching load than professional and tenure-track faculty with required research roles. Instructors and lecturers participate in faculty teaching, meetings (upon invitation), curricular developments, evaluations and modifications, in addition to department retreats and final juries. They are consulted for program revisions and for the development of program learning outcomes and course learning outcomes.

B. Faculty Development

1. How are faculty activities – such as scholarly inquiry, research, professional practice and service to the profession, university and community – documented and disseminated through appropriate media, such as journals, professional magazines, community, college and university media?

The faculty publish their research and present it in the field's and related fields' prominent journals and conferences. We actively seek press coverage of other faculty activities, such as design awards, teaching awards and other activities.

Information about faculty activities is disseminated in multiple ways. We have a department website that includes updated curriculum vitae of each faculty member and that publishes departmental news such as faculty awards and achievements. We also rely on the faculty (college) website to communicate these achievements through its various media, including its monthly newsletter. The department website can be found on the following link:

<https://www.aub.edu.lb/fafs/ldem/Pages/default.aspx>

The program is also actively involved in the Faculty (college) and university communication offices, ensuring that significant recognitions and achievements are highlighted not only on a faculty (college)-wide level, but also on a university-wide level. In addition, the university's active Facebook page includes significant faculty achievements which can be found on the following link:

<https://www.facebook.com/aub.edu.lb>.

Individual faculty announce their activities through various media. Professor Rami Zurayk for instance, has a blog where he shares his thoughts on political ecology. Several faculty members have active websites/professional social media accounts using Google Scholar, Research Gate and Academia (Professor Zurayk, Talhouk and Abunnasr). The university faculty websites and academic pages are means, provided by the faculty, which professors use to highlight and showcase their work. Faculty can also announce activities to LDEM and University-wide faculty as well as students through the Department's email lists, and can utilize the Departmental and Faculty newsletters to highlight their published work and their significant projects and workshops. Please refer to Addendum E for Individual Teaching Records for examples of faculty publications.

This section has been updated in Addendum G, p. 33-35.

2. How do faculty teaching and administrative assignments allow sufficient opportunity to pursue advancement and professional development? Are Faculty duties, work load, and opportunities similar to other faculty in related disciplines or academic units?

Our teaching load of two courses per semester is generally considered equal to 40% of full time work (or 50% if new guidelines are approved). The two-course load per semester includes a design studio (4 or 6 credits) and one 3-credit course for design faculty, and two 3-credit courses for science faculty. As such, 40% of the time is available for research and 20% of the time for service. Teaching in summer is optional so faculty have almost four months a year to pursue advancement and professional development full time.

The studio student-to-faculty ratio ranges between 1:8 and 1:10, allowing for a smaller number of students per faculty, demonstrating a more direct and interactive approach to ensure quality and professional education and to qualify for accreditation. In addition, the department's history of offering only few large enrollment classes and encouraging the offering of research seminars is an opportunity and a testimony to the rigor of the educational experience. This has become a larger challenge to maintain with the university shifting to resource allocation based on majors and credit hours.

For many of the BLA faculty, research is based on application to real world projects. A good percentage of studios involve partnerships with clients, current issues (i.e.: coastal degeneration, refugee crises), real sites, and nearby communities and stakeholders. This is an opportunity to engage teaching with research and contemporary involvement in the profession.

The university has a generous policy on leaves and sabbaticals. Faculty members are eligible for a paid sabbatical leave after six years of full service for one semester. The university also provides a Junior Faculty Research Leave for assistant professors in their 3rd or 4th year of full-time employment. Short-term development grants are competitively offered to faculty members once a year to present research. A long-term development grant is also possible every two years for a maximum of eight weeks where travel and stipend are provided to conduct research in partnership with an institution abroad or a research residency. Leaves without pay are also available for a period of one year, renewable for another. Faculty members with sufficient funds are able to buy out a course.

Faculty duties, workload, and opportunities at the BLA / LDEM follow university policy and are similar in scale, accessibility, and extent to other similar disciplines such as architecture, fine arts, and urban design.

3. How are the development and teaching effectiveness of faculty and instructional personnel systematically evaluated?

As further described in section B.6 below, faculty are evaluated on an annual basis by both the Department Chair and the Faculty Dean. Both teaching and research/creative work are evaluated, and the evaluations are communicated to the faculty member in a written form and discussed in a meeting with the chairperson. Teaching is evaluated primarily through two indicators: Student Course Evaluations, and outcomes assessment as a result of studio presentations. On the other hand, the department, the faculty and the university at large assess faculty members based on teaching research and service submitted by faculty in the annual performance review report. Evaluation by the chair is developed jointly with the faculty member who signs the evaluation indicating agreement.

4. How are the results of these evaluations used for individual and program improvement?

We have a Center for Teaching and Learning (CTL) that is available to assist faculty with pedagogical development. In addition, the IT academic services assist and support faculty with curriculum development and technology integration in teaching.

When a faculty member's student evaluations are notably low, the chair will discuss with that person their perceptions of how the course went, and what changes are needed.

Overall program results are incorporated into faculty curriculum discussions as part of faculty meetings, program meetings, and faculty retreats. Feedback from various sources has resulted in changes to the curriculum such as rethinking studio course sequence to match skill level and restructuring and eliminating some courses from the core curriculum. For more information about the CTL please refer to the link: <https://www.aub.edu.lb/ctl/Pages/default.aspx> and for more information on IT Academic Services, please refer to the following link: <https://www.aub.edu.lb/it/Pages/default.aspx>

5. How do faculty seek and make effective use of available funding for conference attendance, equipment and technical support, etc.?

Each faculty member can apply for both Short-Term and Long-Term Faculty Development grants. Short-Term (maximum 7 days) grants are designed to support individual faculty members travelling to international conferences to present papers (or other scholarly work), and to participate in workshops. The ceiling for short-term faculty development grants is \$2,500 for travel to the MENA and Europe, and \$3,000 for travel elsewhere. Coverage includes tickets, accommodations, sustenance, and registration fees. Requests exceeding the above set ceiling arising from unexpected situations will require extensive justification accompanied by supporting receipts for all expenses to be approved by the dean following the return of the faculty member.

Long-Term Faculty Development grants are designed to support individual faculty members travelling to conduct research during the summer months (June 1- August 31). AUB offers to cover the ticket cost and a per diem of \$3000 per 30 calendar days, pro-rated. The duration of support ranges from two to eight weeks.

Faculty members are eligible to replace computers every three to four years paid by the department.

New faculty usually receive a startup package that includes a computer and software, in addition to a research seed money negotiated with the Dean but not less than 5000\$.

The University has re-instated tenure during the Academic year 2017-2018, these tenure criteria can be found in Volume 3 Appendix 19. These criteria are followed by the Landscape Department.

Please refer to Volume 1, Appendix 7 (Faculty Development Grants) for Long-Term/Short-Term Development Grants.

6. How are the activities of faculty reviewed and recognized by faculty peers?

Annual performance reviews (APR) of all faculty members, including those holding tenure, are required. Rigorous periodic performance reviews, prior to the expiration of a contract term, are applied to all untenured faculty members. The university has full discretion to decide whether employment should be offered anew. Consideration for reappointment is based on criteria established by each Faculty and approved by the board of deans.

The Annual Performance Review (APR) addresses all areas of work (teaching, research/creative/professional work, and service). The APR must be completed by all full-time faculty, and forms the basis for merit-based salary increases and promotion decisions. This report is reviewed by the Department Chair and the Dean of the Faculty. Recommendations are then raised to the Provost. The Chairperson then discusses the results of the evaluation verbally with the faculty.

When being considered for reappointment and promotion, faculty members are evaluated in the above-mentioned areas. Research and teaching will generally be given greater weight. Please refer to Volume 1, Appendix 8 (Faculty Manual), Appendix 3 (Annual Performance Review Content) and to Volume 3, Appendix 19 (LDEM Promotion Tenure and Reappointment) for more information about Annual Performance Review.

7. How do faculty participate in university and professional service, student advising and other activities that enhance the effectiveness of the program?

All faculty members are expected to engage in service in the Department, College, or University communities, as well as in the profession. The level and mix vary by individuals. Many faculty members are involved with the newly formed Lebanese Landscape Association (LELA), affiliated with IFLA, such as Maria Gabriella Trovato and Nayla Al-Akl. Many faculty members are involved in University wide committees and initiatives: Salma Talhouk (Nature Conservation Center and AUBotanic), Rami Zurayk (Department head until January 2020, University Research Committee), and Yaser Abunnasr (BLA Coordinator and current department head, CTL steering Committee, University Student Faculty Committee, University Architect Committee). All faculty members take on advising of BLA students.

The University also recognizes the importance of providing professional service in the form of consultancy; faculty members are entitled one day per week consultancy provided this does not interfere with their appointment responsibilities.

C. Faculty Retention

1. Are faculty salaries, academic and professional recognition evaluated to promote faculty retention and productivity? Are they comparable to related disciplines within the institution?

Each year, full-time faculty members complete an APR, which documents their productivity for the year in terms of teaching, research/ creative work and service. The department chair evaluates the APR and makes recommendations on merit increases for the faculty. The dean then proposes merit increases based on these recommendations as well as his/her priorities and perspectives, and is then approved by the Provost.

Faculty salaries, in general, can be considered per U.S. scales when benefits are calculated with the overall remuneration package. As standard university policy for all full-time faculty, benefits in addition to salary include full support of education cost¹¹ of children for 13-14 years and high subsidy of medical insurance. Faculty also benefit from housing benefit (equivalent to 60% of annual rent) for 13 years of employment as well as return tickets for yearly home visits. The university also contributes an equivalent amount to the person's chosen percentage that goes towards a retirement fund. Recently, faculty members at the university formed the American University Professors Chapter (local chapter of the US based faculty Union) to further advocate for fairness in faculty salaries and development of policies across the University.

Faculty are also offered additional educational subsidy for children; in addition to rent and health insurance. Salaries for new faculty are negotiated with the Dean of the Faculty.

More recently, faculty members have formed an American Association of University Professors Chapter (Faculty Union; FUN) to further strengthen their ability to influence the university administration decisions.

Salaries of faculty members at the BLA follow the pay scale of FAFS, which is in general lower than the faculty of Engineering and architecture, where urban design and architecture programs are housed. The faculty's most recent Strategic Plan (2019-2025) includes action points to increase the competitiveness of faculty compensation packages to allow recruitment and retention of the very best faculty and raise the average salaries of existing faculty.

2. What is the rate of faculty turnover?

In the past six years, the turnover rate has been relatively low. This is a reflection of the Department's focus on a hiring strategy that fulfills the program mission. Since 2010, one senior landscape architect retired but remained on as an associate to the department providing pro-bono academic services. Two resigned to pursue other opportunities and one faculty member was not promoted and left the department. During the same period, four full-time professorial track hiring and one visiting Assistant professor were successful. The visiting Assistant Professor has since been promoted to Full-time Faculty effective AY 2019/2020. One international Assistant Professor resigned in 2018/2019 due to family/ personal reasons. In addition, fewer experienced and well-performing part-timer instructors have been retained. It is hoped that the re-instatement of tenure, effective since the Academic Year 2017-2018 will also further reduce turn-over and ensure retention of faculty.

¹¹ Cost of quality education in Lebanon is primarily through private schools with a range from 10,000 USD to 18,000 USD per student/year.



OUTREACH TO THE INSTITUTION, COMMUNITIES, ALUMNI, AND PRACTITIONERS **6**

6. OUTREACH TO THE INSTITUTION, COMMUNITIES, ALUMNI, AND PRACTITIONERS

STANDARD 6: The program shall have a plan and a record of achievement for interacting with the professional community, its alumni, the institution, community, and the public at large.

INTENT: The program should establish an effective relationship with the institution, communities, alumni, practitioners and the public at large in order to provide a source of service learning opportunities for students, scholarly development for faculty, and professional guidance and financial support. Documentation and dissemination of successful outreach efforts should enhance the image of the program and educate its constituencies regarding the program and the profession of landscape architecture.

NOTE: Updates for this section are included in Addendum G, p. 36-40

A. Interaction with the Institution, and Public

The program represents and advocates for the profession by interacting with the professional community, the institution, community and the public at large.

1. How are service-learning activities incorporated into the curriculum?

The faculty and students are actively engaged in service-learning activities as part of the studio-based curriculum as it is a cross-cutting theme. Students are required in their project analysis to address all aspects of a project, including thorough research on the users, stakeholders, communities and municipalities, depending on the project and the level of complexity and engagement. The service-learning dimension may include working directly with a municipality (LDEM 216, Fall 2013, Yaser Abunnasr) or with refugees (LDEM 228, Gabriella Trovato) or a garden design for a private client (LDEM 216, Spring 2017; Dreksler).

At a more formal level, the curriculum integrates service learning in several ways. First, through the course 'Regional and Community Studies' (LDEM 254) which can be offered during summers as an elective with a focus on a community immersive experience. Second, through joint projects with University centers that include Center for Civic Engagement and Community Service (CCECS; <https://www.aub.edu.lb/ccecs/Pages/default.aspx>), the Nature Conservation Center (NCC; <https://www.aub.edu.lb/natureconservation/Pages/default.aspx>), and the Neighborhood Initiative (NI, <https://www.aub.edu.lb/Neighborhood/Pages/default.aspx>). The activities of these centers revolve around service and connect the university (faculty and students) with proximate and far communities. Student involvement with these centers can take several forms including joint studios, project basis, interns or paid jobs.

2. How are service activities documented on a regular basis?

Studios involving service learning are regularly documented at the end of the semester, through project reports and presentations, and are featured on the Civic Engagement center's website when it is a joint studio. For example, Maria Gabriella Trovato's joint studio with CCECS (LDEM 228) during the Spring Semester of 2014, involved working with Palestinian refugees in Lebanon. The outcome included presentations to stakeholders, produced a report published in collaboration with CCECS. Professor Trovato often presents the work by students in conferences such as the Center on teaching

and Learning annual conference and the recent conference on Landscape in Emergency in Italy, highlighting students' involvement in service-learning. Faculty service activities in community engagement are reported in their Annual Faculty Reports, and are given due recognition in tenure and promotion cases and allocation of merit-based salary increases. The outputs of service activities are often shared via the departmental or faculty-wide newsletters, as well as the official Landscape Architecture at AUB Facebook Page.

3. How does the program interact with the institution and the public, aside from service learning?

The principal means that the BLA program uses to communicate its mission, and to promote visibility with the University and the public, is through the various activities of faculty and students, as summarized below.

University governance: Department faculty are involved in faculty governance including service on the Academic Development Committee (Talhouk), University Library Committee (Abunnasr), and University Research Board (Zurayk). Faculty members have served at the Faculty (College) level on the FAFS Administrative Committee (Zurayk), Deans Advisory Committee (Talhouk), Undergraduate Curriculum and Undergraduate Student Academic Affairs Committee (Abunnasr, Zurayk), Undergraduate Studies Committee (Abunnasr, Talhouk), Graduate Studies Committee (Talhouk, Al-Akl), Library Committee (Abunnasr, Chair), research Committee (Madani, Zurayk), and Student Affairs Committee (Madani). Faculty participation at the University level includes initiatives such as the Nature Conservation Center (Talhouk), AUBotanic (Talhouk, Abunnasr, Trovato, and Al-Akl), and Issam Fares Institute for Public Policy (Abunnasr). In addition, faculty have served in highly visible administrative positions; currently Salma Talhouk is director of AUBotanic, and Professor Nayla Al-Akl has recently been appointed the university's Associate Dean of Student Affairs.

Design and planning on the AUB campus: Faculty are very involved in several specific projects across the campus, as well as they serve on committees related to campus planning and design, and continue to serve on the ongoing master plan efforts, AUB2030. In the past four years Yaser Abunnasr, Nayla Al-Akl, and Maria Gabriella Trovato have designed several projects across campus in conjunction with the Facilities Planning and Design Unit (FPDU), AUBotanic, and the AUB Medical Center (AUBMC). Talhouk and Fabian have also contributed to vegetation mapping assessment and conservation. While these were done outside the context of design studios, students were involved as assistant designers where faculty members provided valuable mentoring. The projects include the design of FAFS ECO-UNIT and AUB Assembly Hall Landscape (Abunnasr), green roofs on top of the Medical Facilities (Al-Akl), the design of smoking areas outside campus in anticipation of the 'Tobacco Free AUB 2018' campaign (Trovato) - a competition which was won by LDEM '18 alumna, Marwa Darazi - and the development of a nature trail within AUB (Dreksler). Salma Talhouk is the founding member of AUBotanic, and AUB-wide initiative to transform the campus into a botanic garden. Yaser Abunnasr serves (along with other members from the architecture department at MSFEA) on the university wide Campus Architect Committee supporting FPDU in project development. Talhouk, Al-Akl, and Trovato, serve on the planning and steering committee of AUBotanic. In addition, Talhouk and Abunnasr have participated in several master plan related workshops. In the past, Salma Talhouk and Jala Makhzoumi have also contributed extensively to the earlier master plan efforts and the appraisal of the campus landscape and planning.

Invitations to Lecture: Because of our faculty's diverse areas of expertise, they are often invited to give public presentations by other institutions, workshops and organizations. Rami Zurayk often lectures in his area on food systems, land tenure, and the impact of politics on landscapes. He continues to present nationally and internationally. More recently, he has given lectures at the London School of Economics, The Association of American Geographers, and the University of Leipzig, Oriental Institute, Germany. Salma Talhouk's focus on community based nature conservation allowed her to present in venues such as the Royal Botanic Gardens (Edinburgh, Scotland) and the United Nations Environment Program (UNEP) Global Assessment Network Meeting in the UAE. Maria Gabriella Trovato presented her work on landscape risk assessment and landscapes in emergency at the University of Torino (Italy) and the Department of Urban Planning, University of Cyprus, Nicosia and TU Delft University, Netherlands, at the 9th International Biennial of Landscape Architecture in Spain, at the University of Southern California, Los Angeles, USA, and at the 53rd IFLA World Congress Tasting the Landscape in Torino. On green infrastructure planning and design, Yaser Abunnasr has been invited to speak at the University of Stuttgart (Germany), several regional activities with German NGOs (Jordan, Tunisia, and Morocco) and featured on the ICOMOS/US website in a short video presentation on an ecological approach to zoning in rural villages in Lebanon (in conjunction with urban design Student, Roger Neimeh).

Professional outreach: The Department continues to maintain visibility nationally, regionally, and internationally. Faculty involvement takes several forms. The profession in Lebanon and the region remains in its infancy but there are several opportunities at the professional level such as advancing the profession, providing expert help to the private sector, and involvement in events. The department has been leading the effort to formalize the profession through negotiations with the OEA to create a Landscape Architecture chapter (Jala Makhzoumi). In parallel, and to increase the visibility of the profession, a workshop (2010) and a conference (2016) were organized in association with IFLA (Makhzoumi, Al-Akl, Trovato, Madani, and Abunnasr). At the level of expert support, Rami Zurayk is a current member of the High Level Panel of Experts of the Committee on Food Security and of the Harvard-Lancet Commission on Sustainable Food Systems. He was also involved in the Erbil Agricultural Green Belt Design (Iraq); Nayla-Akl is also involved in the landscape design of Byblos municipality (Lebanon), and Yaser Abunnasr developed Sustainable Landscape Design for the New Water Front District in Downtown Beirut and he is involved with the advocacy group 'Beirut Madinati' (Beirut my City) developing proposals for coastal protection and parks. Gabriella Trovato has been instrumental in developing several capacity building workshops on Landscape Character Assessment and Landscape Risk Assessment with members from different Lebanese governmental agencies. Several faculty members have been involved with landscape students in developing the PARK(ing) Day (Nayla Al-Akl) event and the yearly Garden Show in Beirut (Nayla Al-Akl, Beata Dreksler, and Monika Fabian). Salma Talhouk is also involved in outreach activities through her project 'Baldati Biati' (My Village My Environment) that provides advice on ecotourism and ecological/natural conservation.

Educational outreach: Faculty members have conducted awareness and educational sessions and lectures to students and adults. Monika Fabian annually brings in elementary students from public and private schools to the green house area to learn about plants and ecology. Mehran Madani was involved with the University for Seniors and an assisted living center close by providing periodic assistance through lectures and workshop sessions on accessibility in the city.

Invited design critics: Faculty have been invited to participate in critiques of student work in the AUB Architecture Department (Trovato, Al-Akl, and Abunnasr), and in other institutions, such as the Lebanese University and ALBA (Trovato, Al-Akl, and Abunnasr) and on the ADAPT-r PRS doctorate program, RMIT- university, Australia (Trovato).

Again, for the faculty involved in these service activities, they are reported in the Annual Faculty Reports, and are given due recognition in promotion cases and allocation of merit-based salary increases.

4. How does the program assess its effectiveness in interacting with the institution and the public?

We assess the interactive effectiveness of the program through the visibility it receives both in local and international press, in the number and quality of inquiries received for professional assistance, as well as grants, awards, and other recognition. Examples of recent press coverage include Salma Talhouk's project "Baldati Biati" (My Village, My Environment) which received consistent coverage by local and regional media since 2012 until today from outlets such as the Lebanese newspaper Al Hayat and Al Mustaqbal as well regional outlet Sky News Arabia. Maria Gabriella Trovato and her research team on "Landscapes in Emergency" received coverage by the Barcelona based Landscape Observatory news outlet. Yaser Abunnasr was interviewed about an ecologically based zoning approach in rural Lebanese town in 2016 for the US /ICOMOS newly developed web site of cultural landscapes: (<http://www.usicomos.org/an-integrated-ecological-and-place-based-landscape-approach-to-zoning-in-mountain-towns-in-lebanon/>).

The Department continues to receive inquiries for professional assistance. Recently, Salma Talhouk and Yaser Abunnasr received a request to assist in the development of botanic garden for a village in the Northern Agricultural plane of Akkar (north Lebanon).

Faculty in the department continue to receive numerous external grants from the European Union (EU), United Nations, United Kingdom (UK), Canada and the USA. For example, Yaser Abunnasr has recently completed an Erasmus grant on Developing skills in the field of integrated energy planning in Med Landscapes, Maria Gabriella Trovato has just taken on an EU grant on Supporting Sustainable Solid Waste Management in Jurd al-Kaytee, Akkar with Dr. Rami Zurayk.*. M. Trovato and N. Al-Akl have received a European Commission grant on Advancing Alternative Migration Governance. Salma Talhouk recently received a grant titled 'Improving the Nutrition of Syrian Refugees and Host Communities through Garden Walls' from the UN Food and Agriculture organization (FAO). Rami Zurayk completed several grants from renowned sources such as the London School of Economics and the International Development Research Center (IDRC; Canada). Yaser Abunnasr recently received a grant from UC Davis to explore the impact of vegetated green infrastructure on outdoor climates in desert urban landscapes.

B. Interaction with the Profession, Alumni and Practitioners

1. How does the program recognize professional organizations, alumni, and practitioners as resources?

Professional Organizations: Professional organizations dedicated to Landscape Architecture remain absent in Lebanon and the region. This is because the profession is in its early stages of being introduced and accordingly in the process of being organized. The department has been very active on this front through joint conferences with IFLA to provide visibility and with the OEA to ensure proper chapter and registration.

The Department recognizes professional organizations as a resource for its faculty and its students. Membership in international landscape architecture bodies is highly encouraged. Many of the faculty are members in IFLA (Trovato, Makhzoumi, and Dreksler) and others are international members of the ASLA (Al-Akl, Madani, and Abunnasr) and one a member in EDRA (Madani). The Order of Engineers and Architects (OEA) provides resources in related fields that our faculty regularly attend or participate in such workshops, conferences and lectures on sustainability, resource management and engineering. A number of our faculty have made presentations or keynote addresses at several national and international professional conferences (Zurayk, Talhouk, Trovato, Madani, Al-Akl, and Abunnasr).

Alumni: The program and the department are in the process of developing a more effective strategy to engage alumni as important resources to our faculty and students such as having an alumni committee affiliated with the Department, engaging students and faculty. At this stage, we engage alumni through several ways. The Professional Practice class also brings in alumni and professionals working in a broad range of offices to talk with students about various avenues and experiences within the field. Our alumni and some practitioners are routinely assigned as second instructors for design studios and lecture courses. We always invite alumni and practitioners as guest critics for studio presentations. At these juries, important discussions are held in response to the projects selected for studios and the students' design responses. Since most faculty attend and participate in these juries, the dialogue with alumni (and practitioners) becomes part of our ongoing discussion on course content and curriculum in support of program objectives. Alumni are also engaged in the annual FAFS event where practitioners from the field are invited to give presentations about their work followed with a discussion with students. We continue to search for ways to engage our students with our alumni beyond the formal studio or classroom setting.

Practitioners: The program maintains a significant and diverse number of interactions with practitioners from many branches of landscape architecture practice and related fields, to provide a variety of perspectives for our students, and to maintain a close working relationship with the active profession and practitioners from firms of various types and sizes.

We engage local and regional practitioners with the Department in several ways:

- As visiting studio critics and jurors: Practitioners in landscape architecture, urban design and planning are invited regularly to attend presentations in all studio levels where they provide pragmatic feedback. As guest lecturers: As formal presentations in the department or as lecturers in conjunction with specific studio topics.
- As visiting instructors and co-instructors: Practitioners are often recruited to give studios in their areas of specialty or to co-teach a studio with a full time faculty member. This provides real-life knowledge to students supporting their projects.
- In addition, we encourage the Department's very active student-led Landscape Society to invite professionals to give lectures and have informal discussions with students. We also encourage students to attend presentations in the OEA, at AUB and at other events in the city where practitioners in design are presenting their work.
- The Department works deliberately and attentively to provide opportunities for our students to interact with local and regional practitioners. These relationships are very much based on individual faculty members' networks. For example, Yaser Abunnasr has good connections with Francis Landscapes, Vladimir Djurovic, and Kathryn Gustafson. These accomplished practitioners visit the department as guest critics and as providers of internships and employment. As a result of discussions with Vladimir Djurovic and Francis Landscapes, both

have developed internship programs for our students. Due to these contacts as well, alumna Kristelle Boulos was employed in the DC office of Kathryn Gustafson.

As the profession advances in Lebanon and the region, we aim to foster closer ties with practitioners and involve them more in the Departments' activities.

Allied and other disciplines: The department strives to expose students to the many fields that are related to landscape architecture. The placement of our Department with FAFS provides an opportunity for students to get exposed to other fields such as agriculture, agribusiness, hydrology/irrigation, and food security. Many lectures, workshops and conferences at FAFS are a resource to our students. In addition, the City Debates conference series organized by the Urban Design and Planning Program in the School of Architecture + Design provides ample opportunities to interact with other disciplines such as planners, architects, urban designers and engineers. This conference often includes several sessions with practitioners in related disciplines.

2. Does the program maintain a current registry of alumni that includes information pertaining to current employment, professional activity, postgraduate study, and significant professional accomplishments?

Contacts are maintained with alumni through several activities and initiatives. Most of the Departmental communication with alumni is now done through email. This includes announcements to alumni regarding lectures, studio presentations, department events and faculty events. The FAFS alumni association and the University Alumni Association actively maintain alumni contacts. For the department, we have recently become more active in developing a more comprehensive contact list.

We have been successful in soliciting responses from alumni regarding their employment and professional activities. For the survey that we recently sent out to alumni requesting information for this SER, of the 300 alumni contacted, 175 (58.3%) responded. See Addendum D and Volume 1, Appendix 2 (Alumni Survey).

The department recognizes the extent that alumni can support the Department and the Program. A more concerted effort is being developed to make the alumni involvement more effective.

3. Does the program use the alumni registry to interact with alumni?

The Department currently has several strategies to engage with alumni. The Department shares this registry with the FAFS Alumni Association and AUB Alumni Association to announce formal events. For example, the FAFS Alumni Association organizes a yearly day-event for the Faculty inviting accomplished professionals from the three Faculty Departments to speak about their fields, including Landscape Architecture, followed by discussions with students, alumni and faculty members. In addition, LDEM uses the registry to contact alumni whenever a department event is planned. In addition, Department news is usually included on the AUB Facebook page. The Landscape Architecture Student Society Facebook page is student lead. Whenever students graduate they remain on the page continually being updated on the Program and department events and activities. As mentioned before, the Department realizes the importance of Alumni for the Program and the Department and more focused efforts are planned to engage Alumni in a more targeted manner.

4. How does the program engage alumni, practitioners, allied professionals and friends in activities such as a formal advisory board, student career advising, potential employment, curriculum review and development, fund raising, continuing education, etc.?

Alumni have been a main source in assisting in the development of the curriculum. Part of the reason why the program was changed from Landscape Design to Landscape Architecture is the opinion and

feedback on local and regional market needs received from FAFS alumni who have been successful in the landscape consulting and contracting business. During the transition period, alumni from FAFS (many of whom have become landscape contractors) provided insightful comments on the necessity to transition to a more professional program in line with international standards.

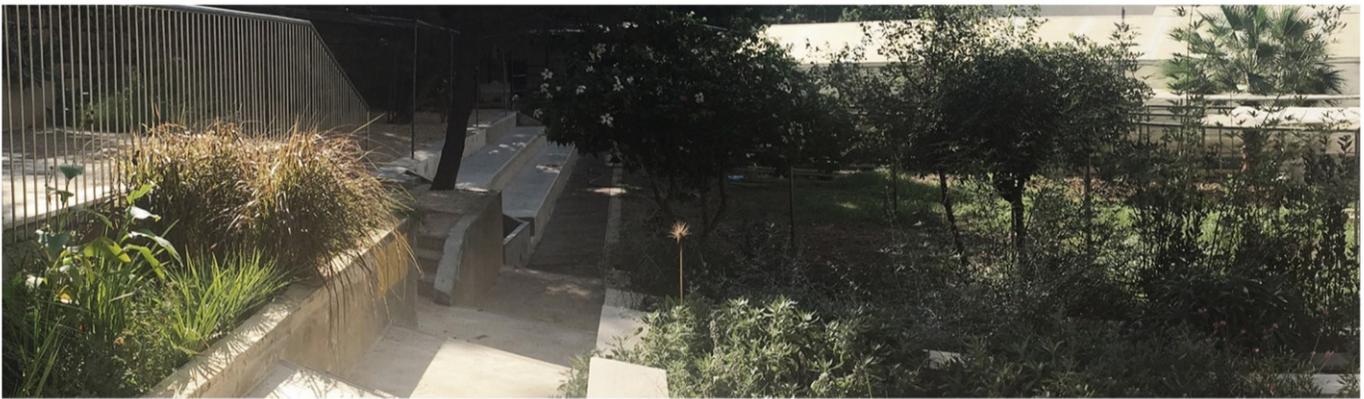
Alumni are also engaged in the program in several ways. Many alumni provide internship and employment opportunities for students through their connections to the Department. These opportunities are directly communicated to our students via email. We routinely invite alumni and practitioners as guest critics for studio presentations. Since most faculty attend and participate in these juries, the dialogue with alumni and practitioners becomes part of our ongoing discussion on course content and curriculum in support of program objectives.

The department seeks donations and funds from alumni. A recent success to the Department Chair's efforts is the 'Nehme Moujaess Student Award in Landscape Architecture' which is a yearly 1,000USD prize given to the capstone project that mostly embodies the mission statement of the program. It is a result of an endowed fund of \$25,000 from the FAFS alumni Nehme Moujaess.

These initiatives are mainly individual efforts and initiatives that the Program and the Department are aiming to formalize in the near future.

5. How does the program assess its effectiveness in engaging alumni and practitioners?

The department believes that the best measure of effectiveness in engaging alumni and practitioners is their willingness to continue their ongoing relationships with the Department. Until today, no request has been turned down for alumni to be involved as instructors, guest critics, invited lectures, as employers, and as mentors. We believe that with added initiatives, we can continue alumni effectiveness and have it formalized into an effective support system.



**FACILITIES, EQUIPMENT,
AND TECHNOLOGY** **7**

7. FACILITIES, EQUIPMENT, AND TECHNOLOGY

STANDARD 7: Faculty, students and staff shall have access to facilities, equipment, library and other technologies necessary for achieving the program’s mission and objectives.

INTENT: The program should occupy space in designated, code-compliant facilities that support the achievement of program mission and objectives. Students, faculty, and staff should have the required tools and facilities to enable achievement of the program mission and objectives.

NOTE: Updates for this section are included in Addendum G, p. 41-51.

A. Facilities

1. How are faculty, staff, and administration provided with appropriate office space?

The university allocates faculty offices to the department based on faculty head count. Not until recently that enough space was allocated for the program. Before January 2016, the LDEM Department was housed in the Faculty of Agricultural and Food Sciences building (Wing A). There was no enough space for faculty, student and staff to have their own spaces. The Department offices and studios were distributed along three floors. In January 2016, the LDEM department was relocated to its current building, Reynolds Hall. Now the Department is seen as one unit, housed in two floors of Reynolds Hall. All full-time faculty are provided with individual offices, located on one floor of the building. The offices comfortably accommodate a space for working, meeting with students, and storing books and materials supportive for research and creative work. The office space assigned to staff and administration personnel is determined based on their needs to interact with faculty, students and the department chair, their need to access and manage shared equipment for the department and conduct their work in collaborative manner. Part-time faculty members and research assistants typically share one or more offices. Each category of staff has a shared working space, working desks, lockers and a shared printer.

2. How are students assigned permanent studio workstations adequate to meet the program needs?

Prior to January 2016, every two classes shared one studio space, which made the studio experience uncomfortable and not customizable to the needs of every year’s needs. Now that the Department has relocated to Reynolds Hall, every class has its own studio space and each student has his/her own desk space. Students rotate the studios according to their year of study, allowing for the studios to be targeted for the needs of every class such as first year students needing drafting tables and higher years needing tables that are more fit for computer usage. The Program administrator and the Chairperson work closely with faculty who teach studio to assure adequate space is provided. Within these spaces, the students select and arrange their workstations. The studios have a maximum capacity of 28 students. This number is based on ensuring that each student has an individual workstation. Lockers are also available for students use in a nearby area.

3. How are facilities maintained to meet the needs of the program?

The maintenance and management of facilities is essential to the program's mission and educational objectives since these form the academic atmosphere and the space supportive of learning. The following spatial assets are supportive of the program's mission and function:

- Access to adequate natural light
- Close proximity between faculty offices and student working spaces
- Printing/Model-making Shop
- Student lounge
- Computer labs that are located in the FAFS building (3 mins walk)
- Basement trying to be acquired as exhibition space.

The University's Physical Plant staff members (electricians, painters, carpenters, plumbers, locksmiths, etc.) maintain all university facilities. Custodial Services team cleans the indoor space of the building and empties garbage. The University's Physical Plant has been responsive to custodial and maintenance issues that have arisen, and continues to allocate resources to mediate the dampness and water infiltration issues. The program, like any other entity in the university, follows a set procedure through requesting a maintenance work order through the oracle-centralized system. If no emergencies, response rate is usually within two days for maintenance requests.

4. Are facilities in compliance with ADA, life-safety, and applicable building codes?

The facility is not ADA approved as this is not mandated by building code, but the landscape studios and classrooms are located at the ground and first floors, which are accessible by both stairs and elevators. As for faculty offices, they are directly accessible on the first floor by both stairs and elevators.

5. If known deficiencies exist, what steps is the institution taking to correct the situation? (Provide documentation on reasonable accommodation from the institution's ADA compliance office and/or facilities or risk management office.)

The current building, Reynolds Hall, was originally planned as an office building with double-loaded corridor and narrow wings on both sides. While this resulted in some very minor deficiencies, such as narrow/long studios; there is not much that can be done about improving them. Some rooms are on the lower level of natural light. Internal lighting was increased above the student work area and above the pinning space in all studios. Windows barriers were removed as much as possible. The department is short on an exhibition and presentation space. The program administration is seeking to acquire this space as part of the LDEM and BLA program requirements.

At this stage, the university is undergoing a master planning process. The program and department may be allocated alternative and new space.

B. Information Systems and Technical Equipment and Facilities

1. How does the program ensure that students and faculty have sufficient access to computer equipment and software, workshops, wetlabs and work yards, as appropriate?

Faculty & Staff: Faculty and staff members are provided with computer equipment having specifications that meet their work requirements. A variety of software is also available to the community and additional licenses are secured based on the members' requirements whether for researching, teaching, or administrative work. In addition to access to physical computers, members can use additional resources and computing power:

HPC - High Performance Computing at AUB aggregates computing power in a way that delivers much higher performance than a typical desktop computer or workstation, hence making it possible to

solve complex problems that require intensive computations. Research Labs and vLabs support teaching and research on virtual or physical machines, remotely or in-person, to ensure the smooth progress of research activities. For more information about the IT services please check the website: <https://www.aub.edu.lb/it/Pages/default.aspx>

Students: The Department and the University provide access to fully equipped computer labs dedicated for teaching and learning. The Faculty has funded a fully equipped Computer Lab (located in the FAFS building, Wing A), and LDEM has funded a Plotter (A0 size plotter) and a 3D printer, which are dedicated to support the students' activities. Lab computers have up-to-date software and operating systems and they also feature special software for statistical analysis, 2D and 3D computer aided design, image-editing, graphic design, geographic information systems, and desktop publishing software. Examples include: SPSS, AutoCAD, Revit, Rhino, SketchUp Pro, ArcGIS, and Adobe Creative Cloud software.

Printing services are available across campus where network printers and photocopiers are available. The department student lounge at Reynolds Hall and the faculty's main computer lab have printers for student use only.

The campus wireless network is available to all AUBnet, Eduroam and Guest account holders. Active students, faculty and staff members may connect to the AUBdot1X wireless service and this is beneficial given that most of the students have their own personal laptops and devices.

Hardware and Equipment List:

Shared Computer lab location: (Faculty of Agricultural and Food Sciences - Wing A – Room 209) includes the following Hardware & Equipment as listed below:

a. Computers

Model	Nb.
LENOVO ThinkCentre M910sdesktop computers including the instructor PC	28

b. Monitors

Model	Nb.
LENOVO ThinkVision T22i-10 21.5"	28

c. Projector

Model	Nb.
NEC UM-301W: Ultra-Short-Throw Projector, 3LCD Technology WXGA projector 3000 lumens, VGA I/O; 2 HDMI; Audio In/out; (RS-232);RJ45; USB, Adjustable Wall Mount.	1

d. Printers

Model	Nb.
Printers for Students' use: HP LaserJet P3015DN and Kyocera FS 4100DN	2

e. Software

ArcGIS: 10.6.1.9270	
SPSS: 25	Chrome: 77.0.3865.120
	Microsoft Office: 16.0.4849.1000
AutoDesk: 0.49.0.0 2018	Adobe Reader
	EndNote

Department Equipment:

Faculty and staff members have access to computers and printers in their offices. The department has the following list of shared equipment that are online and accessible to all faculty and staff 24/7.

Shared by offices and Students	New Workshop/printing space
Network Advanced Konica printing machine (for faculty, staff, research assistants and graduate assistants use)	A0 plotter
Network Advanced Samsung printing machine (for faculty, staff, research assistants and graduate assistants use)	3D model maker
Standalone Kyocera photocopy machine (students use only, paid, 3 rd party management)	A0 size Wood Laser Cutter

2. What are the program’s policies on the maintenance, updating, and replacement of computer hardware and software and other technical tools such as GPS, drones, water-sampling kits, and cameras, as appropriate?

The department administrative staff coordinates with University’s IT regarding the maintenance of the hardware to ensure the proper functioning of equipment. Particularly computers are replaced based on the “Computer Replacement Policy” shared on IT’s website [here](#).

The software upgrades and renewals are coordinated with the University’s IT as well. Imaging to update the software is performed at the end of every academic year or more often if necessary.

The Department’s policy for updating/replacing equipment and acquiring/upgrading software is determined based on need and available funding. This policy is coordinated by the faculty and the Department Chair. In general, computers are updated on a regular basis, on average every 4 to 5 years as per the “Computer Replacement Policy”. All students have their own laptops which are connected to the university wireless network.

The department’s students also have access to an all-in-one Printer/Scanner/Photocopier, an A0 size Plotters and a 3D printer. These are maintained directly by the LDEM department and not by the Faculty (FAFS) IT. The Department’s policy for updating/replacing equipment and acquiring/upgrading software is determined based on need and available funding.

3. What are the hours that the computer lab and workshops (if applicable), and studios are open to students / faculty?

Studios are open 24/7, even during holidays and vacation after securing permission of the University’s Protection Office in order to access the building. The building is guarded by the Protection Office allowing access to safe working place. Regular opening hours of the FAFS Computer Lab are from 7:30AM to 12 midnight. Extended opening hours may apply during reading period/exams upon special approval. Eligible students, faculty members, and staff can access the room by swiping their AUB ID cards thus validating their access permissions through a dedicated access control system. As for the computers, active directory permissions apply – only FAFS active students can login to the computers and only eligible AUB instructors and staff can login to the instructor computer.

4. How does the program determine if these times are sufficient to serve the needs of the program?

The BLA Program Director and Chairperson, along with the administrative staff have frequent formal meetings and informal conversations with students regarding a range of subjects including their access needs to the building and the Computer Lab. It is through these meetings and subsequent feedback from students that the department determines if the opening times are sufficient to serve the students and the program's needs. For example, computer lab time was recently increased until 12am as a result of such a meeting.

In the Students survey conducted in 2019, when students were asked "Is the number of Computer Labs Access Hours Sufficient for your learning needs?" Students responded with 68.5% agreement.

Figure 11 shows the results of this question. Please Refer to Volume 3, Appendix 24 (Students Survey 2019).

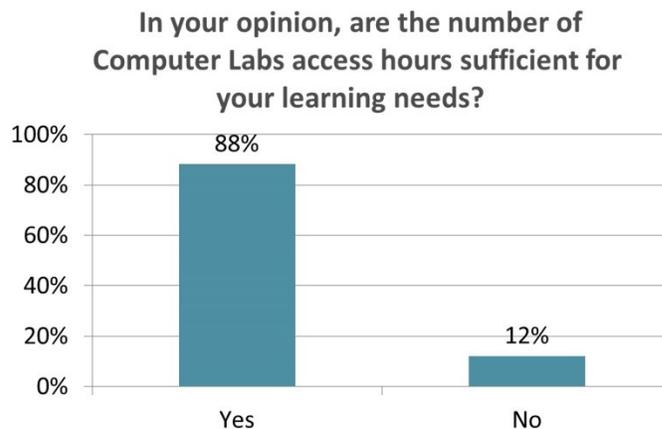


Figure 11: Overall satisfaction of computer labs access hours by current students (AY18-19)

5. How does the program assess the adequacy of equipment needed to achieve its mission and objectives?

The faculty as a whole is responsible for assessing the adequacy of equipment needed to achieve its mission and objectives. As equipment and software become obsolete or fail, then the program administrator and chairperson work with the faculty and department to determine how a replacement will be funded and what the replacement should be in coordination with IT guidelines. Additionally, the Department surveys the faculty's requirements each academic year to determine software and hardware needs so they can be made available timely. New large item equipment is usually included in the capital budget and agreed upon a year prior to expenditure.

C. Library Resources

1. What traditional and digital library resources are available to students, faculty, and staff?

The University Libraries consist of: Nami Jafet Memorial Library as the main library; and the following subject libraries: the Engineering and Architecture Library, the Saab Memorial Medical Library, and the Science and Agriculture Library, with its annex library at the Advancing Research Enabling Communities Center (AREC) in the Beqa'a Valley. The Libraries have a long history in Lebanon and in the region that is reflected in the rich collections that they own. All these libraries are accessible to BLA students.

Jafet Library, being the main library on campus, is located on the upper campus and houses the arts, humanities, business, mathematics, computer sciences, geology, and social sciences collections. The Science & Agriculture Library is located on the second floor of the Agriculture Building (lower campus). The subject library houses the landscape architecture, biology, chemistry, physics, general science, agriculture, nutrition, and food science collections. The Engineering & Architecture Library is located in lower campus and houses the engineering, computer science, and architecture collections. The third specialized library, Saab Medical Library serves as a gateway to the world's electronic and print biomedical information, assisting the AUB Medical Center, the Faculty of Medicine including School of Nursing, Faculty of Health Sciences and all other AUB Faculties, in accomplishing their missions and goals. The subject libraries related to the field of Landscape Architecture are the Science and Agriculture and the Engineering and Architecture Libraries.

Being the central library on campus, Jafet is home to a renovated e-classroom equipped with advanced technology aiming at providing an interactive class environment for instruction and workshop sessions; a recently renovated computer lab; quiet study spaces; group study rooms.

Books are housed in stacks on all five floors of the Library; Current issues of serials are displayed on open shelves in the Serials Reading Room, 1st floor, in Jafet Library; Bound volumes of serials are kept in the stacks; Electronic journals are accessible from the library webpage; The general print reference collection is shelved in the Reference Department, 2nd floor; Audiovisual materials (DVD/CD-ROMs, microforms, videos, etc.) are shelved in the Audiovisuals Room (access is handled by the Reference Department); Readers/printers are in Audiovisuals Reading Room/Computer Lab, second floor). Electronic Reference sources are accessible from the library webpage; and Course Reserve materials are in the Reserve Reading Room, Jafet Library, and 3rd floor. The use of these items is limited to members of the AUB community. Some of the reserve materials are also available online for access by students registered in the course.

The Archives & Special Collections Department houses manuscripts, digital images, photographs, posters, maps and archival materials (AUB archives, theses, projects, closed area books and serials, manuscripts, photographs, posters, and maps); They are located in Jafet Library, 1st floor and are consulted on the library premises.

Jafet Library provides to its patrons (AUB, community, scholars, researchers, etc.) digitization services, digital preservation, digital scholarship, and other related digital services. This allows patrons to access data currently found on obsolete media by converting analog material to a more accessible digital format. The two primary purposes of digitization are to allow easier access to scholars through digital media and to preserve the digitized material for long term access. The digital aspect of the content will open the door to digital scholarship and other services provided by the library. The Digital Scholarship and Preservation Services Department is located on Jafet Library's first floor.

The University Libraries' collections consist of 425,000 print books and 5,500 print periodicals (2,000 in Arabic) in around 157,000 volumes. The Libraries also own 1,343,000 electronic books and provide access to 144,000 electronic periodicals and 800 journals on microfilm (600 in Arabic). The Libraries currently subscribe to 350 online databases, which provide access to millions of articles and books from online and print sources. There are about 1,000,000 audiovisual items of all formats, the majority of which are microforms of a substantial number of local and regional journals and newspapers going back to the late 19th and early 20th centuries. The Archives and Special Collections contain 1,200 linear feet of archival material, 1,800 manuscripts, most of which are in Arabic and some are uniquely and/or rarely held resources, 10,000 theses, projects, and dissertations

going back to the early 20th century, 11,500 posters, 1,200 postcards, and 2,000 maps, as well as 100,000 photographs (including over 20,000 negatives), of a unique and historical nature. These print and electronic collections are developed and enriched on a regular basis to support the academic, research and patient care programs of the University and its medical center.

The University Libraries employ 36 professional staff (majority with a master's degree or higher), 53 support staff (34 with college degrees), and 24 student assistants. More than 2 million people visit the University Libraries per year, and over 650,000 visit its main website. The University Libraries circulate or renew approximately 29,000 per year and provide group and individual instruction sessions to over 7,000 students and faculty (many attending more than one session). In addition to visiting the University Libraries for resources and research help, students use the library to study and collaborate. The University Libraries have around 1,000 seats and 116 computers. All users may access the online library catalog at <http://library.aub.edu.lb/> from any computer on or off-campus to search the collection of books, periodicals, microfilm/fiches, theses, projects, etc., available at AUB. AUB users can access a variety of electronic resources through the Internet or on CD-ROM from the library webpage <http://www.aub.edu.lb/ulibraries>. The use of electronic resources is limited to current members of the AUB community with a valid AUBnet account (AUB email account).

The University Libraries contribute to teaching by developing the library's collection of print and electronic resources to support the curriculum and enhance the learning opportunities, through acquisitions, subscriptions, donations and exchange, filling gaps through collection assessments to improve its strengths and weaknesses; collaborating with library liaisons regarding their needs and/or for new programs (e.g. Master's and PhD programs, Food Security, etc.); providing access to documents not held by the university libraries through ILL/DDS materials (such as reports, theses and dissertations, archival materials, etc.) in support of various courses offered at various programs, departments, schools and centers; providing e-reserve services; organizing exhibits showcasing the libraries' collection; developing course-specific library sessions to instruct users on how to find scholarly materials, helping faculty to identify teaching materials, aiding students to find appropriate sources and cite them correctly and completely; through live integrated library sessions in collaboration with the faculty, one-on-one basis or upon individual's request, and creating easy to understand online research guides. The Libraries' contribution to teaching also lies in the numerous information literacy classes prepared and delivered by UL librarians, and in partnership with other AUB departments.

2. How does the program determine if the library collections are adequate to meet its needs?

The proximity of the Science & Agriculture Library to the LDEM Department makes it convenient for faculty and students to browse physically the collection. The faculty members then can make recommendations and place online orders for publications that might be useful to faculty research and to student instructional and research needs. In addition, the Science & Agriculture Librarian suggests what could be acquired in order to strengthen the library holdings and hence fills any gaps in the existing collection. Priority is given to materials that are needed for course reserve.

In addition, a liaison faculty member, Dr. Yaser Abunnasr, coordinates allocated yearly budget of 500 USD for the program to purchase books.

In the recent User Satisfaction Survey (Spring 2019), when users were asked about the level of satisfaction with library collections, facilities and services, there was moderate to good satisfaction ranging from 37% to 83%, means 2.8-4.0, higher than the previous survey. The lowest satisfaction was with 'library study space' and highest on 'electronic resources' followed by journal and book collection and ease of using library's search engine.

3. How do instructional courses integrate the library and other resources?

The Department makes use of the various core journal titles that the University Libraries subscribe to in the field of landscape architecture, including Journal of Landscape Architecture, Landscape Journal, Landscape and Urban Planning, Landscape Research, and Landscape and Ecological Engineering. Faculty and students have access to notable online collections and databases including the Art Full Text, Artstor, Arts and Humanities Citation Index, Avery Index to Architectural Periodicals, and various multi-disciplinary databases, including Academic Search Complete, JSTOR, ProQuest Central, ScienceDirect, Web of Science and Scopus.

To facilitate the integration of library resources into LDEM courses, the faculty members place items on reserve for student use. Some of these courses include:

LDEM 207 - Landscape Architecture History I

LDEM 208 - Landscape History II

LDEM 222 - Studio III: Landscape Planting Design

LDEM 242 - Studio VIII: Landscape Capstone Project II

LDEM 246 - Studio VI: Natural Landscape Design

LDEM 247 - Site Engineering I

LDEM 260 - Contemporary Issues in Landscape Architecture

LDEM 264 - Interior Landscaping

LDEM 270 - Ornamental Plants for Dry Land

LDEM 290 - Professional Practice

LDEM 630 - Natural Resource Management

In addition, courses such as LDEM 260, LDEM 241, and LDEM 242 conduct research sessions in the library to familiarize the students with research methods, citation techniques, and database searches.

Subject research guides are developed by librarians to support the various disciplines. Course-specific guides may be created on-demand to supplement the curriculum specific instruction. General and subject-specific library instruction sessions may be scheduled by faculty. In addition, students are encouraged to schedule one on one sessions with librarians to obtain more focused research assistance. Other instructional and research help services include LibChat, walk-ins, reference desk, help via phone and e-mails. The Library's Ask a Librarian page at <http://aub.edu.lb.libguides.com/c.php?g=276457&p=1843059>, linked from the University Libraries home page, outlines the various research help options. New faculty members and research assistants are encouraged to receive an orientation to the library resources.

4. What are the hours that the library is open to students and faculty?

During the fall and spring semesters, Jafet Library and Saab Medical Library are open from 7:30am till midnight Monday through Friday, from 8 am to 8 pm on Saturdays, and from 12 noon till 12 midnight on Sundays; Science & Agriculture Library is open from 7:30 am till 9 pm Monday through Friday, from 8 am till 5 pm on Saturdays, and remains closed on Sundays, while Engineering & Architecture Library opens 8 am till 5 pm Monday through Friday.

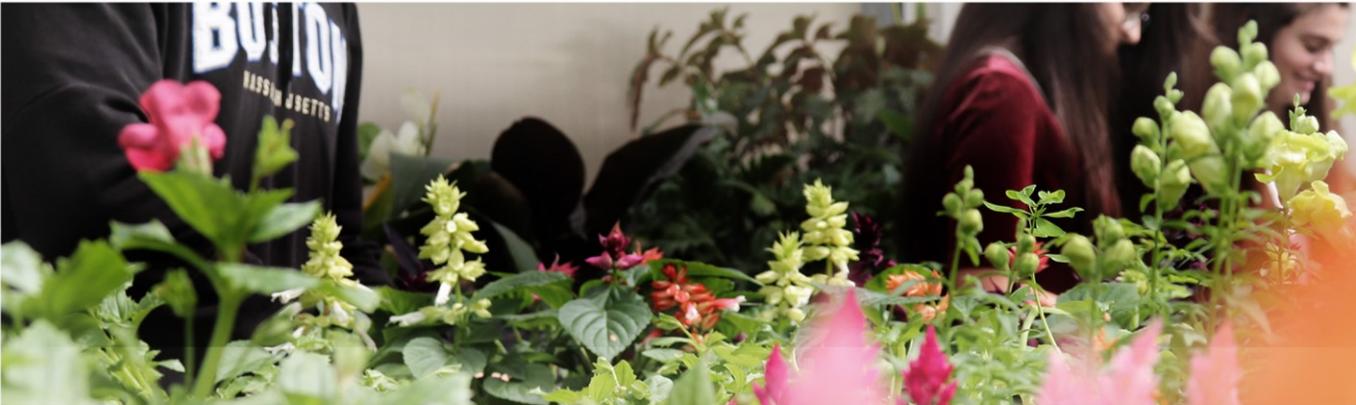
During the summer, Jafet Library is open from 7:30 am till 9 pm Monday through Friday, from 8 am to 5 pm on Saturdays, and 12 noon till 9 pm on Sundays; Saab Medical Library maintains regular opening hours; Science & Agriculture Library and Engineering & Architecture Library are open from 7:30 am till 3 pm Monday through Friday, and remain closed on Saturdays and Sundays. During reading and exam periods, Jafet Library opens 24 hours (Science & Agriculture Library opens till midnight).

5. How does the program determine if these hours are convenient and adequate to serve the needs of faculty and students?

The program relies on feedback mainly from students to determine if the library hours are convenient and adequate. The recent User Satisfaction Survey administered in spring 2019 affirmed that the opening hours are convenient and adequate (68% very satisfied while 5% very dissatisfied).

6. How does the program assess its library resources?

The program relies mainly on students and faculty to provide feedback on resource availability and gaps in the collection. The LDEM has a library faculty liaison responsible for most communication with the library. The liaison solicits input from faculty members and encourages them to order publications without budget restrictions, and the librarian, in turn, notifies faculty of new additions to the library collection. These faculty-librarian interactions assist significantly in maintaining and building a relevant collection. In addition, this coordination work is carried out in regard to e-library resources.



ADDENDA

ADDENDA

Addenda information is considered important to giving a full understanding for the program.

A. Program Details

B. Curriculum / Syllabi

C. Student Information

D. Alumni Information

E. Faculty Information

F. Facilities Information

G. COVID-19 and Other Crises Updates (new March 2021; provided separately)

Accompanying Information:

Visit Schedule (if available)

Visit Map

Include a one-page map showing the locations (labelled) of buildings, meeting locations, lodging, library, and program resources into the SER making it easily accessible by Visiting Team Members during the visit.



Marked in Red is the AUB Reynolds Hall which houses all LDEM studios, classes, offices, and resources.

Marked in Blue is the AUB Agriculture building which houses the Science and Agriculture Library as well as the Computer Labs available to LDEM students.

A. PROGRAM DETAILS

Faculty Resources

1. Budgeted Faculty Resources: TOTAL

	2018/ 2019	2017/ 2018	2016/ 2017	2015/2016	2014/ 2015	2013/ 2014
Professors	2 (tenured)	2	2	2	2 + 1 visiting	2 + 1 visiting
Associates	1	1	0	1	1	1
Assistants	3 + 1 visiting	3 + 1 visiting	4+1 visiting	4	3	2
Instructors/ lecturers – tenure track	NA	NA	NA	NA	NA	NA
Guest faculty members/speaker	4	10	5	2 + speakers/IFLA conference	9	4
Year-long appointments	5 + 1 associate to the department	5 + 1 associate to the department	4 + 1 associate to the faculty	7 + 1 associate to the faculty	7 + 1 associate to the faculty	6 + 1 associate to the faculty
One-semester appointments	9	10	11	12	7	5+ 1visiting lecturer
Speakers	NA	NA	NA	NA	NA	NA
Endowed positions	NA	NA	NA	NA	NA	NA
Undergrad teaching assistantships	NA	NA	NA	NA	NA	NA
Graduate teaching assistantships (for graduate. ECOM Program)	8 (Fall) + 14 (Spring) + 2 (Summer)	8 (Fall) + 6 (Spring) + 2 (Summer)	4 (Fall)+ 5 (Spring) +2 (Summer)	5 (Fall) + 3 (Spring)+ 1 (Summer)	5 (Fall)+ 4 (Spring) +3 (Summer)	5 (Fall) + 5 (Spring) +1 (Summer)
Undergrad research assistantships	NA	NA	NA	NA	NA	NA
Graduate research assistantships (sponsored by your institution).	NA	1	3	NA	1	NA
Graduate research assistantships (sponsored by outside sources)	6	4	2	NA	NA	1
Other: Instructors/lecturers – non-tenure track	1 full-time instructor	1 full-time instructor	1	1	1 instructor + 1 lecturer	1 instructor + 1 lecturer

2. Budgeted Faculty Resources: MALE

	2018/ 2019	2017/ 2018	2016/ 2017	2015/ 2016	2014/ 2015	2013/ 2014
Professors	1	1	1	1	1 + 1 visiting	1 + 1 visiting
Associates	1	1	0	1	1	1
Assistants	1	1	2	2	2	1
Instructors/lecturers – tenure track	0	0	0	0	0	0
Guest faculty members/speakers	3	7	4	1	6	3
Year-long appointments	3	3	2	5	4	4
One-semester appointments	2	3	6	4	3	3
Speakers	NA	NA	NA	NA	NA	NA
Endowed positions	NA	NA	NA	NA	NA	NA
Undergrad teaching assistantships	NA	NA	NA	NA	NA	NA
Graduate teaching assistantships	1 (Spring 2018/ 2019)	1 (Spring 2017/ 2018)	2 (Spring) +1 (Summer)	3 (Fall)+ 2 (Spring)+ 1 (Summer)	2 (Fall)+ 2 (Spring)+ 1 (summer)	4 (Fall)+ 2 (Spring)
Undergrad research assistantships	NA	NA	NA	NA	NA	NA
Graduate research assistantships (sponsored by your institution).	0	0	1	0	0	0
Graduate research assistantships (sponsored by outside sources)	0	1	1	0	0	0
Other: Instructors/lecturers – non-tenure track	0	0	0	0	0	0

3. Budgeted Faculty Resources: FEMALE

	2018/ 2019	2017/ 2018	2016/ 2017	2015/ 2016	2014/ 2015	2013/ 2014
Professors	1	1	1	1	1	1
Associates	0	0	0	0	0	0

	2018/ 2019	2017/ 2018	2016/ 2017	2015/ 2016	2014/ 2015	2013/ 2014
Assistants	2 + 1 visiting	2 + 1 visiting	2 + 1 visiting	2	1	1
Instructors/lecturers – tenure track	NA	NA	NA	NA	NA	NA
Guest faculty members/speakers	1	3	1	1	3	1
Year-long appointments	3	2	2 + 1 associate to the faculty	3 + 1 associate to the faculty	3 + 1 associate to the faculty	1 + 1 associate to the faculty
One-semester appointments	7	7	7	7	4	3
Speakers	NA	NA	NA	NA	NA	NA
Endowed positions	NA	NA	NA	NA	NA	NA
Undergrad teaching assistantships	NA	NA	NA	NA	NA	NA
Graduate teaching assistantships	8 (Fall 2018/ 2019) + 13 (Spring 2018/ 2019) + 2 (Summer 2018/ 2019)	8 (Fall 2017/ 2018) + 5 (Spring 2017/ 2018) + 2 (Summer 2017/2018)	4 (Fall)+ 3 (Spring)+ 1 (Summer)	2 (Fall)+ 1 (Spring)	3 (Fall)+ 2 (Spring)+ 2 (Summer)	4 (Fall)+ 3 (Spring)+ 1 (Summer)
Undergrad research assistantships	NA	NA	NA	NA	NA	NA
Graduate research assistantships (sponsored by your institution).	0	1	2	NA	1	NA
Graduate research assistantships (sponsored by outside sources)	6	3	1	NA	NA	1
Other: Instructors/lecturers – non-tenure track	1 instructor	1 instructor	1 instructor	1 instructor	2 (1 instructor+ 1 lecturer)	2 (1 instructor+ 1 lecturer)

4. Budgeted Faculty Resources: Race/Ethnicity

Record the race/ethnicity for faculty FTE resources committed to program under review.

	2018-2019	2018-2017	(2016-2017)	(2015-2016)	(2014-2015)	(2013-2014)
American Indian/ Alaska Native	NA	NA	NA	NA	NA	NA
Asian	NA	NA	NA	NA	NA	NA
Native Hawaiian/ Other Pacific Islander	NA	NA	NA	NA	NA	NA
Black / African American	NA	NA	NA	NA	NA	NA
Hispanic / Latino	NA	NA	NA	NA	NA	NA
White / Non-Hispanic	8 Full-time + 3.15 part-time (11.15)	8 Full-time + 2.65 part-time (10.65)	8 Full-time + 2.86 FTE part- time (10.86)	8 Full-time + 4.44 FTE part- time (12.44)	8 Full-time + 3.57 FTE part- time (11.57)	8 Full-time + 3.25 FTE part- time (11.25)
Mixed	NA	NA	NA	NA	NA	NA
Unknown	NA	NA	NA	NA	NA	NA
Totals	11.15 FTE	10.65 FTE	10.86 FTE	12.44 FTE	11.57 FTE	11.25 FTE

5. Budgeted Faculty Resources: FTE Allocation among Multiple Programs

For LA faculties engaged across multidisciplinary programs, illustrate the distribution of FTE resources of current faculty across those various programs.

	FTE LA Faculty Resources Applied to BLA/BSLA Program	FTE LA Faculty Resources Applied to MLA Program	FTE LA Faculty Resources Applied to non-LA Program(s)
	FTE LA Faculty Resources Applied to BLA/BSLA Program	FTE LA Faculty Resources Applied to MLA Program	FTE LA Faculty Resources Applied to non-LA Program(s)
Professors (Tenured/Tenure-track)	1.42 (tenured)	NA	0.58
Associate Professors (Tenured/Tenure-track)	0.67 (tenure-track)	NA	0.33
Assistant Professors (Tenured/Tenure-track)	4 (tenure-track)	NA	NA
Instructors/Lecturers (Tenured/Tenure-track)	NA	NA	NA
Professors (non-Ten./Ten.-track)	NA	NA	NA
Associate Professors (non-Ten./Ten.-track)	NA	NA	NA
Assistant Professors (non-Ten./Ten.-track)	NA	NA	NA
Instructors/Lecturers (non-Ten./Ten.-track)	1	NA	NA
Adjunct Faculty (non-Ten./Ten.-track)	NA	NA	NA
Sessional Faculty* (non-Ten./Ten.-track); see note below	3.15 FTE	NA	NA

(Definitions or explanations of categories, if needed, for the table to be added here.)

N.B:

- Sessional Faculty is understood as part-time faculty hired on a semester basis
- The numbers in the table reflect academic year 2018/2019.
- Tenure was reinstated at AUB effective 2017/2018. All full-time professorial rank faculty are eligible to apply for tenure track after transition period. Numbers in the table are for the academic year 2018/2019.
- The only current non-LA program offered by the department is the interdisciplinary Masters of Science in Environmental Sciences (Major: Ecosystem Management)

6. Budgeted Faculty Resources: Degrees

Record the number of degrees earned by current LA faculty.

	Undergrad degree in Landscape Architecture (BLA or BSLA)	MLA	Doctorate
Professors (Tenured/Tenure-track)	NA	NA	2
Associate Professors (Tenured/Tenure-track)	NA	1	1
Assistant Professors (Tenured/Tenure-track)	NA	4	4
Instructors/Lecturers (Tenured/Tenure-track)	NA	NA	NA
Professors (non-Ten./Ten.-track)	NA	NA	NA
Associate Professors (non-Ten./Ten.-track)	NA	NA	NA
Assistant Professors (non-Ten./Ten.-track)	NA	NA	NA
Instructors/Lecturers (non-Ten./Ten.-track)	NA	NA	NA
Adjunct Faculty (non-Ten./Ten.-track)	NA	NA	NA
Sessional Faculty (non-Ten./Ten.-track)	4	2	2
Totals	4	7	9

N.B: The number of degrees indicated in the above table include all faculty members of the department (full-time and part-time). For each faculty member, all degrees he or she hold is recorded (BLA, MLA and PhD)

Effective 2017/2018, all full-time professorial rank faculty will be eligible to apply for tenure track. Numbers in the table are for the current academic year 2018/2019.

7. Other Budgeted Resources:

Record the other budgeted resources (by FTE or by budgeted dollars) committed to program under review.

	2018-2019	2017-2018	(2016-2017)	(2015-2016)	(2014-2015)	(2013-2014)
Guest Speakers or Critics	NA	NA	1 URB visiting scholar shared with another department for 4 days (on URB* fund which covers round trip economy ticket as well as meals and lodging during guest stay)	NA	1 URB visiting scholar for 1 week; days (on URB fund which covers round trip economy ticket as well as meals and lodging during guest stay)	NA
Endowed Positions	NA	NA	NA	NA	NA	NA
Undergraduate Teaching Assistantships	NA	NA	NA	NA	NA	NA
Graduate Teaching Assistantships (for the graduate ECOM program)	100,040 USD (equivalent to a total of 24 GTAs)	67,156 USD (equivalent to 16 GTAs)	56,851 USD (equivalent to 11 GTAs)	39,029 USD (equivalent to 9 GTAs)	62,916USD (equivalent to 12 GTAs)	44,462USD (equivalent to 11 GTAs)
Undergraduate Research Assistantships	NA	NA	NA	NA	NA	NA
Graduate Research Assistantships (sponsored by the institution)	NA	2,340 USD (1 GRA)	3	NA	2	NA
Graduate Research Assistantships (sponsored by outside sources)	13,000 USD (equivalent to 6 GRAs)	8,800 USD (equivalent to 4 GRAs)	4,000 USD (equivalent to 2 GRAs)	NA	3,200 USD (equivalent to 1 GRA)	2,000 USD (equivalent to 1 GRA)
Other (explain): Instructors/lecturers – non-tenure track	30,000 USD (1 full-time instructor, non-tenure track)	30,000 USD (1 full-time instructor, non-tenure track)	30,000 USD (1 full-time instructor, non-tenure track)1	30,000 USD (1 full-time instructor, non-tenure track)1	Around 66,000 USD (1 full-time instructor + 1 full-time lecturer)	Around 66,000 USD (1 full-time instructor + 1 full-time lecturer)

(Definitions or explanations of categories, if needed, for the table to be added here.)

B. CURRICULUM

1. Required / Elective Courses

Total Program Credit Hours

Type of Credit Hours	Cr. Hrs.
Total Units/Credit Hours required to graduate	144
Total Units/Credit Hours required by the LDEM Department to graduate	108
General Education Units / Credit Hours required to graduate	9
Elective Units / Credit Hours required to graduate	27

Total Required Course Credit Hours

Required Courses	Cr. Hrs.
Landscape Architecture - LDEM 202 – LDEM200 — LDEM207 – LDEM216 – LDEM222 – LDEM204 – LDEM208 – LDEM263 – LDEM228 – LDEM246 – LDEM265 – LDEM241 – LDEM260 – LDEM242	59
Architecture	0
City & Regional Planning	0
Natural Sciences – LDEM 214 – LDEM 217 – LDEM 218	9
Horticulture - LDEM217 – LDEM211 – LDEM210– LDEM219 - LDEM221	9
Engineering LDEM291 – LDEM247 – LDEM248 - LDEM249 – LDEM231 -	16
Art or Design LDEM201	4
Computer Applications/Technology - LDEM252 - LDEM251	6
Professional Practice - LDEM290 – LDEM292	5
Other	N/A

Total Elective Course Credit Hours

Group or Controlled Elective Choices	Cr. Hrs.
Natural Sciences	3
Social Sciences	6
Humanities	6
English, Speech, Writing	6
Arabic	3
Faculty of Agriculture & Food Sciences Electives	9
Quantitative thought Elective	3

2. Typical Program of Study

Identify length of term/semester and relation of contact hours to unit/credit hours. List courses (instructional units) for a typical program of study, using the format given below.

First Year					
Fall Semester	Cr.	Spring Semester	Cr.	Summer Semester	Cr.
LDEM 202 Studio I: Landscape Design Fundamentals	4	LDEM 216 -Studio II: Landscape Garden Design	4	LDEM 252 Computer Aided Design	3
LDEM 200 Landscape Technical Drawing	4	LDEM 201 - Landscape Descriptive Drawing	4		
LDEM 214 Landscape and Geomorphology	3	LDEM 217 -Soils in the Landscape	3	LDEM 219 Plant Material I	2
LDEM 207 - Landscape Architecture History I	3	LDEM 291 -Surveying and Base Plan Development	3		
ENGL 203 - Academic English (GE)	3	LDEM 211 - Landscape Horticulture	3		
Total Credits	17		17		5

Second Year					
Fall Semester	Cr.	Spring Semester	Cr.	Summer Semester	Cr.
LDEM 222 Studio III: Landscape Planting Design	4	LDEM 204 -Studio IV: Cultural Landscape Design	6	LDEM 249 - Site Engineering III - Design Implementation	4
LDEM 210 Botany and Plant Ecology	3	LDEM 208 - Landscape Architecture History II	3		

LDEM 247 Site Engineering I	3	LDEM 248-Site Engineering II - Construction Material	3	LDEM 231 Sustainable Water Management Techniques	3
LDEM 221 Plant Material II	1	LDEM 263 Landscape Appreciation and Site Analysis	3		
Humanity Elective (GE)	3				
Natural Sciences Elective (GE)	3				
Total Credits	17		15		7

Third Year					
Fall Semester	Cr.	Spring Semester	Cr.	Summer Semester	Cr.
LDEM 228- Studio V: Urban Landscape Design	6	LDEM 246 - Studio VI: Natural Landscape Design	6	LDEM 292 Internship (Practicum)	2
LDEM 251- Geographic Information System (GIS)	3	LDEM 265- Landscape Management	3		
LDEM 218- Landscape Ecology	3	LDEM 290- Professional Practice	3	FAFS Elective	3
Social Science Elective (GE)	3	Quantitative Thought Elective	3		
Total Credits	15		15		5

Fourth Year			
Fall Semester	Cr.	Spring Semester	Cr.
LDEM 241 - Studio VII: Landscape Capstone Project I	4	LDEM 242- Studio VIII: Landscape Capstone Project II	6
LDEM 260 - Contemporary Issues in Landscape Architecture	3	Arabic Elective	3
FAFS Elective (GE)	3	FAFS Elective	3
Social Science Elective (GE)	3	Humanities Elective	3
ENGL 204 (GE)	3		
Total Credits	16		15

3. Landscape Architecture Courses Offered During Past Academic Year¹²

List all landscape architecture courses offered during the past academic year and who taught each. Course numbers must correspond with those used in other sections of this report. Course descriptions should be in the Appendix — not in this section.

The table below shows all landscape architecture courses offered during the past academic year (AY 2018-2019) and who taught each.

Course Title	Course Nb.	Instructor(s)	Cr. Hrs.	Contact Hrs./Wk.	# of Students
FALL 2018/2019					
Landscape Technical Drawing (LDEM I)	LDEM 200	Wissam Melhem (PT); Joelle Baroud (PT)	4	8	10
Studio I: Landscape Design Fundamentals (LDEM I)	LDEM 202	Beata Dreksler (coordinator); Ramzi Mezher (PT)	4	8	10
Landscape Architecture History I (LDEM I)	LDEM 207	Nayla Al-Akl	3	3	23
Botany and Plant Ecology for Landscape Architects (LDEM II)	LDEM 210	Monika Fabian	3	3	20
Landscape and Geomorphology (LDEM I)	LDEM 214	Rami Zurayk	3	3	10
Landscape Ecology (LDEM III)	LDEM 218	Yaser Abunnasr	3	3	13
Plant Material II (LDEM II)	LDEM 221	Monika Fabian	1	3	19
Studio III: Landscape Planting Design (LDEM II)	LDEM 222	Nayla Al-Akl (coordinator); Monika Fabian	4	8	19
Studio V: Urban Landscape Design	LDEM 228	Mehran Madani (coordinator); Dima Rachid (PT)	6	12	15

¹² Annual report curriculum Question 14

Course Title	Course Nb.	Instructor(s)	Cr. Hrs.	Contact Hrs./ Wk.	# of Students
Water and the Environment (FAFS Elective/ Natural Sc. GE Elective)	LDEM 230	Nadim Farajalla (Director of Climate Change & Environmental Program at Issam Fares Institute)	3	3	60
Studio VII: Landscape Capstone Project I (LDEM IV)	LDEM 241	Maria G. Trovato (coordinator); Balsam El-Ariss (PT), Mona Khechen (PT)	4	8	22
Site Engineering I (LDEM II)	LDEM 247	Beata Dreksler	3	3	19
Geographic Information System (LDEM III)	LDEM 251	Rania Abboud (PT)	3	4	17
Contemporary Issues in Landscape Architecture (LDEM IV)	LDEM 260	Mehran Madani	3	3	21
Spatial Structure and Movement (FAFS Elective)	LDEM 261	Cornelia Krafft (PT)	3	3	10
Ornamental Plants for Dry Landscapes	LDEM 270	George Battikha (PT)	3	3	17
SPRING 2018/2019					
Landscape Descriptive Drawing	LDEM 201	Noura Badran (PT)	4	8	12
Studio IV: Cultural Landscape Design	LDEM 204	Beata Dreksler (coordinator); Salwa Sabbagh (PT)	6	12	19
Landscape Architecture History II	LDEM 208	Nayla Al-Akl	3	3	19
Landscape Horticulture	LDEM 211	Monika Fabian	3	2 hours lecture + 3 hours lab	11

Course Title	Course Nb.	Instructor(s)	Cr. Hrs.	Contact Hrs./ Wk.	# of Students
Studio II: Landscape Garden Design (LDEM I)	LDEM 216	Ramzi Mezher*	4	8 hours	9
Soils in the Landscape	LDEM 217	Rami Zurayk (Lecture) and Monika Fabian (Lab)	3	2 hours lecture + 3 hours lab	9
Studio VI: Natural Landscape Design (LDEM III)	LDEM 246	Yaser Abunnasr, Sara Hage	6	12	14
Water and the Environment (this course is only offered as a FAFS elective or GE Natural Sciences course to non-LDEM students)	LDEM 230	Nadim Farajalla*	3	3	67
Studio VIII: Landscape Capstone Project II (LDEM IV)	LDEM 242	Maria G. Trovato (coordinator); Mona Khechen (PT); Balsam El-Ariss (PT)	6	12	22
Site Engineering: Construction Material	LDEM 248	Beata Dreksler	3	4	19
Healing Gardens: Theoretical Perspectives and Applications (FAFS Elective/Social Sc. GE Elective)	LDEM 262	Salma Talhouk	3	3	17
Landscape Appreciation and Site Analysis	LDEM 263	Maria Gabriella Trovato	3	3	21
Interior Landscaping	LDEM 264	George Battikha*	3	3 hours lecture +2 hours lab	9
Landscape Management	LDEM 265	Salma Talhouk	3	3	14
Professional Practice	LDEM 290	Beata Dreksler	3	3	15
Surveying and Base Plan Development	LDEM 291	Halim Nader*	3	5	11

Course Title	Course Nb.	Instructor(s)	Cr. Hrs.	Contact Hrs./Wk.	# of Students
Natural Resource Management (Graduate)	LDEM 630	Rami Zurayk	3	3	17
Green Infrastructure for resilient Landscapes and Cities (Graduate)	LDEM 302	Yaser Abunnasr	3	3	9
SUMMER 2018/2019					
Computer-Aided Design	LDEM 252	Rania Abboud (PT)	3	9	8
Plant Material I	LDEM 219	Monika Fabian	2	8	7
Site Engineering III – Design Implementation	LDEM 249	Beata Dreksler	4	5	19
Sustainable Water Management Techniques	LDEM 231	Beata Dreksler; Wissam Melhem (PT)	3	6	16
Internship (Practicum)	LDEM 292	Beata Dreksler	2	-	14

*part-time faculty

C. STUDENT INFORMATION

1. Overview

Include only full-time students recorded as majors in the program being reviewed for the last five years.

Academic Year	In-State		Out-of-State		Foreign		TOTAL	
	Male	Female	Male	Female	Male	Female	Male	Female
Current Year	10	35	NA	NA	2	8	12	43
1 Year Ago	13	40	NA	NA	5	9	18	49
2 Years Ago	12	51	NA	NA	4	14	16	65
3 Years Ago	11	54	NA	NA	2	17	13	71
4 Years Ago	12	73	NA	NA	5	16	17	89

2. Ethnic Group/Diversity (AY 2018-2019)

Include only full-time current landscape architecture students.

 N/A % American Indian N/A % Hispanic
 N/A % Black (non-Hispanic) 100 % Caucasian
 N/A % Asian or Pacific Islander N/A % Other

3. Applications

	2018-2019	2017-2018	2016-2017	2015-2016	2014-2015
Total number of applications	214	286	243	217	440
Applications from males	56	96	63	64	159
Applications from females	158	190	180	153	281

4. Enrollments

	2018-2019	2017-2018	2016-2017	2015-2016	2014-2015
Total enrollment	67	81	84	106	107
Males	18	16	13	17	17
Females	49	65	71	89	90

5. Student Ethnic Backgrounds

	Caucasian	African-	African Descent	Asian/	Hispanic	Native American	Other
Total	55	N/A	N/A	N/A	N/A	N/A	N/A
Males	12	N/A	N/A	N/A	N/A	N/A	N/A
Females	43	N/A	N/A	N/A	N/A	N/A	N/A

6. Number of degrees per year

	2018-2019	2017-2018	2016- 2017	2015- 2016	2014- 2015	2013- 2014
Total	21	21	24	21	25	21

7. Graduation Rate

	2018-2019	2017-2018	2016-2017	2015-2016	2014-2015
Total	92%	81%	78%	53%	91%

8. Retention Rate

	2018-2019	2017-2018	2016-2017	2015-2016	2014-2015
Total	92%	92%	88%	77%	100%

D. ALUMNI INFORMATION

1. Degrees Awarded

Tabulate the number of degrees awarded in the present year (estimated) and for the years since the last SER.

Academic Year	Males	Females	TOTAL
AY 2018-2019	6	16	22
AY 2017-2018	1	20	21a
AY 2016-2017	4	24	28
AY 2015-2016	6	22	28
AY 2014-2015	2	12	14
AY 2013-2014	7	16	23

2. Record of Advanced Study

Tabulate for the years since the last SER all alumni who were or are engaged in advanced study in any field. (Include alumni who are in the process of earning an advanced degree.)

Results below are based on a survey administered by the department to all LDEM alumni (around 200) including alumni who had graduated since our last SER, and received 171 responses. Of those 171 respondents, 39 have pursued advanced study. The survey was administered during the Fall term 2018-2019 during the period of September 19, 2019 to December 2, 2019.

Institution	Degree	Yr. LA degree awarded	Yr. advanced degree awarded
The Bartlett School of Planning, University College London	MSc Sustainable Urbanism	2017	2019
IE School of Human Sciences and Technology	Customer Experience and Innovation	2014	2018
Lebanese University	Landscape Architecture	2005	2019
American University of Beirut	Environmental Sciences - Ecosystem management	2014	2019
City University of New York	Masters of Urban Planning in Urban Design	2018	2019
Wismar	Landscape lighting	2011	2021
Columbia University	Urban design	2014	2015

Institution	Degree	Yr. LA degree awarded	Yr. advanced degree awarded
Scuola Superiore di Catania	Landscape Design and Environmental Planning in the Mediterranean Area	2005	2007
Université de Bordeaux	Urban Planning	2009	2012
Wageningen University	Cultural geography	2010	2012
University of Montreal	PhD Environmental Design	2004	2016
Birmingham City University	Business Administration	2010	2014
Architectural Association	Landscape Urbanism	2005	2011
AUB	Urban Design	2012	2015
IE school of architecture	Architecture management	2012	2018
Manchester university	engineering project management	2015	2016
George Washington University	MBA	2013	2020
Jean monnet university	Culture and heritage management	2013	2018
University of Strathclyde	MSc. Urban design postindustrial landscape	2005	2008
AUB	Rural Community development	2019	2022
Architectural Association School of Architecture	Landscape Urbanism	2016	2019
American University of Beirut	Rural Community Development	2012	Expected year 2020
AUB	Environmental sciences	2015	2019
American University of Beirut	Urban Design	2019	2021
American university of Beirut	Executive MBA	2007	expected 2021
American University of Beirut	Urban Planning and Policy	2019	Expected 2021
AUB	Ecosystem Management	2016	Still in the process
University of Groningen	Cultural geography	2016	2017
American university of Beirut	Urban design	2011	2015
Alice Salomon Hochschule-Berlin	Intercultural conflict management	2009	2017

Institution	Degree	Yr. LA degree awarded	Yr. advanced degree awarded
Kent state university	Landscape architecture	2007	2019
Lebanese University	Landscape Architecture and Environment	2005	2019
AUB	Environmental sciences	2015	2019
KTH	Urban Design	2009	2012
The University of Texas at Arlington	Master of Landscape Architecture	2012	2016
London School of Economics and Political Science	International Development Studies	2006	2009
AUB	Masters in Urban Planning	2012	2018-ongoing
Birmingham City University	MBA	2010	2014
Lebanese University	Socio-anthropology of the city	2015	2019

Previous Responses collected in previously administered Survey (2017-2018) present the additional information.

Institution	Degree	Yr. LA degree awarded	Yr. advanced degree awarded
Universidad Politecnica de Madrid	Urban and Territorial Planning	2012	2015
Wageningen University	Landscape Architecture and Planning	2011	2013
Universidad Politecnica de Madrid	City Sciences	2014	2015
Scuola Superiore di Catania	Landscape Design & environmental planning	2005	2007
Domus Academy	Urban Design	2012	2014
ELTE, Budapest and EHESS, Paris (joint degree)	Urban studies	2011	2015
University of Stuttgart (Germany) & Ain Shams University (Egypt)	Urban Planning _ Sustainability	2012	2015
University of Oxford	Sustainable urban development	2011	2013

University of Montreal	Environmental Design	2004	2016
AUB	Urban Design	2012	2020
IVP - Switzerland	Diplomatic Etiquette and Protocol	2015	2008
University of Sheffield	Landscape Architecture	2010	2013
ALBA	Urban Planning	2009	2012
Domus Academy	Urban Design	2012	2014
University of East Anglia	Environment and International Development	2014	Expected Nov 2017
Edinburgh Napier University	Masters of design in Lighting	2011	2013
Instituto de Empresa Madrid (IE Business school)	Market research	2011	2016
Parsons The New School of Design	Lighting Architecture	2013	2015
University of California, Berkeley	Sociology	2011	2012
ENSP Versailles	Paysage	2007	2011
Domus Academy	Urban Design	2009	2012
University of Montreal	Urban Planning	2004	2016
London School of Economics	Development Studies	2006	2009
Lebanese University	Urban planning/Design	2006	2009
AUB	Ecosystem Management	2015	2018

3. Current Employment

Tabulate the present employment of those having the degree conferred by the program since the last SER. Results below are based on a survey administered by the department to all LDEM alumni (around 300) including alumni who had graduated since our last SER, and received 171 responses. Of those 171 respondents.

The survey was administered during the Fall term 2018-2019 during the period of September 19, 2019 to December 2, 2019.

Present Occupation	TOTAL
Advanced Study and Research	39
Teaching	0
Private Practice (LA only)	47
Private Practice (non-LA or multidisciplinary)	21
Landscape Hort./Design Build	15
Unknown	39
TOTAL	161

Responses to other profession were as per below:

- Construction (male)
- Environmental and international Development (female)
- Software Services, ArcGIS (male)
- Editorial (magazine) (female)
- Event management (female)
- Environmental Health (female)

D. FACULTY INFORMATION

1. Previous and Present Faculty

Tabulate faculty and staff specifically assigned and budgeted to the particular program under review. The number listed in the TOTAL column should agree with the information provided for Standard 2C (Faculty Numbers). Use the following format:

Rank/Title	2018-2019	2017-2018	2016-2017	2015-2016	2014-2015
Professor/LA	2 R. Zurayk (1); Salma Talhouk (1)	2 R. Zurayk (1); Salma Talhouk (1)	2 R. Zurayk (1); Salma Talhouk (1)	2 R. Zurayk (1); Salma Talhouk (1)	2 R. Zurayk (1); Salma Talhouk (1)
Assoc. Professor/LA	Y. Abunnasr (1)	Y. Abunnasr (1)	NA	Nadim Farajalla (1)	Nadim Farajalla (1)
Asst. Professor/LA (including 1 visiting Asst. Professor – B. Dreksler)	4 N. Al-Akl (1); B. Dreksler (1); M. Madani (1); M. G. Trovato (1)	4 N. Al-Akl (1); B. Dreksler (1); M. Madani (1); M. G. Trovato (1)	5 Y. Abunnasr (1); N. Al-Akl (1); B. Dreksler (1); M. Madani (1); M. G. Trovato (1)	4 Y. Abunnasr (1); N. Al-Akl (1); M. Madani (1); M. G. Trovato (1)	3 Y. Abunnasr (1); M. Madani (1); M. G. Trovato (1)
Instructor/Lecturer	1 M. Fabian / instructor	1 M. Fabian / instructor	1 M. Fabian / instructor	1 M. Fabian / instructor	2 N. Al-Akl (1)/ Lecturer; M. Fabian (1)/ instructor
Asst. Professor/Arch.	NA	NA	NA	NA	NA
Visiting Lecturer/Adjunct	NA	NA	NA	NA	NA
TOTAL	8	8	8	8	8

2. Instructional Assignments

Complete the following table for all full and part time instructors. Begin with the Program Administrator and list in order of rank.

Teaching: Percentage FTE assigned to courses taught/instruction.

Research: Include only the percentage of time specifically assigned to research and so recognized by reduction in full-time teaching load. Do not include research efforts normally considered a part or full-time faculty members' contributions.

Service: Include only the percentage of time specifically allocated to service activities (internal, institutional, community and professional) specifically assigned and reviewed as a part of a faculty member's assigned workload.

Administration: Include only the percentage of time devoted to regularly assigned administrative responsibilities. Do not include incidental ad hoc administrative duties, i.e., committee work, visiting lecturer arrangements, student advisement.

Faculty member	Degree	Teaching %*		Research %	Admin / other %	TOTAL** %
		Land. Arch. Curriculum	Other programs (graduate level)			
Professors						
Rami Zurayk Professor (Chairperson until January 15, 2020)	PhD, MSc, BSc	20%	10%	40%	40%	110% (due to course overload)
Salma Talhouk	PhD, BSc	30%	10%	40%	20%	100%
Associate Professors						
Yaser Abunnasr (BLA Coordinator; Chairperson effective January 2020)	PhD Planning, MLA, BArch	20%	10%	40%	30%	100%
Assistant Professors						
Maria G. Trovato	PhD, BA in Architecture	40%	0%	40%	20%	100%
Mehran Madani	D.Des., MLA, BESC.	40%	0%	40%	20%	100%

Faculty member	Degree	Teaching %*		Research %	Admin / other %	TOTAL** %
		Land. Arch. Curriculum	Other programs (graduate level)			
Nayla Al-Akl (Associate Dean of Student Affairs)	MLA, BArch	30%	0%	30%	40%	100%
Beata Dreksler (visiting assistant professor. Was reappointed as Assistant Professor effective AY 2019/20)	PhD, MSc in Landscape Architecture	50%	0%	30%	20%	100%
Instructors						
Monika Fabian	MSc	50%	0%	0%	50%	100%
Part-time Senior Lecturers						
Nadim Farajalla***	PhD, MSc	25%	0%	0%	0%	25%
George Battikha	MSc	25%	0%	0%	0%	25%
Part-time Lecturers						
Wissam Melhem	Masters in landscape urbanism	25 %	0%	0%	0%	25%
Rania Abboud	PhD and Masters in Urban Planning	25%	0%	0%	0%	25%
Ramzi Mezher	Master of advanced studies in landscape architecture; BArch	33.3%	0%	0%	0%	33.3%

Faculty member	Degree	Teaching %*		Research %	Admin / other %	TOTAL** %
		Land. Arch. Curriculum	Other programs (graduate level)			
Sara Hage	Post-masters in Architecture and Urban Design; Landscape Architect - Paysagiste d.p.l.g.	25%	0%	0%	0%	25%
Halim Nader	Bachelor of Engineering	12.5%	0%	0%	0%	12.5%
Balsam El-Ariss	Post-Professional Master in Architecture; Master in Architecture	41.7%	0%	0%	0%	41.7%
Noura Badran	Master of Illustration	16.7%	0%	0%	0%	16.7%
Joelle Baroud	MSc Sustainable Urbanization; BLA	33%	0%	0%	0%	16.7%
Dima Rachid	MLA; BLA	25%	0%	0%	0%	25%
Mona Khechen	DDes Planning	41.7%	0%	0%	0%	41.7%
Salwa Sabbagh	Master of Urban Design; BLA	25%	0%	0%	0%	25%
Cornelia Krafft	Master of Scenography	12.5%	0%	0%	0%	12.5%

* The teaching percentage is calculated based on the AY 2018-2019 yearly load and not on a one-term basis. For a part-time faculty member, the total percentage is calculated solely based on the teaching duties. A full teaching load of a full-time lecturer is 24 credits/year (12 credits/term). Subsequently, a full teaching load for a part time faculty is 12 credits/year (equivalent to 50%).

**A full teaching percentage for a regular full-time faculty is 40%; a full research percentage is 40% and a full service percentage is 20%. These percentages vary with specific faculty members based on their rank and their duties.

***Dr. Nadim Farajalla was a previous full-time Associate Professor at the LDEM department. His current position at the University is Program Director of the Climate Change and Environment Program at Issam Fares Institute.

3. Courses Taught by Individual Faculty Members

Complete the following table for each instructor.

Courses Taught: Use current year or last academic year. Depending on time of report preparation

Term Symbols: Use the institutional terminology. For example: Fall Semester - FS, Spring Semester, SS, Fall Quarter - FQ, Winter Quarter - WQ, Spring Quarter SQ, Summer Term - ST.

Contact Hours: Actual number of scheduled contact hours per week between instructor and students.

FTE Students: Multiply credit hours by number of students and divide by 15 for undergraduate courses, 12 for graduate level courses.

Faculty member (in alphabetical order)	Course Taught*	Course Number	Term	Credit Hours	Contact Hrs. / Week	Number Of Students	FTE Students
Rania Abboud (PT)	Geographic Information System (GIS)	LDEM 251	FS	3	5	17	3.4
	Computer-Aided Design	LDEM 252	ST	3	9	8	1.6
Yaser Abunnasr	Landscape Ecology	LDEM 218	FS	3	3	13	2.6
	Studio VI: Natural Landscape Design	LDEM 246	SS	6	12	14	5.6
	Green Infrastructure for resilient Landscapes and Cities (graduate)	LDEM 302	FS	3	3	9	2.25
Nayla Al-Akl	Studio III: Landscape Planting Design	LDEM 222	FS	4	8	19	5.1
	Landscape Architecture History I	LDEM 207	FS	3	3	23	4.6
	Landscape History II	LDEM 208	FS	3	3	19	3.8
Noura Badran (PT)	Landscape Descriptive Drawing	LDEM 201	SS	4	8	12	3.2

Faculty member (in alphabetical order)	Course Taught*	Course Number	Term	Credit Hours	Contact Hrs. / Week	Number Of Students	FTE Students
Joelle Baroud (PT)	Landscape Technical Drawing (LDEM I)	LDEM 200	FS	4	8	10	2.7
George Battikha (PT)	Ornamental Plants for Dry Landscapes	LDEM 270	FS	3	5	17	3.4
	Interior Landscaping	LDEM 264	SS	3	5	9	1.8
Beata Dreksler	Site Engineering I	LDEM 247	FS	3	3	19	3.8
	Studio IV: Cultural Landscape Design	LDEM 204	SS	6	12	19	7.6
	Studio I: Landscape Design Fundamentals	LDEM 202	FS		8	10	2.7
	Site Engineering II: Construction material	LDEM 248	SS	3	5	19	3.8
	Sustainable Water Management Techniques	LDEM 231	ST	3	6	16	3.2
	Professional Practice	LDEM 290	SS	3	3	15	3
	Site Engineering III: Design Implementation	LDEM 249	ST	4	10	19	5.1
	Internship (practicum)	LDEM 292	ST	2	-	14	1.9
Balsam El-Ariss (PT)	Studio VII: Landscape Capstone Project I	LDEM 241	FS	4	8	22	5.9
	Studio VIII: Landscape Capstone Project II	LDEM 242	SS	6	12	22	8.8
Sara El-Hage (PT)	Studio VI: Natural Landscape Design	LDEM 246	SS	6	12	14	5.6

Faculty member (in alphabetical order)	Course Taught*	Course Number	Term	Credit Hours	Contact Hrs. / Week	Number Of Students	FTE Students
Nadim Farajalla (PT)	Water and the Environment	LDEM 230	FS	3	3	60	12
		LDEM 230	SS	3	3	67	13.4
Monika Fabian	Botany and Plant Ecology for Landscape Architects	LDEM 210	FS	3	3	20	4.0
	Soils in the Landscape	LDEM 217	SS	1 out of 3	3	9	0.6
	Studio III: Landscape Planting Design	LDEM 222	FS	4	8	19	5.1
	Plant Material I	LDEM 219	ST	2	8	7	0.9
	Plant Material II	LDEM 221	SS	1	3	19	1.3
	Landscape Horticulture	LDEM 211	SS	3	5	11	2.2
Mona Khechen (PT)	Studio VII: Landscape Capstone Project I	LDEM 241	FS	4	8	22	5.9
	Studio VIII: Landscape Capstone Project II	LDEM 242	SS	6	12	22	8.8
Cornelia Krafft (PT)	Spatial Structure and Movement	LDEM 261	FT	3	3	10	2.0
Mehran Madani	Studio V: Urban Landscape Design	LDEM 228	FS	6	12	15	6.0
	Contemporary Issues in Landscape Architecture	LDEM 260	FS	3	3	21	4.2

Faculty member (in alphabetical order)	Course Taught*	Course Number	Term	Credit Hours	Contact Hrs. / Week	Number Of Students	FTE Students
	On Leave Without Pay		SS		-		-
Wissam Melhem (PT)	Site Engineering III: Design Implementation	LDEM 249	ST	2 out of 4	6	19	2.5
	Landscape Technical Drawing (LDEM I)	LDEM 200	FS	4	8	10	2.7
Ramzi Mezher (PT)	Studio I: Landscape Design Fundamentals (LDEM I)	LDEM 202	FS	4	8	10	2.7
	Studio II: Landscape Garden Design	LDEM 216	SS	4	8	9	2.4
Halim Nader (PT)	Surveying and Base Plan Development	LDEM 291	SS	3	5	11	2.2
Dima Rachid (PT)	Studio V: Urban Landscape Design	LDEM 228	FS	6	12	15	6.0
Salwa Sabbagh (PT)	Studio IV: Cultural Landscape Design	LDEM 204	SS	6	12	19	7.6
Salma Talhouk	On Research Leave		FS		-		-
	Landscape Management	LDEM 265	SS	3	3	14	2.8
	Healing Gardens: Theoretical Perspectives and Applications	LDEM 262	SS	3	3	17	3.4
Maria G. Trovato	Studio VII: Landscape Capstone Project I	LDEM 241	FS	4	8	22	5.9
	Studio VIII: Landscape Capstone Project II	LDEM 242	SS	6	12	22	8.8

Faculty member (in alphabetical order)	Course Taught*	Course Number	Term	Credit Hours	Contact Hrs. / Week	Number Of Students	FTE Students
	Landscape Appreciation and Site Analysis	LDEM 263	SS	3	3	21	4.2
Rami Zurayk	Landscape and Geomorphology	LDEM 214	FS	3	3	10	2.0
	Soils in the Landscape	LDEM 217	SS	2 out of 3	2	9	1.2
	Natural Resources Management (graduate)	LDEM 630	SS	3	3	17	4.25

* Data pertains to Academic Year 2018/2019

4. Visiting Lecturers/Critics

List the name, specialty, dates in attendance and the contribution of visiting critics and lecturers, resource personnel, etc. who served the program. List only persons who were brought in for the program under review. Indicate by an asterisk (*) those sponsored jointly with other departments or sponsored at the college or school level. Use the format below to list this information for the present and two preceding academic years.

Name	Field/Specialty	Date(s)	Contribution
Spring 2018/2019			
Mr. Shubhendu Sharma*	Eco-entrepreneur, Founder, and Director of Afforestt. 'Afforestt' is a for-profit enterprise established in India in 2011 and devoted to planting native forests for all kinds of clients, from farmers to corporations to city governments (Forestscaping)	April 1, 2019	LDEM organized in collaboration with AUB's Neighborhood Initiative and theOtherDada [integrated consultancy and architecture], an open lecture entitled "Forestscaping: How to Bring Back Our Lost Forests in Cities" by Mr. Shubhendu Sharma. In his talk, Mr. Sharma discussed the Miyawaki method of afforestation and the mission of his enterprise 'Afforestt' to bring back native forests, specializing in making natural forests of native species in urban landscapes. Mr. Sharma was visiting Beirut to work on the Beirut River Urban Reforestation Pilot Project as part of Beirut RiverLESS initiative by theOtherDada.
Mr. Thomas Nideroest* & Ms. Dima Rachid*	Swiss Landscape Architect, co-founder of the think tank 'International Landscape Collaborative LDEM alumna (class of 2010), a Lebanese landscape architect, urbanist, and design researcher.	May 31, 2019	LDEM hosted the lecture and book launch event 'A Landscape Approach: Between Theory and Practice'. Using a series of global case studies at the intersection of practice and academia to highlight the need for a landscape approach focusing on the international practice work of Hideo Sasaki. The event, sponsored by the Lebanese Landscape Association (LELA), featured presentations by Mr. Nideroest and Ms. Rachid

Name	Field/Specialty	Date(s)	Contribution
Fall 2018/2019			
Mr. Kamel Louafi*	International landscape architect from Germany	October 24, 2018	LDEM in collaboration with the Lebanese Landscape Association (LELA) organized a public lecture by Kamel Louafi entitled 'Works and Philosophy'. He presented his work philosophy as well as his approaches and methods.

Name	Field/Specialty	Date(s)	Contribution
Spring 2017/2018			
Ms. Cornelia Krafft	She holds an MA in Fine Arts from the Academy of Fine Arts in Vienna, Austria. She was a Professor in the Art History Department at AUB and was a part-time Lecturer at MSFEA at AUB.	March 14, 2018	Gave a public lecture entitled 'The Ephemeral and Timeless Power of Nature and Landscapes Translated into Art' which covered the major approaches of exploring nature and landscape through the Arts since the sixties until the present day and gave an insight to the broad potential of the artistic interaction and collaboration between the sciences and the arts.
Professor Timothy Waterman*	Senior Lecturer in Landscape architecture History and Theory at Greenwich University, UK	March 26, 2018	Gave a talk entitled 'The Commons, Aesthetics, and Civil Society: Dimensions of Landscape, Food, and the Built Environment' which reflected his extensive publication and active academic record. Professor Waterman's latest publication, the Routledge Handbook of Landscape and Food (2018), co-edited with Joshua Zeunert". The talk was co-organized with the Lebanese Landscape Association (LELA)

Name	Field/Specialty	Date(s)	Contribution
Mr. Duncan Denley, managing director, and Mr. William Bennett (from 'Desert Ink')	'Desert Ink' is a leading Landscape Architecture practice in the region (based in Dubai) keen to building bonds with regional educational institutions.	April 4, 2018	A presentation was given to students and faculty to highlight some of their more interesting commissions working as a landscape architect based in Dubai and answered students and faculty questions. The presentation focused upon one of their recently completed park projects in Dubai called 'The Block'. Students were encouraged to attend this informative presentation, which provided the opportunity to learn about new knowledge in the field and establish a professional relationship with this design firm for possible future jobs.
Dr. Susan Kelly Shannon*	BLA Program reviewer 1, professor of urbanism at the Department of Architecture, Faculty of Engineering at KU Leuven, Belgium.	April 26, 2018	LDEM organized two presentations by the two BLA external program reviewers who visited the department during late April 2018 and early May 2018. Dr. Shannon gave a public presentation entitled 'Forest and
Dr. John Francis Ahern*	BLA program reviewer 2, professor of landscape architecture and urban planning at the University of Massachusetts Amherst	May 3, 2018	Water Urbanisms to Address Climate Change' and Dr. Ahern gave a presentation entitled 'Novel Urban Ecosystems: New Nature(s) for the Anthropocene'

Name	Field/Specialty	Date(s)	Contribution
Fall 2017/2018			
Mr. Artur Tondera and Mr. Lukasz Puchalski	Artur Tondera is the head of the Sustainable Mobility Department in Municipal Roads Authority in Warsaw. Lukasz Puchalski is the current Director of Municipal Roads Authority and was previously the Director for Investments in Public Transport Authority in Warsaw.	September 19, 2017	Gave a public lecture entitled ‘Applications in Sustainable Mobility’. Talk was jointly organized by the Lebanese Landscape Association (LELA) and LDEM
Dr. Monika Domanowska	Landscape architect and vice president of Mazovia Branch of Polish Landscape Architects Association. She is a project coordinator, inspector and landscape designer at Municipal Roads Authority in Warsaw, Poland since 2015.	September 20, 2017	Gave a public lecture entitled ‘Roads and greenery: How to combine them? Warsaw Experience’. The lecture revolved about the difficulties in combining road infrastructure and greenery. In Warsaw, Poland, Municipal Roads Authority from several years is working together with landscape architects to provide a high quality infrastructure and innovative solutions for green areas. The lecture showed some examples of successful projects, as well as problems that had to be solved during its realization.

Name	Field/Specialty	Date(s)	Contribution
Dr. Paul Wojtkowski*	Has a PhD in Forest Economics from the University of Georgia with internationally recognized expertise in the land-use sciences. He has considerable field experience along with a strong understanding of the practicalities of sustainable agriculture and best management practices throughout the world. He is author of seven books including 'Agro-ecological Economics: Sustainability and Biodiversity', 'Introduction to Agroecology: Principles and Practices' and 'Landscape Agroecology'.	November 14, 2017	Gave a public lecture entitled 'An overview of agroecology and the differences with conventional agriculture'. The different systems, principles and practices and the science behind were also discussed. The lecture was organized with the support of the USAID funded Farmer to Farmer program (F2F) implemented by the Land O'Lakes office in Lebanon.

Name	Field/Specialty	Date(s)	Contribution
Spring 2016/2017			
Agence Taktyk	Taktyk is a transnational multidisciplinary practice that engages in city making through practice, research, design studios, editing and art installations. Responding to heterogeneous and complex challenges at the intersection of landscape, infrastructure and the city, the practice acts as a mediator of complex transformation processes.	March 31, 2017	Public lecture entitled “MARCH ATLAS”.
Tammy Kaser	Global Education Liaison from the College of Architecture and Environmental Design (CAED) at Kent State University, Kent, Ohio, USA	March 23, 2017	Presentation on Kent State University Postgraduate and Education Abroad Programs
Rami Al Outa	Platform Configuration Engineer at ESRI (GIS company based in the USA with offices all around the world) and LDEM alumnus	February 10, 2017	Offered a workshop to LDEM students and introduced new methods to create accurate maps of your site using your phone. Techniques to help students collect ‘non-physical data’ for their site and teach them how to search for readily available online info relating to landscape layers of Lebanon were also introduced.

Name	Field/Specialty	Date(s)	Contribution
Fall 2016/2017			
John Anthony Allan*	<p>Professor and leading water expert who specializes in the analysis of water resources in semi-arid regions and the role of global systems in ameliorating local and regional water deficits; Heads the London Water Research Group at King's College London (KCL) and SOAS; Awarded the Stockholm Water Prize; awarded the international Environmentalist Award of the Florence based Fondazione Bardini e Peyron and the Prince Albert of Monaco Water Prize in 2013</p>	November 23- 26, 2016	<p>URB Visiting Scholar</p> <p>Gave a public lecture on 'Food-Water Security in the Middle East'</p>
Spring 2015/2016			
Peter Bogdanov and Layne Bogdanov	<p>Peter Bogdanov is an educator and author by training, through formal education and experience. Professionally, he has created his own company 'VermiCo' that primarily offers educational resources and products in the area of vermiculture, composting and waste management.</p> <p>Layne Bogdanov is a consultant of Marketing Earthworms and Vermicompost</p>	January 26, 2016	<p>Gave a seminar on 'Prospects of commercializing vermicast'</p> <p>(With the support of the USAID funded Farmer to Farmer program (F2F) implemented by Land O'Lakes in Lebanon)</p>

Name	Field/Specialty	Date(s)	Contribution
Spring 2014/2015			
Imad Gemayel	Lebanese landscape architect and owner of IGA Architecture and Landscape Design in Lebanon	March 24, 2015	Gave a lecture to LDEM students on ‘Concepts of Conflict/Complicity between the entities which are Landscape Architecture, Architecture and Sustainability’.
Pere Sala Marti*	Professor at the Autonomous University of Barcelona, Spain (UAB), Spain and Coordinator of the Landscape Observatory of Catalonia	April 14-19, 2015	URB Visiting Scholar Gave series of two lectures (‘The integration of Landscape into Public Policies; the role of the Landscape observatory of Catalonia’ AND ‘Landscape approach on natural resources management’), and a lecture entitled ‘Landscape Character Assessment. Participation and landscape quality objectives’ during the MEDSCAPES - Development of Landscape Character Assessment as a tool for effective conservation of natural heritage in the Eastern Mediterranean Stakeholders seminar. Medscapes is a two-year project funded by the EU involving four Mediterranean countries Cyprus, Greece, Jordan and Lebanon. The aim of the event is to disseminate the results of the first year of the project hoping to provide support for regional and local planning while raising awareness about the character of local landscape and the natural environments. His visit also helped to initiate research collaboration between faculty members at LDEM and the Landscape Observatory of Catalonia.
Daniel Halsey	Certified permaculture designer and teacher at multiple academic institutions and organizations at the USA.	April 15-17, 2015	Gave a lecture on “Permaculture” and Forum on Vermicomposting in Lebanon - roundtable discussion on vermicomposting initiatives in Lebanon, challenges, experiences, and ideas and a show and tell session in the composting station at the EcoUnit area, with the support of the USAID funded Farmer to Farmer program (F2F) Implemented by Land O’Lakes in Lebanon.

Name	Field/Specialty	Date(s)	Contribution
Fall 2014/2015			
Michael Jakob	Professor in History and Theory of Landscape at Hepia (Geneva) and Professor of Comparative Literature (Chair) at Grenoble University. He is the curator of the “The Swiss Touch in Landscape Architecture”	November 21-30, 2014.	<p>Gave a public lecture entitled “Switzerland, the Idea of Nature and Swiss Landscape Architecture”.</p> <p>The 'Swiss Touch in Landscape Architecture' is an international event initiated by ProHelvetia and was brought to Lebanon by the LDEM Department at AUB. The event was open to professionals, students and the general public.</p> <p>The opening lecture was followed by an exhibition (Nov. 21-30, 2015).</p> <p>A Student’s workshop entitled ‘Alternative Reading to the Lebanese Landscape’ was also held on with the participation of 10 LDEM students from 3rd and 4th year, in addition to students and faculty from the Lebanese University and ALBA and a representative from the Swiss Embassy.</p>
Sara Cohen	Senior associate at Sasaki from Sasaki Associates, USA	October 2, 2014	Gave a lecture entitled ‘Investigating the Chicago Riverwalk and the Lawn on D as investments to jump start a neighborhood’.
Daniel Halsey	Certified permaculture designer and teacher at multiple academic institutions and organizations in the USA (Volunteer expert brought in with the support of the USAID funded Farmer to Farmer program (F2F) Implemented by Land O’Lakes in Lebanon)	October 3-10, 2014	<p>Gave a public lecture entitled ‘Vermiculture: Nutrient Cycling with Worms for Increasing Organic Fertility in Soil’</p> <p>And offered a vermicomposting workshop on setting up a vermicompost unit at the EcoUnit area of the faculty.</p>
SueAnne Ware	Professor, Landscape Architecture RMIT School of Architecture and Design, Australia	December 8, 2014	“Productive Friction: Anti-memorials as a catalyst for Social Change”

Name	Field/Specialty	Date(s)	Contribution
Caroline LaVoie	Associate Professor, Department of Landscape Architecture and Environmental Planning, Utah State University, Logan Utah	December 9, 2014	“Vastness and Intimacy: Interpreting the Contrasts of the American Western Landscape”
Chris Johnstone	Landscape Architect, Director and owner of Bosque Studio Australia	December 10, 2014	“100 forests - A new national arboretum for Australia”

5. Individual Faculty Records

Name: Rami Zurayk

Rank: Professor

Education

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
University of Oxford, U.K.	4	DPhil/1989
American University of Beirut	2	MSc Irrigation
American University of Beirut	4	BSc Agriculture

Teaching Experience:

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	28	Soil in the Landscape, Natural Resource Management, Landscape and Geomorphology, Environment and Sustainable Development, soil conservation

Practice Experience:

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
ESCWA	1	Expert on Food Security Monitoring
Booz Allen Hamilton	6 months	Senior Expert
International Labor Organization	1	Expert on Arab Food Security in the Wake of the Uprisings
Khatib and Alami Consultants	1	Erbil Agricultural Green Belt Design
Booz Allen Hamilton	1	Agricultural Policy Expert, Agricultural Strategy of Egypt, Cairo
AGRIDEAS (Switzerland) and Ministry of Economy and Trade, Lebanon	2	Senior National Expert, Geographic Indicators Project
United Nations Development Program	2	International Consultant in Environment and Development. Country Program Identification Mission, Qatar International Consultant in Community Development. Masila Water and Sanitation Project, Hadramawt, Yemen

Professional Registration:

- Lebanese Order of Engineers and Architects. Beirut, Lebanon
- Association of American Geographers
- Arab Council for the Social Sciences
- British Society of Soil Science

Professional & Academic Activities.

- Member of the Steering Committee of the High Level Panel of Experts on Food Security and Nutrition (HLPE) of the Committee of World Food Security (CFS).
- Commissioner. EAT-Lancet-Harvard Initiative on sustainable diets from sustainable food systems.
- Member of the Research Review Board of the Arab Council for the Social Sciences
- Member of the AUB Research Board
- Member of the Steering Committee of the PhD program in the Department of Natural Resources and the Environment at the Arabian Gulf University
- Member of Advisory Board, Journal of Agriculture, Food Systems, and Community Development
- Member of Advisory Board, Social and Economic Action for Lebanon (SEAL)
- Founding member: Arab Food Sovereignty Network
- Founding member, Thimar Research Collective
- Policy Advisor of Al Shabaka (the Palestinian Policy Network)
- Member of the AUB Interfaculty Committee on Capacity Building in Food Security
- Member of the AUB Collaborative Research Stimulus Review Board

- Member of the AUB Academic Affairs Committee
- Member of the AUB Advisory Committee
- Member of the AUB Administrative Committee
- Member of the AUB Research and Publication Committee
- Member of the AUB FAFS Undergraduate Curriculum and the Undergraduate Student Academic Affairs Committee

Publications.

Chapters in Books

- Bahn, R., Tell, T., and **Zurayk, R.** 2019. Social Life, from Rural to Urban. In Yom, S. (ed.). *The Societies of the Middle East and North Africa: Structures, Vulnerabilities, and Forces*. 1st Edition (Paperback) - Routledge. pp.356
- Bahn, R., and **Zurayk, R.** 2018. Agriculture, Conflict and the Agrarian Question in the 21st Century. In Zurayk, R., Woertz, E., and B. Rachel (eds.). *Crisis and Conflict in Agriculture*. Wallingford, UK: CABI. pp. 3-27.
- **Zurayk, R.**, and Dirar, A. 2018. Farmer-led Water User Associations in Agricultural Water Management In: Allan, T., Bromwich, B., Colman A., and Keulertz, M. (eds.) *The Oxford Handbook of Food, Water, and Society*. OUP Oxford, UK. Online May 2018.
- **Zurayk, R.** 2016. The Arab Uprisings through an Agrarian Lens. In Kadri, A. (ed). **Development Challenges and Solutions after the Arab Spring**. Hampshire, England: Palgrave Macmillan. pp. 139-152.
- **Zurayk, R.** and Gough, A. 2014. Bread and Olive Oil: The Agrarian Roots of the Arab Uprising. In: Gerges, F. (ed). **The New Middle East: Protest and Revolution in the Arab World**. Cambridge University Press. pp. 107-134. ISBN 978-1-107-61688-2

Books

- **Zurayk, R.**, Woertz, E., and B. Rachel (Eds.) 2018. *Crisis and Conflict in Agriculture*. Wallingford, UK: CABI. 294 p.p. ISBN: 978-1786393647

Refereed International Journals

- Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., Tilman, D., DeClerck, F., Wood, A., Jonell, M., Clark, M., Gordon, L.J., Fanzo, J., Hawkes, C., **Zurayk, R.**, Rivera, J.A., De Vries, W., Sibanda, L.M., Afshin, A., Chaudhary, A., Herrero, M., Agustina, R., Branca, F., Lartey, A., Fan, S., Crona, B., Fox, E., Bignet, V., Troell, M., Lindahl, T., Singh, S., Cornell, S.E., Reddy, K.S., Narain, S., Nishtar, S., and Murray, C.J.L. 2019. Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. *Lancet*, London, England. Vol. 393. February 2, 2019. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2818%2931788-4/fulltext#rel693a86d5-def0-4c8a-be40-235cf5297fbb*
- Springmann, M., Clark, M., D’Croz, D. M., Wiebe, K., Bodirsky, B.L., Lassaletta, L., de Vries, W., Vermeulen, S. J., Herrero, M., Carlson, K. M., Jonell, M., Troell, M., DeClerck, F., Gordon, L. J., **Zurayk, R.**, Scarborough, P., Rayner, M., Loken, B., Fanzo, J., Godfray, H. C. J., Tilman, D., Rockström, J., and Willett, W. 2018. Options for keeping the food system within environmental limits. *Nature Research*. https://doi.org/10.1038/s41586-018-0594-0*
- El-Fadel, M., Deeb, T., Alameddine, I., **Zurayk, R.**, and Chaaban, J. 2018. Impact of groundwater salinity on agricultural productivity with climate change implications. *International Journal of Sustainable Development Planning*, Vol. 13, No. 13: 445-456.*
- Tomaszkiewicz, M., Abou Najm*, M., **Zurayk, R.** and M. El-Fadel. 2016. ‘Dew as an adaptation measure to meet water demand in agriculture and reforestation’. *Agricultural and Forest Meteorology*, 232, 411–421. DOI:10.1016/j.agrformet.2016.09.009*
- Gharios, C., El. Nour, S., Mundy, M., **Zurayk, R.** 2016. Transformation rurale, paysage et conflit dans un village du Liban Sud, Sinay. *Economie Rurale* 353-354/Mai-Juillet 2016. P 9-26*
- Habib, R., Mikati, D., Hojeij, S., El Asmar, K., Chaaya, M., and **Zurayk, R.** 2016. Associations between poor living conditions and multi-morbidity among Syrian migrant agricultural workers in Lebanon. *European Journal of Public Health*. 26 (6): 1039-1044. <https://doi.org/10.1093/eurpub/ckw096>. July 8, 2016.*
- Jaafar, H., **Zurayk, R.**, King, C., Ahmad, F., and Al-Outa, R. 2015. Impact of the Syrian conflict on irrigated agriculture in the Orontes Basin. *International Journal of Water Resources Development*. Online March 23, 2015. http://dx.doi.org/10.1080/07900627.2015.1023892*
- El. Nour, S., Gharios, C., Mundy, M., **Zurayk, R.** 2015. The right to the village? Concept and History in a village of South Lebanon. *Spatial justice journal*. January 2015, No. 7. ISSN 2105-0392.*
- **Zurayk, R.** 2014. Looking at Sierra Leone's Ebola Epidemic Through an Agrarian Lens. *Journal of Agriculture, Food Systems, and Community Development*. Volume 5(2), 15-20 pp. online November 17, 2014. <http://dx.doi.org/10.5304/jafscd.2014.051.005> *

- **Zurayk, R.** 2014. The agrarian limits of the food movement. **Journal of Agriculture, Food Systems, and Community Development**. Volume 4(3), 9-22 pp. ISSN: 2152-0801 online. June 25, 2014. *
- **Zurayk, R.** 2014. The fatal synergy of war and drought in the Eastern Mediterranean. **Journal of Agriculture, Food Systems, and Community Development**. Volume 4(2), 9-13 pp. ISSN: 2152-0801 online. March 17, 2014. *

Conference Papers, Proceedings and Abstracts published in Proceedings

- El-Samra, R., El-Fadel, M., **Zurayk, R.**, Abou Najm, M., Alameddine, I., Bou-Zeid, E., Stenchikov, G., and Bangalath, H. 2018. Adaptation assessment for silage maize production in response to climate change in a semi-arid region. "**Climate Change and Global Warming**". New York, USA. May 23-24, 2018
- **Zurayk, R.** 2016. Livelihoods and Food Security in Post-Conflict Situations: Lessons Learned from Grassroots Action. "**Food Security Post-conflict: A Foundation for Peace and Sustainable Development**". Beirut, Lebanon. December 8, 2016.
- Gharios, C., El Nour, S., Mundy, M., **Zurayk, R.** 2014. Transformation rural, paysage et conflit dans un village du Liban sud, Sinay. Paper presented at the "**Foncier Agricole 2014: Usages, tensions et regulations**". Ecole Normale Supérieure, Lyon, France. June 11-12, 2014
- **Zurayk, R.** 2014. The Morning After: the Arab Uprisings through an Agrarian Lens. Paper presented at the Annual conference **After the 'Arab Spring': Development Challenges and Solutions**. Singapore. May 29-30, 2014.
- Serval, H. et **Zurayk, R.** 2014. Marche, pouvoir et jeux de rôle: Le Rouge libanais résiste dans la vallée de la Beqaa. Paper presented at the **International Conférence "Agriculture et Géopolitique - Rivalités, Puissance, Coopération"**. Université De Versailles Saint-Quentin- Guyancourt. February 12-13, 2014.

Contributions

My contribution is in research, teaching and services. My aim is to contribute to developing the optimal curriculum that has global relevance and local impact. Graduates from such a curriculum are attuned to the natural dimensions of landscape and to the spatial dimensions of environmental sciences. I am a natural scientist by training (soil science/environmental sciences). My goal is to make the ecosystem, in both its human and natural facets, an integral part of landscape design and planning.

Research: My focus is on the spatialization of the Agrarian Question, which addresses the fate of the agrarian world (society, biodiversity and space) when confronted with the inexorable hold of capital on the rural world, and the ensuing commodification of labor, nature and land (space). I ask: what is the fate of the agrarian landscapes? What happens to agrarian livelihoods? What forms will rural settlements take? What are the implications on food security? The goal is to produce evidence-based knowledge to inform rural planning policies and political actors. To illustrate: In my current research project "The Palimpsest of Agrarian Change" funded by the London School of Economics, I look specifically at the coevolution of landscape and land tenure in a group of associated villages and farms of South Lebanon. I combine methods from landscape ecology and analytical frameworks from political ecology to develop a social-spatial understanding of agrarian change. The ultimate aim is to inform policy with regards to food security, sovereignty and human development.

Teaching: I teach basic courses in natural sciences (landscape and geomorphology, soils in the landscape), which I frame with a landscape discourse. I also teach courses in environment and sustainable development and a graduate course in natural resource management. In both courses, the matters of space and landscape are brought forth and integrated in ecosystem and environment concerns. As a result, landscape architects are given a strong base in natural sciences, along with the tool to integrate this knowledge into design and planning.

Services: I have served as department chair for the past 5 years, and was renewed for another 3 years upon positive evaluation by the landscape faculty in 2017, of which one year remains. I have guided and contributed to curricular development and reviews.

Name: Salma Talhouk
Rank: Professor
Education: Full-Time Lecturer

<u>Institution</u>	<u>Years Attended</u>	<u>Degree/Date Granted</u>
Ohio State University, USA	4	DPhil (Horticulture)/1988
American University of Beirut	4	BSc in Agriculture and Diploma of Ingenieur Agricole/1983

Teaching Experience:

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	27	Characterization of Ornamental plants for Dry Landscape, Ecological Landscape Design and Planning, Plant Propagation, General Horticulture, Landscape Horticulture, Subtropical Fruit Production, Introduction to Floriculture,

Botany and plant ecology for landscape architects,
landscape management, Healing Gardens

Georgetown University, Center
for Contemporary Arab Studies
(CCAS)

1 semester

Visiting Scholar,

Practice Experience.

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
Ministry of Environment (MOE)/ Global Environment Fund (GEF)	1	Updating of 2002 SAP-BIO National report
Ministry of Environment (MOE)	1	Prepared a report on 'Biodiversity monitoring and indicators: Guidelines for integrating monitoring programs and indicators in projects within the context of the national biodiversity strategy and action plan for Lebanon'
Ministry of Environment (MOE)	1	Prepared a report entitled 'Bi'atouna Beytouna: A partnership with schools towards biodiversity conservation 2004 theme: biodiversity and community
Ministry of Environment (MOE)	1	Prepared an Addendum to the Lebanese National Biodiversity Strategy and Action Plan
Ministry of Environment (MOE)	1	Prepared report on 'Priorities for capacity building needs for the conservation and sustainable use of biodiversity in Lebanon: focusing on sustainable use'
Ministry of Environment (MOE)	1	Prepared the Second National Report of Lebanon to the convention on biological diversity
Ministry of Environment (MOE)	1	Prepared National Report of the Country of Lebanon on the strategic action plan for the conservation of biological diversity in the Mediterranean region (SAP BIO)
United Nations Development Program	1	Conducted a Top up Biodiversity Enabling Activity
United Nations Development Program	2	Project director: Development of the National biosafety framework for Lebanon
ESCWA	2	Co-expert: scientific coordination for the Ebel-es-Saqi ecological park
Ministry of Environment (MOE)	1	Proposal writing of the 'Needs assessment in biodiversity for Lebanon' submitted to GEF
Lebanese National Research Council	1	Scientific coordinator for the Shouf-forest reserve
Lebanese National Research Council	2	Coordinator for the landscape design of natural botanic gardens at the Rasheed Karame fairgrounds
IDRC	1	Rapporteur for the fruit tree task force, One of the working groups of experts Requested to develop a research strategy for the Lebanese agriculture sector

Professional Registration

Lebanese Order of Engineers and Architects. Beirut, Lebanon

Professional & Academic Activities.

Administrative positions:

- Founding Chairperson, AUB Arboretum and Botanic Garden (AUBotanic) 2014 – present
- Advisory Committee, Tenure and Promotion Appeal Committee, Advisory Committee, Tenure Criteria Task Force 2019-2020
- Associate Dean, Faculty of Agricultural and Food Sciences (FAFS) AUB, 2014-2015
- **Acting Dean, FAFS**, during FAFS Dean travels and leaves (2008-2015)
- **Chairperson**, Department of Landscape Design and Eco-system Management (LDEM) AUB, 2008- 2014

Outreach - Workshops:

- 2015 Coordination of **one national event - Biodiversity Village Award and Map exhibit**. In partnership with the Ministry of Tourism, and under the AUB-Nature Conservation Center umbrella organized a public green map exhibit featuring 70 Lebanese village green maps. October 16, 17 2015 West Hall.
- 2015 Coordination of **one national event - School Guide for Extra-Curricular Nature-Related Activities**. A closing ceremony was held at the UNESCO to showcase the accomplishments of 21 public schools that engaged in nature related extracurricular activities based on the school guide prepared by AUB NCC. A total 472 students and 54 teachers from all participating schools attended and received a 32-page booklet documenting the efforts made by the students and their schools throughout the year
- 2014 Coordination of **one national event - Official Adoption by Ministry of Education and Higher Education of the extracurricular nature related School manual**. Announcement and manual presentation was made in front of 400 school representative (January 2014) and 2000 copies of manual distributed by MEHE to all public schools.
- 2014 Coordination of **one national event - Village green maps exhibit**. 16 participatory mapping village exhibit (Baadaran, Bshetfine, Mokhtara, Chahtoul, Qartaba, Saghbine, Kfeir, Rashaya, Hasroun, Qnat, Oyoungosh, Tannourine, Ehden, Reifoun, Menjez, and Bentaël.)
- 2014 Coordination of **102 regional participatory mapping workshops** in 16 villages.
- 2014 Coordination of **one national participatory mapping event** AUB, October 11
- 2014 Coordination of **one national workshop “Eco-tourism planning”** in collaboration with the Ministry of tourism. December 5. Glass Lounge, Ministry of Tourism.

Publications.

Books and Chapters

- Talhouk, S.N., M. Itani, and M. Al-Zein. 2018. Biodiversity in Lebanon. In: Global Biodiversity, Volume 1: Selected Countries in Asia. Editor: T. Pullaiah. Apple Academic Press. ISBN: 9781771887076
- Talhouk, S.N. ألف بقاء الطبيعة. ألدار العربية للعلوم ناشرون
- Talhouk, S.N., M.M. Yazbek, K. Sleem, A.J.Sarkissian, M.S. Al-Zein, and S. Abo Eid. 2014. Trees of Lebanon. Published by American University of Beirut, Nature conservation center. Pp151.

Refereed International Journals (*corresponding author)

- Baalbaki, R. Ahmad, S. H., Kays, W., Talhouk, S.N., Saliba, N. A., Al-Hindi, M. 2019. Citizen science in Lebanon – a case study for ground water quality monitoring. R. Soc. open sci. 6: 181871. <http://dx.doi.org/10.1098/rsos.181871>
- Sarkissian, A. J., R. M. Brook, S. N. Talhouk, N. J. Hockley. 2017. Asset-building payments for ecosystem services: assessing landowner perceptions of reforestation incentives in Lebanon. Forest Systems. Vol 26, No 2. DOI: 10.5424/fs/2017262-10325
- Mattouk, M., S.N. Talhouk*. 2017. A content analysis of nature photographs taken by Lebanese rural youth. PLoS ONE 12(5): e0177079. <https://doi.org/10.1371/journal.pone.0177079>
- Hammad, EA, M Akkary, N Saliba, M Farran, and S Talhouk. 2017. Bioactivity of Indigenous Medicinal Plants against the Two-Spotted Spider Mite, Tetranychus urticae. Journal of Agricultural Science 9 (7), 123
- Moledor, S., Chalak, A., Fabian, M., and S.N. Talhouk*. 2017. Socioeconomic dynamics of Vermicomposting systems in Lebanon. Journal of Agriculture, Food Systems, and Community Development. <http://dx.doi.org/10.5304/jafscd.2016.064.007>
- Marouf, M, M. Batal, S. Moledor, and S. N. Talhouk*. 2015. Exploring prospects of the traditional practice of wild plant collection in Lebanon. Food, Culture and Society. 18:3:355-378. <http://dx.doi.org/10.1080/15528014.2015.1043103>
- Naja, F., M. Alameddine, L. Itani, H. Shoaib, D. Hariri, and S. N. Talhouk. 2015. The Use of Complementary and Alternative Medicine among Lebanese Adults: Results from a National Survey. Evidence-Based Complementary and Alternative Medicine. Volume 2015, Article ID 682397, 9 pages. <http://dx.doi.org/10.1155/2015/682397>
- Talhouk, S. N.*, Y. Abunnasr, M. Hall, T. Miller, and A.Seif. 2014. Ancillary botanic gardens in Lebanon – Empowering local contributions to plant conservation. SIBBALDIA: The Journal of Botanic Garden Horticulture (12) 111-129.
- Abou-Fakhr Hammad, E., A. Zeaiter, N. Saliba, and S.N. Talhouk. 2014. Bioactivity of indigenous medicinal plants against the cotton whitefly, Bemisia tabaci. Journal of Insect Science. 14 (105). Available online: <http://www.insectscience.org/14/105>
- Francis, F., Talhouk, S.N., Batal, M. and A. Olabi. 2014. Sensory and quality parameters of raw and processed Chicory-Hindbeh, a commonly consumed dark leafy green in Lebanon (Cichorium intybus L.) during frozen storage. LWT-Food Science and Technology 58: 230-238.

Conference Papers, Proceedings and Abstracts published in Proceedings

- 2018 Principle Investigator. Reconnecting People with Plants: Implementation Examples for Ancillary Botanic Gardens. Moustapha Itani, Maya G. Melhem, Myriam Boufadel,
- Yaser Abunnasr, Salma N. Talhouk. 2nd Mediterranean Plant Conservation Week La Valetta, Malta November 12 - 16, 2018

- 2018 Principle Investigator. A quantitative tool to assess local preference for the conservation of Important Plant Areas (IPAs) : A Case Study of Sannine-Kneisse IPA in Lebanon. Marya Salman, Salma Talhouk, Samer Kharroubi & Moustapha Itani. 2nd Mediterranean Plant Conservation Week La Valetta, Malta November 12 - 16, 2018
- 2018 Speaker. Everyday Nature in the World of Lebanese Rural Youth. COSIMENA roundtable “Knowledge of Nature and Intangible Cultural Heritage”, September 5-6 2018 at the DAAD Cairo, Egypt (via skype)
- 2018 Session organizer. Tourism and ecosystem services - searching for sustainability. Ecosystem Services Partnership regional conference. 22-25 April 2018. (Dead Sea, Jordan).
- 2018 Speaker. DASKARA - a phone application for mapping cultural ecosystem services: an academic / private partnership example. Ecosystem Services Partnership regional conference. 22-25 April 2018. (Dead Sea, Jordan).
- 2017 Session organizer. S7 Tourism and ecosystem services - searching for sustainability. 9th Ecosystem Services Partnership conference. 11-15 December 2017, (Shenzhen, China)
- 2017 Graduate Student Advisee Speaker (Asma Al Hajal and Salma N Talhouk). How Can Ecotourism In Cities Teach About Nature and Ecosystem Services? 9th Ecosystem Services Partnership conference. 11-15 December 2017, (Shenzhen, China)
- 2017 Graduate Student Advisee Poster (Maya Melhem, S. N. Talhouk, and Y. Abu Nasr). Landscape Design Guidelines for Ancillary Botanic Gardens. 6th Global Botanic Gardens Congress of Botanic Gardens Conservation International. Conservatory and Botanical Garden of the City of Geneva, Switzerland, 26th-30th June.
- 2017 Speaker. Ancillary botanic gardens–Local botanic gardens for education and outreach. 6th Global Botanic Gardens Congress of Botanic Gardens Conservation International. Conservatory and Botanical Garden of the City of Geneva, Switzerland, 26th-30th June.
- 2017 Graduate Student Advisee Poster (Moustapha Itani, Salma N. Talhouk, Salvatore Pasta & Mohammad S. Al-Zein. Assessing the impact of Carpobrotus edulis and Lantana camara on three Lebanese coastal endemic plant species. State of the World's Plants Symposium, Kew, UK. 25-26 May.
- 2015. Speaker. Evaluating participatory mapping as a tool to assess the prospects of decentralized community based tourism in Lebanon. 8th Ecosystem Services Partnership conference. November 9– 13, (Stellenbosch, South Africa) –
- 2015. Speaker. How do rural youth perceive nature? A case study from Lebanon. 8th Ecosystem Services Partnership conference. November 9– 13, (Stellenbosch, South Africa)
- 2014. Speaker. Biodiversity Village Award – Baldati Bi’ati. Fifth Sub-Global Assessment Network Meeting - UNEP, 26-28 October, Dubai, United Arab Emirates.
- 2014. Co-author (Nadim Farajalla, Eleni Assaf, Issam Bashour, and Salma N. Talhouk) Deriving a Planting Medium from Solid Waste Compost and Construction, Demolition and Excavation Waste. European Geosciences Union, General Assembly 2014, Vienna, Austria, 27 April – 02 May 2014
- 2014. Co-author (Arbi J. Sarkissian, Salma N. Talhouk, Rob M. Brook, and Neal J. Hockley). Incentivizing reforestation with native species in Lebanon: Measuring conservationists’ preferences and landowners’ willingness to accept reforestation payments. IUFRO, Forest Change 2014, International Conference · 2nd - 4th April 2014 · Freising / Germany
- 2013. Speaker. Ancillary Botanic Gardens. Plant Life of SW Asia 8 conference. Royal Botanic Gardens, Edinburgh, Scotland. July 1-5.
- 2013. Speaker at the “Lebanon Reforestation Experiences and Lessons Learned”. Organized by FAO, the World Bank, and the Ministry of Agriculture. Beirut, 6 March

Workshops:

- 2015 Coordination of one national event - Biodiversity Village Award and Map exhibit. In partnership with the Ministry of Tourism, and under the AUB-Nature Conservation Center umbrella organized a public green map exhibit featuring 70 Lebanese village green maps. October 16, 17 2015 West Hall.
- 2015 Coordination of one national event - School Guide for Extra-Curricular Nature-Related Activities. A closing ceremony was held at the UNESCO to showcase the accomplishments of 21 public schools that engaged in nature related extracurricular activities based on the school guide prepared by AUB NCC. A total 472 students and 54 teachers from all participating schools attended and received a 32-page booklet documenting the efforts made by the students and their schools throughout the year
- 2014 Coordination of one national event - Official Adoption by Ministry of Education and Higher Education of the extracurricular nature related School manual. Announcement and manual presentation was made in front of 400 school representative (January 2014) and 2000 copies of manual distributed by MEHE to all public schools.
- 2014 Coordination of one national event - Village green maps exhibit. 16 participatory mapping village exhibit (Baadaran, Bshetfine, Mokhtara, Chahtoul, Qartaba, Saghbine, Kfeir, Rashaya, Hasroun, Qnat, Oyoum orgosh, Tannourine, Ehden, Reifoun, Menjez, and Bentaël.)
- 2014 Coordination of 102 regional participatory mapping workshops in 16 villages.
- 2014 Coordination of one national participatory mapping event AUB, October 11

- 2014 Coordination of one national workshop “Eco-tourism planning” in collaboration with the Ministry of tourism. December 5. Glass Lounge, Ministry of Tourism.

Contributions.

Extensive green roof research: conducting on site trials to identify native plant species suitable for use in extensive green roofs

Low input green walls: development of low input modular green walls that can be readily acquired, assembled and planted by communities

Ancillary botanic gardens: novel concept introduced applying multifunctionality of landscapes to the establishment of community / civic botanic gardens

Participatory mapping project (80 villages in Lebanon completed local village map) to promote local planning

Name: Yaser Abunnasr

Rank: Associate Professor

Education: (Doctoral Degree)

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
University of Massachusetts Amherst, MA, USA.	6	PhD in Regional Planning / 2013
University of Massachusetts Amherst, MA, USA.	2	MLA, 2007
American university of Beirut	5	BArch, 1998- Minor in Archaeology

Teaching Experience:

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	9	Landscape Architecture design studios from fundamental to advanced capstone studios; landscape planning, green infrastructure
University of Massachusetts Amherst, USA	3	Regional Planning/ Judaic and Near Eastern Studies/ Landscape Architecture and Regional Planning

Practice Experience

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
Consultant	14	Consultant; large scale developments requiring interface between landscape, architecture and planning
Yaser Abunnasr & Associates (YAA)	13	Owner & Manager; Landscape architecture consulting (+ architecture and planning); local partner to Kathryn Gustafson on three projects in Beirut (2002-2005)
Cassia & Associates	1	Project Manager
Dar Al - Handasah Consultants (Shair and Partners)	3	Project architect and Project Manager
Simone Koramelli Architects	3	Architect for Complex of mud-brick residences in Abu Dhabi, UAE
AUB Museum	8	Expedition architect for several archaeological excavations in Lebanon and Syria

Professional Registration:

- Registered Architect at the Order of Engineers and Architects in Beirut, Lebanon.
- International member, American Society of Landscape Architects
- Member, American Planning Association

Professional & Academic Activities.

Awards:

- March 2018 Collaborative Research Stimulus Award, 2018, for outstanding and innovative scientific research proposal, American University of Beirut
- May 2017 Teaching Excellence Award 2017, Center for Teaching and Learning, American University of Beirut. This award is given every year to two full-time faculty members on competitive basis across the university. A full teaching portfolio is submitted for the nomination.
- 2016 Third Place, CIU HABITAT International Competition (Sponsored by HABITAT III). Team co-leader with Dr. Mona Fawaz and Habib Debs (Practicing Architect/Urban Designer, URBI) for the project titled 'Flood Pulse: From Threat to Opportunity: Capitalizing on Water Flows in Guasmo Sur' responded to the competition theme "Challenges of Marginal Habitat in the Contemporary Southern Globe: Resilient Communities". The third place responded to the need to resettle informal settlement dwellers in the city of Guasmo Sur (Ecuador), a vulnerable community living in mangrove swamps that experiences regular flooding. AUB student team members included MUPP/MUD students Israa Darwish and Diala Makki, LDEM alumna Nour Farhat, and fifth year architecture student Louai Kaakani.

Memberships, Affiliations, and Licensure:

- 2016-2017 Vice President, FAAL, Fulbright Alumni Association of Lebanon
- 2013-present Member, FAAL, Fulbright Alumni Association of Lebanon

- 2007-present Member, Fulbright Alumni Association, Washington, D.C.
- 2007-present Member, Alumni Association of the University of Massachusetts, Amherst, USA

Department Standing Committees and Contributions

- 09/2018-present Program Coordinator, Bachelors of Landscape Architecture, Department of Landscape design and Ecosystem Management, American University of Beirut
- 11/2017-05/2018 Lead Faculty member (research, writing, and reviewers' visit), BLA Program Self-Study, for New York State Education Department registration and LAAB/ASLA Accreditation process.
- 02/2018-05/2018 Member, Faculty Reappointment Committee. Served on two committees for contract reappointment for department colleagues.
- 05/2017-present Member, LDEM Mujais Landscape Architecture Award Selection Committee, Given to the best capstone project of the graduating class
- 2016-present Acting Department Chair, Consistently served as acting chair to department chairperson, Department of Landscape design and Ecosystem Management, American University of Beirut
- 2015-2016 Chair, LDEM Promotion Criteria Development Committee (for design faculty)
- 2015-2016 Member, LDEM Faculty Search Committee, position in Site Engineering
- 2013-present Key Member, LDEM Curriculum Development, participation in retreats, brainstorming sessions, and report development Key
- 2014-present Lead Faculty Member, LDEM New Outdoor teaching facilities, bidding process, supervision, and coordination with University Facilities, Planning, and Design Unit
- 2014-2015 Lead Faculty Member, LDEM studio renovations and re-equipping, planned, procured, and supervised construction
- 12/2014 Lead Faculty Member, LDEM external program reviewers three day; organized, coordinated, and prepared all material and meetings
- 2013-2014 Member, LDEM External Program Review Committee
- 2013-2014 Lead Faculty Member, LDEM New Green House Structure for horticulture teaching, design, supervision and coordination
- 2013-2015 Chair, Program and Course Learning Outcome Committee (PLO/CLO), conduct, report, and recommend improvements from direct and indirect assessment of learning outcomes
- 2013-present Faculty Representative, LDEM Library Liaison with University libraries
- 2012-2015 Lead Faculty, LDEM/FAFS Geographic Information Systems (GIS) Laboratory, Coordinator

University Standing Committees at AUB

- 2018-present Member and FAFS representative, AUB AREC Taskforce committee, reimagining AREC (AAT).
- 10/2018-12/2018 **External Member**, Horticulture Faculty Search Committee, Department of Agriculture
- 2018-present **Member**, FAFS Space committee
- 2018-present **Member**, FAFS AREC strategic task force.
- 2017/2018 Member and FAFS representative on the Accreditation working group on University assessment (WG5).
- 10/2016-2017 Member, University Architect Committee, serving under the Facilities Planning and design Unit (FPDU) providing advice and direction to architectural projects and master plan initiatives across university projects. Reports to head of FPDU and COO.
- 2016-present **Member**, Undergraduate Curriculum & the Undergraduate Student Academic Affairs Committee
- 05/2016-present Member, Regional External Programs (REP) Steering Committee, faculty (college) representative
- 08/2016-2017 Member, Academic Campus Master Planning 2030 Steering Committee, faculty (college) representative
- 2013-2017 Advisor to the Dean on facilities renovation, expansion, and needs, FAFS Dean's Office. Advisory tasks include:
 - University Master Planning, review of scope and requirements
 - FAFS facilities future needs
 - FAFS re-planning of existing facilities/floor renovations
 - Proposals for new projects: The Campus Landscape Sustainable Site Prototype Budgeting
 - Material and furniture selection
- 2015-2016 Leader, Task: Decanting of the Department of Landscape Design and Ecosystem Management to temporary facilities for facilities expansion (2 to 4 year period decanting), planned, designed temporary facilities, and supervised move.
- 2015-present Chair, FAFS Library Committee
- 2015-2017 Elected Member, FAFS Undergraduate Admissions Committee
- 2013-2015 Elected Member, FAFS Undergraduate Curriculum Committee
- 05/2016 FAFS Assistant Marshal, undergraduate graduation ceremonies, academic year 2015/2016
- 2015-present Member, Advisory Committee to the Center for Teaching and Learning, FAFS Faculty (college) representative

- 2015-present Member, AUBotanic Planning Committee
- 2014-present Member, AUBotanic university wide Steering Committee
- 2014 Advisor, University Student Photography Club
- 2013-2016 Elected Member, University Student Faculty Committee (USFC, joint faculty-student governance body), faculty (college) representative

Publications.

Books

- Hamin, E.M., **Abunnasr, Y.** and Ryan, R.L. (Expected August 1, 2017) ‘A Reader in Planning and Green Infrastructure for Climate Change’. Proposal submitted, reviewed, and accepted. Contract signed January 2017.

Book Reviews

- **Abunnasr, Y.** (2017), Book Review: Saliba, Robert 2015 (ed.), Urban Design in the Arab World, Routledge, *International Journal of Urban and Regional Research*, vol. 41,6 Book Chapters:
- Talhouk, S., **Abunnasr, Y.**, Forrest, A., and Miller, T. (2018). Ancillary Botanical Gardens in *Conserving wild plants in the south and east Mediterranean region*, Ed. Marcos Valderrábano, Teresa Gil, Vernon Heywood and Bertrand de Montmollin, IUCN (International Union for Conservation of Nature).
- **Abunnasr, Y.** (forthcoming, 2019) “The Garden of Forgiveness Project - Hadiqat As-Samah”. In Makzoumi, J., Ed., *Beirut Gardens*, American University of Beirut Press, Beirut.
- **Abunnasr, Y.** & Abunnasr, M. (forthcoming, 2019) “The Green Line Project”. In Makzoumi, J., Ed., *Beirut Gardens*, American University of Beirut Press, Beirut.
- **Abunnasr, Y.** (forthcoming, 2019) “The Shoreline Walk Project”. In Makzoumi, J., Ed., *Beirut Gardens*, American University of Beirut Press, Beirut.

Refereed Articles:

- John Dialesandro, Stephen Wheeler, and Yaser Abunnasr (2019). Urban Heat Island Dynamics in Dryland Urban Regions, Environmental Research Communications
- Stephen Wheeler, Yaser Abunnasr, John Dialesandro, Virginia Carter Gamberini, and Sarine Agopian (2019). “Mitigating Urban Heating in Dryland Cities: A Literature Review” *Journal of Planning Literature*.
- Abunnasr, Y. (2019). The ‘landscape’ as a basic unit for integrated energy planning in the Mediterranean Basin, *I Quaderni Urbanistica Tre*, *Journal of urban Design and Planning*, In Planning
- EM Hamin, Y Abunnasr, M Dilthey, E Albright, J Buxton, D DeGroot, T. P Judge, M Kenney, P Kirshen, B McAdoo, L Nurse, E Roper, RL Ryan, T. Sheahan, and Fricke, R. (2018) “Pathways to coastal resiliency: the Adaptive Gradients Framework”, *Sustainability*, 10(8), 2629; <https://doi.org/10.3390/su10082629>
- Talhouk, S.N., Y. Abunnasr, M. Hall, T. Miller, and A. Saif (2014) “Ancillary Botanic Gardens - Local Contributions to Plant Conservation” *Sibbaldia, the Journal of Botanic Garden Horticulture* No. 12, p 111-128, Royal Botanic Garden Edinburgh, UK.
- Abunnasr, Y., Hamin, E. and Brabec, E. (2013) “Windows of Opportunity: Addressing Climate Change through Adaptation Plan Implementation” *Journal of Environmental Planning and Management*. Online publication Dec09, 2013 (DOI: 10.1080/09640568.2013.849233). Volume 58, issue 1, p.135-155

Conference Proceedings – Full Refereed Articles:

- Yeretian, A., **Abunnasr, Y.**, Makki, Z. and Abi Habib, B. (2018). “A comparative analysis of thermal performance of building envelope types over time”. Proceedings of the *Second International Conference for Sustainable Design of the Built Environment: Research in Practice*, 12-13 September 2018, The Crystal, London
- Abu Jaber, N., **Abunnasr Y.**, Abu Yahya A, Boulad, N., Christou, O., Dimitropoulos, G., Dimopoulos, T., Gkoltsiou, K., Khreis, N., Manolaki, P., Michael, K., Odeh, T., Papatheodoulou, A., Sorotou, A., Sinno, S., Suliman, O., Symons, N., Terkenli, T., Trigkas V., Trovato, M.G., Victora, M., Zomeni, M., Vogiatzakis, I.N.(2015) “Travelling in the eastern Mediterranean with landscape character assessment”. In Full Proceedings of *Third International Conference on Remote Sensing and Geo-information of Environment (RSCY2015)*, 16-19 March, 2015 – Cyprus.
- Choueiri, Y. and **Abunnasr, Y.** (2014) “Assessing Water Consumption for integrating water management into urban Landscape Planning: The case study of Hamra neighborhood, Beirut, Lebanon”. In Full Proceedings of *Urban Sustainability and Resilience Conference 2014*. University of Central London, November 2-5, 2014, London, United Kingdom.

Conference Proceedings – Refereed Abstracts

- Madani, M., **Abunnasr, Y.** Sibaii, a. and Hazimeh, R. (2018).”Pedestrian Safety and Struggles over Older Adults’ Accessibility: The Case of Beirut Landscape Infrastructure”. Proceedings of the Third City Street Conference 2018 titled, *Transitional Streets: Stories of Convivial Streets*, #1 October-November 3, 2018, Notre Dame University Campus, Lebanon.
- Yeretian, A., **Abunnasr, Y.**, Makki, Z. and Abi Habib, B. (2018). “A comparative analysis of thermal performance of building envelope types over time”. Proceedings of the *Second International Conference for Sustainable Design of the Built Environment: Research in Practice*, 12-13 September 2018, The Crystal, London

- Yeretzian, A., **Abunnasr, Y.**, Makke, Z. & Abi Habib, B. (2018) “Improving the Thermal performance of Building Elevations: Analysis of Existing and Simulated Buildings in view of future adaptability”. Third World Multidisciplinary Civil engineering, Architecture, and urban Planning Symposium (WMCAUS 2018), 18-22 June, 2018, Prague (Czech Republic).
- Bachacha, N. and **Abunnasr, Y.** (Corresponding Author; 2018). “Urban cracks in Beirut’s urban landscape: the potential of leftover plots to enhance densely built neighborhoods”, Conference Proceedings of Place that Remains: Recounting the Un-built Territory, March 23 -24, 2018, Lebanese American University, Beirut, Lebanon.
- Madani, M., Sibaii, A. and **Abunnasr, Y.** (2017). “Pedestrian Safety and Struggles of Older Adults’ Accessibility: The Case of Beirut’s Landscape Infrastructure”. Aging and Society: the Seventh Interdisciplinary Conference and The Aging and Society Research Network, University of California Berkeley, November 3-4, 2017, Berkeley, CA, USA.
- **Abunnasr, Y.**, Fabian, M., Forrest A., Miller, T., and S.N. Talhouk. (2017). Ancillary Botanic Gardens, Local Botanic Gardens for Education and Outreach’. The 6th Global Botanic Garden Congress’. June 26-30, 2017, Geneva, Switzerland.
- **Abunnasr, Y.** (2016) “Rethinking Green Infrastructure in Middle Eastern Landscapes”. In *Unfolding Middle Eastern Landscapes, IFLA-Beirut Conference, Abstracts*. American University of Beirut May 31-June 2, 2016, Beirut, Lebanon.
- Dagher, R. and **Abunnasr, Y.** (2016) “A Spatial Urban Agriculture Strategy to improve Livelihoods in Disadvantaged Neighborhoods; the case of Nabaa, Beirut”. In *Unfolding Middle Eastern Landscapes, IFLA-Beirut Conference, Abstracts*. American University of Beirut May 31-June 2, 2016, Beirut, Lebanon.
- Neaimeh, R. and **Abunnasr, Y.** (2016) “An Integrated Ecological and Place-based Landscape Approach to Zoning in Mountain Towns in Lebanon”. In *Unfolding Middle Eastern Landscapes, IFLA-Beirut Conference, Abstracts*. American University of Beirut May 31-June 2, 2016, Beirut, Lebanon.
- Shaar, K. and **Abunnasr, Y.** (2016) “Retrofitting the Urban Landscape: Incorporating suitable green infrastructure typologies and related policies in dense neighborhoods in Municipal Beirut”. In *Unfolding Middle Eastern Landscapes, IFLA-Beirut Conference, Abstracts*. American University of Beirut May 31-June 2, 2016, Beirut, Lebanon.
- **Abunnasr, Y.** (2016) “Authenticity revisited: Do urban archaeological sites belong to the contemporary city or time past?” In *Nature and Culture: Heritage in Context Conference, 7th Annual Conference on Heritage Issues in Contemporary Society, Abstracts*. May 16-19, 2016, organized by the Center for Heritage & Society (University of Massachusetts Amherst), Czech University of Life Sciences, Prague, Czech Republic.
- **Abunnasr, Y.**, Al-Akl, N. and Dagher, R. (2016) “Towards a Comprehensive Assessment Manual for Design Studio Teaching: A Pilot Study from A.U.B. Landscape Architecture and Architecture Undergraduate Programs”. In *Sixth International Conference on Effective Teaching and Learning in Higher Education, Abstracts*. American university of Beirut, February 12-13, 2016, Beirut, Lebanon.
- **Abunnasr, Y.** (2015) “Ecological concepts in design and planning in the Middle East: historical precedents, project initiatives, and challenges” In *IALE 2015 World Congress, Crossing Scales, Crossing Borders: Global Approaches to Complex Challenges, Abstracts*. July 5 - 10, 2015, Portland, Oregon, USA.
- **Abunnasr, Y.** and Talhouk, N.T. (2015) “Archaeological sites as Ancillary Botanical Gardens: The Case of Chahim, Lebanon”. In *Cultural Landscapes and Heritage Values: Embracing Change in the Management of Place, Abstracts*. University of Massachusetts Amherst, May 13 - 15, 2015, Amherst, MA, USA.
- Tohme Tawk, S., Abi Saiid, M., Hamadeh , S. and **Abunnasr , Y.** (2013) “Peri-urban agriculture and food security in the MENA region as related to enabling policy settings: a case study from Lebanon and Jordan”. In *First International Conference on Global Food Security, Abstracts*. 29 Sept -2 October 2013, Noordwijkerhout, Netherlands.
- **Abunnasr, Y.** (2014) “Analyzing potential surface areas across land use types for an integrated green infrastructure network in Boston”. In *5th Global Forum on Urban Resilience and Adaptation, Abstracts*. May 29-31, 2014, Bonn, Germany.
- Choueiri, Y. and **Abunnasr, Y.** (2014) “Assessing Water Consumption for integrating water management into urban Landscape Planning: The case study of Hamra neighborhood, Beirut, Lebanon”. In *Urban Sustainability and Resilience Conference 2014, Abstracts*. University of Central London, November 2-5, 2014, London, United Kingdom.

Research Reports

- **Abunnasr, Y.** and Torvato, M.G. (2015) “Results of Landscape Character Assessment, Level One Mapping, Lebanon”, MEDSCAPES Project.

Contributions to Policy Reports

- **Expert Contributor to:** RICCAR Arab Climate Change Assessment Report (2017). United Nations Economic and Social Commission for Western Asia (ESCWA), E/ESCWA/SDPD/2017/RICCAR/Report. Link: <https://www.unescwa.org/publications/riccar-arab-climate-change-assessment-report>

Professional Practice Reports

- Kenney, M. , Weeks, D., **Abunnasr, Y.** , Baer, A.E. , Craft, C., Judge, P. , Hamin, E. , Madrid, C., Leonard Nurse, Rolli, C., Sutton-Griere, A.E., Teodoro, D. (2018) “Hurst Creek Resiliency Project in Maryland Adaptation Gradients Framework Expert Scoring Workshop”, SAGE Research Publication.
- **Abunnasr, Y.** (2018) Ghazze Park Design, Participatory Workshop, Report of Results. In collaboration with VNGI International and the Chief Architect of the Netherlands.
- **Abunnasr, Y.** (2017) “AUB Assembly Hall Landscape Preliminary Design”, American University of Beirut

- **Abunnasr, Y.** (2017) “AUB FAFS ECO-UNIT: A Living Laboratory for Sustainability”, American University of Beirut
- **Abunnasr, Y.** (2016) “Re-Envisioning Bliss Street”, Bliss Area Association and American University of Beirut.
- **Abunnasr, Y.** (2015) “Temporary Decanting of the Department of Landscape Design and Ecosystem Management: Technical and Financial Report” Faculty of Agricultural and food Sciences, American University of Beirut
- **Abunnasr, Y.** (2015) “Assessment of Short and Long Term Facilities Space Needs and Scenarios for Expansion for The Faculty of Agricultural and Food Sciences”, Faculty of agricultural and food Sciences, American university of Beirut
- **Abunnasr, Y.** (November 2014). “The FAFS ECO-UNIT – A showcase of Agro-ecological Sustainable Practices; Phase 1: Master plan Report”
- **Abunnasr, Y.** (2013) “Landscape and Green Standards for the New Waterfront Development (NWD), SOLIDERE, Beirut” In collaboration with ECOFYS (Germany) and PRIME DESIGN (Beirut).
- **Abunnasr, Y.** and the third year design students (2013). “ARECAP: Recapitulation, and capabilities: Assessment and strategic scenario planning for the Agricultural Research and Educational Center (AREC)” Faculty of Agricultural and Food Sciences, American University of Beirut

Conference Presentations

- **Abunnasr, Y.** (Invited), ‘MENA Cities: Urbanization and the WEF Nexus’, The Water-Energy-food Nexus in the Levant Conference, December 6 and 7, 2018, Faculty of Agricultural and Food Sciences, American University of Beirut, Beirut, Lebanon.
- **Abunnasr, Y.** (Invited), ‘Reflections on Open Space Planning and Design in Lebanese Cities’, Abi Samra Public Space Competition Tripoli, Lebanon. UN Habitat and order of engineers and Architects Tripoli Chapter, Tripoli, December 09, 2017.
- **Abunnasr, Y.** (Invited), ‘Green Infrastructure for Climate Change Adaptation: Challenges for the MENA Region’, Fulbright Alumni Regional Conference on Natural Resources organized by the Binational Fulbright Commission in Egypt, December 04-07, 2016, Cairo, Egypt
- **Abunnasr, Y.** (Invited), ‘Green Infrastructure for climate Adaptation’, Conference titled ‘The Transformative power of Cities in the MENA Region’, organized as a parallel event to the COP22 by the Frederich Ebert Foundation, November 19-22, 2016, Casablanca, Morocco.
- **Abunnasr, Y.** (Invited) ‘Re-conceptualizing Green Infrastructure: Challenges for Middle Eastern Landscapes’, First Conference on the Sustainable Use of Ecosystem Services in the MENA Region, organized by GIZ and Ministry of Environment in Jordan, October 10-12, 2016, Dead Sea, Jordan.
- **Abunnasr, Y.** (Invited) “Potential Contribution of ‘*Alternative Open Space*’ to Sustainable Cities”, *Cities for the 21st Century: Sustainable Cities in the MENA Region*, organized by Friedrich Ebert Stiftung (Germany) October 8-9, 2015, Tunisia, Tunisia
- **Abunnasr, Y.** (Invited) “Measuring for Meaningful Data”, *Eco-City Summit 2015, Session 15D –One Planet Solutions: Measuring for Impact*, October 11-13, 2015, Abu Dhabi, UAE
- **Abunnasr, Y.** (Invited) “Reflections on the Meanings of Resilience and Sustainability for MENA Cities” *The Sustainable Cities in the Middle East and North Africa Conference*, Issam Faris Institute for Policy Studies (AUB) and Friedrich Ebert Stiftung (Germany), American University of Beirut, November 4-5, 2014
- **Abunnasr, Y.** (Invited) “Use of gradients and transects in planning and design in the context of climate change adaptation” *SAGE Workshop (Sustainable Adaptive Gradients in the Coastal Environment)*, May 21-23, 2014, New York City, NY, USA.

Conferences, Workshops, Panels and Meetings ◦ Organized/Moderated/Commentated

- **Abunnasr Y.,** Kosmatopoulos, N., Talj, J. and Elshakry, M., ‘How Communities Imagine the Sea and How the Sea Creates Communities’, New York-Beirut Briefing (discussion panel between AUB campus and NY office remotely and simultaneously connected), November 28, 2018, College Hall, American University of Beirut.
- **Abunnasr, Y.,** Abiad Mohamad, Jaafar, H. ‘FAFS Interactive Research Workshop’, November 02, 2018, American University of Beirut, Lebanon
- **Abunnasr, Y.** (invited), organizing conference committee member (focus on ecology and landscape planning) for the conference titled ‘Power, Borders, and Ecologies in Arab Societies’, Arab Council for the Social Sciences, April, 2019.
- **Abunnasr, Y.** , organized, participated and managed the final conference for the EU funded grant project ENEPLAN titled “Energy Education in Mediterranean Universities”, September 11-12, 2018, American university of Beirut, Lebanon
- **Abunnasr, Y.** (Invited). Participated in the fifth SAGE (Sustainable Adaptive Gradients in the Coastal Environment) workshop on developing gradients of integrated infrastructure for climate change adaptation, Baltimore, USA, June 3-9, 2018. The adaptive gradients framework was applied and tested on a case study adopting living shorelines as a first line of defense against rising sea level.
- **Abunnasr, Y.** (on Grant) Participated and contributed to the fifth thematic workshop held in the University of Algarve for the project titled “Developing skills in the field of integrated energy planning in Mediterranean Landscapes (ENEPLAN)”, European Union, ERASMUS+ Program, January 15-19, 2018, Faro, Portugal.

- Farajalla, N., Jargerskog, A., **Abunnasr Y.**, and Yeretzian, A. ‘Climate Change’ Dire Consequences for the Middle East: Known Vulnerabilities and Available Policy responses’, New York-Beirut Briefing (discussion panel between AUB campus and NY office remotely and simultaneously connected), February 13, 2018, College Hall, American University of Beirut.
- **Abunnasr, Y.** (Invited). Participated in the fourth SAGE (Sustainable Adaptive Gradients in the Coastal Environment) workshop on developing gradients of integrated infrastructure for climate change coastal adaptation, Barbados, July 29-August 4, 2017.
- **Abunnasr, Y.** (on Grant) Participated and contributed to the fourth thematic workshop held in University of Siena for the project titled “Developing skills in the field of integrated energy planning in Mediterranean Landscapes (ENEPLAN)”, European Union, ERASMUS+ Program, September 25-29, 2017, Siena, Italy.
- **Abunnasr, Y.**, Participated in two expert panels on the project titled ‘Informal Systems in Cities in Lebanon and the Region Project’, Issam Faric Institute for Policy and Friedrich Ebert Stiftung, American university of Beirut, April 20, 2017 and October 27, 2017.
- **Abunnasr, Y.** (on Grant) Participated and contributed to the third thematic workshop held in Valetta for the project titled “Developing skills in the field of integrated energy planning in Mediterranean Landscapes (ENEPLAN)”, European Union, ERASMUS+ Program, December May 3-8, 2017, Valetta, Malta.
- **Abunnasr, Y.** (on Grant) Participated and contributed to the second thematic workshop held in Universidad Pablo de Olavide for the project titled “Developing skills in the field of integrated energy planning in Mediterranean Landscapes (ENEPLAN)”, European Union, ERASMUS+ Program, December 12-17, 2016 Seville Spain.
- **Abunnasr, Y.** (on Grant) Participated and contributed to the first thematic workshop held at the University Roma Tre for the project titled “Developing skills in the field of integrated energy planning in Mediterranean Landscapes (ENEPLAN)”, European Union, ERASMUS+ Program, September 5-9, 2016, Rome, Italy.
- **Abunnasr, Y.** (Invited), **Peer reviewer** of data developed for the “Vulnerability Assessment Task Force on Sensitivity and Adaptive Capacity indicators for the Middle East and North Africa”. The Regional initiative for the Assessment of the Impact of Climate Change on Water resources and Socio-Economic Vulnerability in the Arab Region, United Nations House, December 6-9, 2016 Beirut, Lebanon
- **Abunnasr, Y. (Invited), member, Experts Consultation Meeting** for the research project titled ‘Informal Systems in Lebanon and the MENA Region’ co-organized by the Issam Faris Institute for Public Policy and International Affairs, AUB.
- **Abunnasr, Y.** (Invited) Facilitator of a session in the “SAGE 2016 Writing Workshop”, June 21-22, 2016, Boston, MA, USA
- **Abunnasr, Y.** (Invited) Session Moderator, “Landscape Ecology and Environment” *Unfolding Middle Eastern Landscapes, IFLA-Beirut Conference*. American University of Beirut May 31-June 2, 2016, Beirut, Lebanon.
- **Abunnasr, Y.** Co-organizer and Contributor, Grant Kick-off workshop meeting – “Developing skills in the field of integrated energy planning in Mediterranean Landscapes (ENEPLAN)”, European Union, ERASMUS+ Program, March 14-18, 2016, Rome, Italy
- **Abunnasr, Y.** (Invited) Session Moderator “Biomimicry in Architecture” *Eco-City Summit 2015*, October 11-13, 2015, Abu Dhabi, UAE
- Dr. Sadahisa Kato (Japan), **Abunnasr, Y.** and Jack Ahern (USA), Full day symposium co-organizer (10 speakers), “Case Study Application of Landscape Ecological Thinking to Design and Planning of Landscapes Addressing Climate Change and Impacts on Ecosystems: An International Survey” *IALE 2015 Congress (International Association of Landscape Ecology)*, Portland, Oregon (USA), July 5 - 10, 2015
- **Abunnasr, Y.** (Invited) Commentator and contributor to the Second Expert Work shop on Coastal Resilience organized by *Sustainable Adaptive Gradients in the Coastal Environment (SAGE)*, June 16-20, 2015, Jamaica.
- **Abunnasr, Y.** (Invited) Commentator and Expert opinion “Vulnerability Assessment Task Force on Sensitivity and Adaptive Capacity indicators for the Middle East and North Africa” *UNDP, The Regional initiative for the Assessment of the Impact of Climate Change on Water resources and Socio-Economic Vulnerability in the Arab Region*, United Nations House, October 20-23, 2014, Beirut, Lebanon
- **Abunnasr, Y.** Co-organizer and Contributor Grant Kick-off workshop meeting – “Development of Landscape Character Assessment as a tool for effective conservation of natural heritage in the Eastern Mediterranean (MEDSCAPES)”, European Union, ENPI CBCMED Project/Cross Border Cooperation in the Mediterranean Program, March 10-12, 2014, Nicosia, Cyprus
- **Abunnasr, Y.** (Invited) Roundtable Discussant “Urban Green Spaces policy in Lebanon” organized by the Issam Faris Institute for Policy Studies (AUB), November, 2012 American University of Beirut, Beirut, Lebanon
- **Abunnasr, Y.** Organizer and Lead faculty in “Invented Landscape(s)” a multi-disciplinary, student/faculty design workshop, Swiss Pavilion, Venice Biennale 2014, September 15-21, 2014, Venice, Italy

Active Membership in Research Groups

2018 - present	The Coast of Lebanon: Ecology and Development.
10/2018	Participated in the MIT-AUB research workshop organized by the Maroun Semaan Faculty of Engineering and Architecture, October 8-10, 2018

- 2016-2017 Co-PI for the project titled ‘Informal Systems in Cities in Lebanon and the Region Project’, Friedrich Ebert Stiftung and American university of Beirut.
- 2014-2018 Member to the *Sustainable Adaptive Gradients in the Coastal Environment (SAGE): Conceptualizing the Role of Coastal Infrastructure in Resilience* (<http://www.resilient-infrastructure.org/>).
- 2014-present Lead and Founding member (with Carla Aramouny and Nayla Al-Akl), *Invented Landscapes*, a research through design to conceptualize integrated natural and built design approaches to sprawl along mountain slopes within the Lebanese urban and natural landscape
- 2013-present The ECOMENA Project, with Dr. Shadi Hamadeh Integrated Resilient and Sustainable models for small scale developments across the Middle East and North Africa.

Workshops and Exhibitions

- 2018 Participated in the 50th Anniversary Exhibition for the Department of Architecture at AUB titled “Exhibition and Symposium 1968-2018”, October 05, 2018, American University of Beirut. Entry included an exhibition panel and inclusion in the exhibition publication.
- 2018 Participated in the MIT-AUB research workshop organized by the Maroun Semaan Faculty of Engineering and Architecture, October 8-10, 2018

Contributions: Research area on green infrastructure planning and design for climate adaptation. Key contributor to the SAGE, NSF funded project on coastal resilience. Recipient of UC Davis grant on the extent of vegetated green infrastructure capacity to ameliorate outdoor climates in urban desert landscapes. Recipient of a European Union grant on integrated energy planning with a focus on land use and land cover aspects with emphasis on ecological impacts. Attended and presented in more than 25 international and regional academic and professional venues since 2012. Co-PI on two funded projects from the university. Taught all levels of studios within the program from the first year studio to the capstone project. Developed three new courses LDEM 202, LDEM 228, and LDEM 302 (Green Infrastructure graduate level). Advised and graduated 6 masters’ students and currently advising four from different disciplines such as urban design, rural development and ecosystem management. Member of two PhD committees, one in Ethiopia and the second in the USA (UMass Amherst). Very active in mentoring and advising students and assisting in career development. Written more than 70 recommendation letters since 2010, started a student group “Talking landscapes” for student mentoring, placed several students in internships and full-time jobs, most notably one graduate student with Kathryn Gustafson DC office.

Very active service record. At the department level leader and contributor on the course/program learning outcomes committee, course mapping, and self-evaluation studies. Mentor to several junior design faculty. Served and serving on Faculty (College) committees (Library Committee, undergraduate Curriculum committee, and three other committees). At the University level served in the University Student Faculty Committee (2 years), on the steering committees of the Teaching and Learning center, the Regional Extension programs of the University, and the AUBotanic. Key member in the University architect Committee and member of the Working group 5 (on Assessment) for the University 9AUB) reaccreditation process.

Name: Maria Gabriella Trovato**Rank:** Assistant Professor**Education:**

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
Universita' degli Studi Mediterranea di Reggio Calabria, Italy	7	BA in Architecture/1995
Ecole Nationale Superieure du paysage, Versailles – Paris, France	2	Postgraduate degree in Landscape Architecture /1999
Universita' degli Studi Mediterranea di Reggio Calabria, Italy	3	PhD in Landscape Architecture: Parks, Gardens and Spatial Planning /2003

Teaching Experience: (College level)

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	9	
Universita' degli Studi Mediterranea di Reggio Calabria	8	Design of urban public space; Architettura del paesaggio mediterraneo; Elements of the landscape; Art of Gardens; Architectural Design
Scuola Superiore dell'Università degli Studi di Catania, It	3	Landscape design and environmental planning in the Mediterranean area
Faculty of Architecture, Università degli Studi di Palermo, It	1	Art of Gardens and Landscape Architecture
International Master in Landscape Architecture, Ecole Nationale d'Architecture, Rabat, Morocco	2	Landscape and suburbs
Ecole d'Architecture de paysage, Université de Montréal, Montreal, Canada	1 semester	Atelier APA 4300 "Processus et design"

Practice Experience:

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
B&B Landscape Architecture, Amsterdam	1	Designer
Trovato+Truglio Landscape Architects	14	Landscape Designer

Professional Registration:

- Order of Architects, Planners, Landscape Architects and Conservators, Province of Messina, IT
- LELA, Lebanese Landscape Association
- ECLAS, European Council of Landscape Architecture Schools

Professional & Academic Activities.

1997-present	Order of Architects, Planners, Landscape Architects and Conservators, Province of Messina, IT
2018-present	Member of the Committee of the PhD program in Landscape Architecture, Faculty of Architecture, Università di Firenze, Italy
2016-Present	IFLA Middle East Chair of the working group IFLA Landscape Architecture without borders, under the Professional Practice IFLA Committee
2016-present	Secretary of LELA (Lebanese landscape Association) IFLA association
2015-present	ECLAS, European Council of Landscape Architecture Schools
2015-present	Founder and Director of the Eastern Mediterranean Landscape Observatory, an initiative in the framework of the MEDSCAPES project founded by the European Neighborhood and Partnership Instrument (ENPI) program
2012-present	Member of the editorial department of the 'RIVISTA' journal of the Order of Architects, Planners, Landscape Architects and Conservators, Province of Messina, IT
1997-present	Order of Architects, Planners, Landscape Architects and Conservators, Province of Messina, IT
2018-2019	Co Principal Investigator in the academic research Developing a Global Design Team Approach for Interdisciplinary Learning at the Faculty of Agricultural and Food Sciences, Scholarship on Teaching and Learning (SOTL) University Research Board, AUB
2016	Responsible of CIVILSCAPE's Task Force for Landscape in Emergency

- 2013-2015** Member of the landscape advisory committee of the MEDSCAPES project
2013-2015 Member of the steering committee of the MEDSCAPES project

Exhibitions of student's works

2015-2016	A collaboration between the CCECS at AUB, American University of Cairo, Landscape Design and Ecosystem Management at FAFS/AUB, to design implementable landscape interventions in Sarafand Syrian Settlement in Lebanon.
2013-2014	A collaboration between the CCECS at AUB, American University of Beirut, Landscape Design and Ecosystem Management at FAFS/AUB, to design landscape interventions along Nahr Beirut River, in Lebanon.
2013-2014	A collaboration between the Environment and Sustainable Development Unit at FAFS (ESDU), LDEM and Al-Shouf Cedar Society to design a farmers market 'Souk O Shouf' in Damour area.

Research

- 2019-2023** Principal Investigator (PI) in the Scientific Research 'Advancing Alternative Migration Governance (ADMIGOV)', Horizon 2020-SC6-MIGRATION-2018
2018-2020 Principal Investigator (PI) in the Scientific Research 'SWaM Akkar. Supporting Sustainable Solid Waste Management in Jurd al-Kaytee, Akkar, EuropeAid/155108/DD/ACT/LB
2014-present Principal Investigator (PI) in the Scientific Research 'Landscape in emergency'
2016-2017 Principal Investigator (PI) in the Scientific Research 'Forests and Landscapes Restoration Mechanism' - FAO and Ministry of Agriculture, Lebanon
2013- 2016 Principal Investigator (PI) in the Scientific Research 'MEDSCAPES', "Development of Landscape Character Assessment as a tool for effective conservation of natural heritage in the Eastern Mediterranean", ENPI-CBCMED, Programme funded by the European Union.
2013- 2016 Principal Investigator (PI) in the Scientific Research 'URB Grant – FAFS, AUB', "Landscape Atlas"
2013 Principal Investigator (PI) in the Scientific Research 'Seed grant – FAFS, AUB', "Territories in transition\The landscape in "Between" in Beirut city"

Books and Articles Referee

- 2016** Referee for the book: Nigel Bertram, Leon van Schaik, and Shane Murray. Suburbia: Reimagined: the City and Ageing Populations in the Information Era, Routledge
2016 Referee for the article: Envisioning A Post-Conflict Tripoli. The 'Inclusive Urban Strategy And Action Plan' For Bab El Tebbeneh And Jebel Mohsen, Footprint Peer Review Journal

Publications:

- *2016** Landscape in emergency. Syrian informal settlements in Lebanon, in JOLA Journal of Landscape Architecture (Status: submitted for peer review)

Invited contribution on peer review Book Chapter

- 2019** The Landscape Character Assessment As A Tool For Decision-Making In Iswm Processes. The Case Study of Jurd Al Kaitee, Lebanon, in Progress In Planning. (Status: in preparation)
2019 Landscape, Community And Resilience: Migration And Inclusive Cities, in Landscape Research. (Status: in preparation)
2019 Borderscape: Syrians Forced Migration And New Spatial Practices In Lebanon, in Jola, Journal Of Landscape Architecture. (Status: in preparation)
2018 Developing a Landscape Decision Support System model for the Eastern Mediterranean area, in Lothar Muller editor, Status and Trends of Landscape Research, Springer book series „Innovations in Landscape Research“. (Status: sent for publication)
2018 Enfeh coastal landscape: preservation, management and landscape planning strategies, in Journal of Marine and Island Cultures, v7 n2-3; doi:10.21463/jmic.2018.07.2.03
2018 Landscapes in the Eastern Mediterranean between 3 the Future and the Past, in Land Special Issue on "Landscapes in the Eastern Mediterranean between the Future and the Past". Land 2018, 7(4),160; <https://doi.org/10.3390/land7040160>
2018 A Landscape Perspective on the Impact of Syrian Refugees in Lebanon. In: Asgary A. (eds) Resettlement Challenges for Displaced Populations and Refugees. Sustainable Development Goals Series. Springer, Cham. DOIhttps://doi.org/10.1007/978-3-319-92498-4_4. ISBN 978-3-319-92497-7

- 2017** Landscape Risk Assessment and Decision Support System in the East Mediterranean area, in Land Special Issue on “Landscapes in the Eastern Mediterranean between the Future and the Past”. 2017, 6(4), 76.
<https://doi.org/10.3390/land6040076>
- *2016** GENTRIFICATION VERSUS TERRITORIALISATION. THE PERIURBAN AGRICULTURE AREA IN BEIRUT, in *Balanced Urban Development: Options and Strategies for Liveable Cities*, Basant Maheshwari, Vijay P. Singh and Bhadrani Thoradeniya (Editors), Springer ISBN 978-3-319-28110-0
- *2015** TERRITORIES IN TRANSITIONS. Beirut cityscape, in *Landscape Culture - culturing Landscapes: The differentiated construction of Landscapes (RaumFragen: Stadt- Region - Landschaft)* Diedrich Bruns (ed), Olaf Kühne (ed), Antje Schönwald (ed), Simone Theile (ed) ISBN-10: 3658042834 ISBN-13: 978-3658042837
- 2016** Landscape and social Justice, in Conference proceedings IFLA Beirut Conference: Unfolding Middle Eastern Landscapes.
- 2016** Landscape and displacement condition, in NIP Network in Progress n.2, 2016, "CMYK. Farewell to the press" title "Magenta. A landscape literature". ISSN 2281-1176
- *2015** N. Abu Jaber · Y. Abunnasr · A. Abu Yahya · N. Boulad · O. Christou · G. Dimitropoulos · T. Dimopoulos · K. Gkoltsiou · N. Khreis · P. Manolaki · [...] · A. Sorotou · S. Sinno · O. Suliman · N.Symons · T. Terkenli · V. Trigkas · M-G. Trovato · M. Victora · M.Zomeni · I.N.Vogiatzakis (2015) Travelling in the eastern Mediterranean with landscape character assessment. In Hadjimitsis, D.G., Themistocleous, K., Michaelides, S., Papadavid, G. (Ed) *Proceedings of SPIE* Vol. 9535, 953505, doi: 10.1117/12.219272
- 2015** East Mediterranean Landscape Observatory, in UNISCAPE En-Route International Seminar “Landscape Observatories in Europe II”. ISSN 2281-3195
- 2015** Landscape in Emergency, in Conference proceeding ‘Defining Landscape Democracy’, CLAD, Center for Landscape Democracy, Oslo, 2015

Articles in professional magazines

- *2015** E-scape/ landscape and refugees influx. Syrian informal settlements in Lebanon, in *Landscape Architecture Australia* Issue entitled *New Frontiers, Future Landscapes*.
- 2014** Beirut cityscape e il diritto (negato) al paesaggio. in ‘RIVISTA’ n. 10/11, 2014 *Journal of the Order of Architects, Planners, Landscape Architects and Conservators, Province of Messina, IT*

Contributions:

2016 I supported and lead the signature of a Memorandum of Understanding (MOU) between AUB and Sin El Fil Municipality. The MOU has the broad objective of promoting a mutually beneficial collaboration between the Parties whereas both the municipality and AUB wish to establish a framework of collaboration in matters of mutual interest related to urban landscape and implementation of public spaces.

2016 4th Student Civic Engagement Conference and Workshop under the theme “Refugees and Marginalized Communities in Lebanon and Egypt”, AUB, Center for Civic Engagement and Community Service (CCECS). In April 2016, Third years landscape students from the course LDEM228 participated actively to the 4th Student Civic Engagement Conference and Workshop under the theme “Refugees and Marginalized Communities in Lebanon and Egypt”. The students, led by the professor Maria Gabriella Trovato and by the instructor Balsam Ariss, presented the work there were conducting in the deprived neighborhood of Dahr Ej Jammal, Sin El Fil Municipality. With the aim to provide Sin El Fil municipality with projects for four focus intervention areas and with a strategy to enhance the public space provision of this

2015 I jointly worked with Professors J. Makhzoumi, and N. Al Akl (LDEM-AUB) and Professor S. Samaha, Chair of the Department of Landscape at the Lebanese University, with the assistance of Ms. Salwa Sabbagh, for the establishment of the Lebanese Landscape Association (LELA). LELA is an NGO aiming at promoting landscape architecture in Lebanon. LELA received formal approval at the 2015 IFLA World Council held in Saint Petersburg, Russia. I am currently the secretary of the association.

Name: Mehran Madani

Rank: Assistant Professor

Education: (Doctoral Degree)

Institution	Number of Years Attended	Degree/Date Granted
Washington State University	3.5 years	D.Des. / Dec 2012
University of Toronto	2	MLA/2005
Shiraz University	4	Bachelor of Engineering Science/1994

Teaching Experience: (College level)

Institution	Years Taught	Subjects
American University of Beirut	3	Landscape Architecture
University of California Berkeley	1	Design Thinking/Landscape Architecture
North Dakota State University	2	Landscape Architecture
Washington State University	3	Design/Landscape Architecture
Westwood College	3	Design

Practice Experience:

Firm or Agency	Number of Years	Responsibilities
Urban Arena	4	Project Designer
Marius Ois and Associate	5	Landscape Designer
NAK Design Group	2	Landscape Designer

Professional Registration:

N/A

Professional & Academic Activities.

Member of Research Committee, Student Affairs Committee, and Graduate Committee

Awards and Grants

- Erasmus Mobility Grant, Department of Sociology, University of the Aegean, Lesvos, Greece, 2018
- URB Interdisciplinary Research Grant (2-year), University Research Board, American University of Beirut, 2018
- CNRS Grant (2-year), Lebanese National Council for Scientific Research, Lebanon, 2017
- Erasmus Mobility Grant, Department of Architecture and Design, Politecnico di Torino, Italy, 2017
- URB Interdisciplinary Research Grant (2-year), University Research Board, American University of Beirut, 2016
- Faculty Seed Grant, Department of Landscape Architecture and Ecosystem Management, American University of Beirut, 2015
- Representative of Department of Architecture and Landscape Architecture for the NDSU Diversity Impact Award, for contributions to cultural and pedagogical diversity on the NDSU Campus, 2013

Scholarships and Fellowships

- Center for Information Technology Research in the Interest of Society (CITRIS), UC Berkeley, Visiting Scholarship, CA (2017)
- Center for Advanced Studies On Aging, School of Social Welfare, UC Berkeley, Visiting Scholarship, CA (2017)
- Constructed Environment, Common Ground Publisher, Scholar Award, Lisbon, Portugal, 2013

Publications.

- Madani, M., El Zeenni, L., & Kanj, T. (2018)-“Obsolete Active Surveillance as Product of Dynamic Public Place” – Book chapter in both English and Portuguese, by the Federal University of de Juiz de Fora.
- Madani, M. & Filho, F. (2018) - “Social Conurbation as Justifiable Urban Sprawl Repercussion ” – Recently accepted to be published on the International Journal of Constructed Environment, Common Ground Publishing.
- Madani, M. & Mehio-Sibai A. (2017)-“ Assisted Living Facilities’ Accessibility Challenge in the Beirut Urban Area”– Common Ground Publishing, The International Journal of Architectonic, Spatial, and Environmental Design.
- Madani, M, Williams, J., & Kharfan, G. (2016)-“Reclaiming the Virtual Sense of Place”– Common Ground Publishing, Journal of Constructed Environment.
- Madani, M. (2016)-“Beirut Neighborhood Characteristics and Older Age”– HelpAge International, Ageing and the City Magazine.
- Madani, M. (2015) - “Outdoor Invitation Qualities of Assisted Living Facilities Located in Different Urban Forms ” - Common Ground Publishing, Journal of Aging and Society.

- Madani, M. (2013)-“*Is Suburban Form a Good Fit For Assisted Living Residents’ Outdoor Social Activities?*”– Book Chapter (Working Papers), in the Death and Life of Social Factors in Environmental Design, Cambridge Scholars Publishing.

Seminars and Conferences

- Keynote Speaker & Panelist– 7th International Conference on Urban Planning and Management – Ferdowsi University of Mashhad – Mashhad, Iran (Spring, 2017)
- Panelist – Habitat III Conference - The United Nations Conference on Housing and Sustainable Urban Development, Quito, Ecuador (Fall, 2016)
- Keynote Speaker & Panelist– IALE International Conference - International Association for Landscape Ecology – an Interdisciplinary Conference, Isfahan, Iran (Fall, 2016)
- Panelist – Aging Processes and Design of Living Environments, Institute for Aging, School of Social Welfare, University of California Berkeley (Spring, 2014)

Contributions:

I have contributed to the landscape design field and urban landscape discipline through creative projects, cutting edge research, and scholarly publications related to landscape architecture/planning, and have conducted my research on human dimensions of urban landscape and social aspects of healthy community design beside my commitment to teaching excellence and professional activities.

Name: Nayla M. Al-Akl

Rank: Assistant Professor

Department or unit (if not part of the program under review):

Education: (College and higher)

Institution	Number of Years Attended	Degree/Date Granted
Harvard University Graduate School of Design, USA	2	MLA/2007
American University of Beirut, Lebanon	6	BArch/2002

Teaching Experience: (College level)

Institution	Years Taught	Subjects
American University of Beirut, Department of Landscape Design and Ecosystem Management (as Assistant Professor)	7	Technical Drawing, Descriptive Drawing (new course), Site Design I: Sustainability and Spatial Landscape Strategies, Seminar, Contemporary Issues in Landscape Architecture, Landscape Architecture History 1, Professional Practice, Internship - Practicum (new course), Site Design II: Cultural Landscapes and Historic Preservation, Final Year Research Project, Final Year Advanced Design, Master's Thesis Advising
Harvard University Graduate School of Design	1	Landscape Architecture Teaching Assistant III (design studio)

Practice Experience

Firm or Agency	Number of Years	Responsibilities
Nayla Al-Akl – Design Consultancy	8	Design consultant on landscape architecture, landscape planning and architecture projects locally and internationally
SWA Group	4	Beirut Office Director and Landscape Architect
Hargreaves Associates	1	Landscape Intern
Samir Khairallah & Partners (SKP)	1	Architect
LACECO	2	Landscape Architect
Consulting Architect (Saab International)	1	Consulting Architect

Professional Registration:

2002 - Present	Registered Architect with the <i>Order of Engineers and Architects</i> of Beirut
2018 - Present	Anglo-American Cemetery Committee, Lebanon: Member
2019 – Present	European Council of Landscape Architecture Schools (ECLAS):Representativemember of LDEM-AUB
2015 - Present	Lebanese Landscape Association (LELA): Co-Founder and Administrative Member
2015 - Present	International Federation of Landscape Architects (IFLA): Member of affiliatedassociation LELA
2009 - 2014	American Society of Landscape Architects (ASLA): International Member

Professional & Academic Activities.

Memberships & Committees

2015	Co-Founder of <i>LELA</i> (Lebanese Landscape Association), a Lebanese NGO affiliated with IFLA (International Federation of Landscape Architects)
2015- Present	Member of the Administrative Committee, Accountant - <i>LELA</i>
University Committees	<ul style="list-style-type: none"> • AUB Associate Dean of Student Affairs • AUB Task Force on Inclusive Campus Environment • AUB Core Curriculum Committee • AUB Task Force on Lives and Careers of Women Faculty at AUB • AUB AUBotanic University CommitteeAUB Strategic Planning Committee, Member • AUB President Inauguration, Speaker • AUB Dean’s Search Committee, Member •
Faculty & Departmental Committees & Responsibilities	<p>Present Roles:</p> <ul style="list-style-type: none"> • LDEM Landscape Student Society, Academic Advisor • LDEM LDEM Faculty/Student Committee, Chair • LDEM Student Internship Coordinator • LDEM Student Orientation Coordinator • LDEM Green Roof Research Group • LDEM LDEM Program Review Committee • FAFS Students Affairs Committee • FAFS Graduate Studies Committee • FAFS Undergraduate Admissions Committee • FAFS Teaching Facilities Design Consultation (labs, classrooms, offices) • FAFS AREC Lounge and Cafeteria Design <p>Past Roles:</p> <p>2013-2015 Member, LDEM Program Review Committee</p> <p>2013-2015 Department Coordinator of External Relations and Student Internships</p> <p>2012-2015 Head of Department Visibility efforts</p>

Conference Proceedings:

- **Al-Akl, N.**, Karaan, E., Talhouk S. and Temraz S., “Medical Centers: A Platform for Urban Healing Landscapes” - WORLD DESIGN SUMMIT (WDS 2017), October 16-25, 2017, Montreal, Canada - (Proceedings accepted)
- **Al-Akl, N.**, “ The practice of Green Roofs in the Middle East: System or Trend”; Conference: IFLA BEIRUT 2016 CONFERENCE, American University of Beirut, May 31 – June 02, Beirut Lebanon (ISBN 978-9953-0-3656-4)
- Al-Zein, M., Itani, M., **Al-Akl, N.**, Yazbeck, M., “Assessing the Potential of Native Plant Species as Ornamentals: Lebanon as a Case Study”; Future Conference: INTERNATIONAL SYMPOSIUM ON SURVEY OF USES OF PLANT GENETIC RESOURCES TO THE BENEFIT OF LOCAL POPULATIONS, September 18, Madagascar (Proceedings accepted)
- Al-Zein, M. , **Al-Akl, N.** and Yazbeck, M., “Native Plant Species as Potential Ornamentals”; Conference: IFLA BEIRUT 2016 CONFERENCE, American University of Beirut, May 31 – June 02, Beirut Lebanon (ISBN 978-9953-0-3656-4)
- Abunnasr, Y., **Al-Akl, N.** and Dagher, R. “Towards a Comprehensive Assessment Manual for Design Studio Teaching: A Pilot Study from AUB Landscape Architecture and Architecture Undergraduate Programs”; Conference: SIXTH INTERNATIONAL

Publications

Academic Papers

- 2018 **Al-Akl, N. M.**, Karaan, E. N., Al-Zein, M. S., & Assaad, S. (2018). The landscape of urban cemeteries in Beirut: Perceptions and preferences. *Urban Forestry & Urban Greening*, 33, 66-74. (Status: Published)
- 2018 Jaszczak, A., Kristianova, K., Dreksler, B. & **Al-Akl, N.M.** (2019). Planning of the green road system as an element of spatial management in suburbs and small towns. *ZARZADZANIE PUBLICZNE* no2/2019 (Status: Published)
- 2019 (in-progress) Karaan, E., Talhouk, S., Temraz, S. & **Al-Akl, N.M.*** Design Guidelines for a Therapeutic Roof Garden: The case of AUBMC’s Oncology Unit (Status: In-Preparation) to be submitted to *Landscape and Urban Planning*

2019 (in-progress) **Al-Akl, N. & Talhouk S.**, Redefining the values of beauty in landscape architecture: the everyday experience of Beirut streetscapes (Status: In-Preparation) to be submitted to *Landscape Research*

* Corresponding Author

- *Conference Abstracts/Proceedings* Al-Akl, N., “Sustaining the landscape of cemeteries: Enhancing religious institutions’ contribution to sustainable cities and communities in Beirut”; COMMON GROUND, IFLA WORLD CONGRESS 2019, 18-20 September, Oslo Congress Center, Oslo, Norway (2019)
- Abunnasr, Y., Al-Akl, N., Fabian, M., Makhzoumi, J., Talhouk, S., Zurayk, R., Dreksler, B. and Trovato, M.G., “Challenges and opportunities of landscape architecture education in the Arab world: The experience of the American University of Beirut”, LESSONS FROM THE PAST, VISIONS FOR THE FUTURE, ECLAS-UNISCAPE CONFERENCE 2019, 16-17 September, Norwegian University of Life Sciences, As, Norway (2019)
- Al-Akl, N., “Redefining the values of beauty in landscape architecture: the challenge of an emerging field in the urban context”; FROM GARDEN ART TO LANDSCAPE ARCHITECTURE – TRADITIONS, RE-EVALUATIONS, AND FUTURE PERSPECTIVES, 14-15 September, Herrenhausen Palace, Hanover, Germany (2018)
- Al-Akl, N., “Urban ecologies: blurring boundaries between public and private”; Conference: CITY DEBATES 2018, 18-20 April, American University of Beirut, Lebanon (2018)
- Al-Akl, N. and Al-Zein, M., “Re-questioning the landscapes of death: Urban cemeteries as conservation sites”, THE SPACE THAT REMAINS, 23-24 March, Lebanese American University, Lebanon (2018)
- Al-Akl, N. and Al-Zein, M., “The Potential of Urban Cemeteries in Sustainable Landscape and Urban Planning: The Case of Beirut”; Conference: LANDSCAPE FUTURES: UNISCAPE CONFERENCE 2017, June 19-21, University of Copenhagen, Copenhagen, Denmark (2017)
- Al-Akl, N., “The practice of Green Roofs in the Middle East: System or Trend”; Conference: IFLA BEIRUT 2016 CONFERENCE, American University of Beirut, May 31 – June 02, Beirut, Lebanon (ISBN 978-9953-0-3656-4) (2016)
- Abunnasr, Y., Al-Akl, N. and Dagher, R. Presented a lecture titled “Towards a Comprehensive Assessment Manual for Design Studio Teaching: A Pilot Study from AUB Landscape Architecture and Architecture Undergraduate Programs”; Conference: SIXTH INTERNATIONAL CONFERENCE ON EFFECTIVE TEACHING AND LEARNING IN HIGHER EDUCATION, American University of Beirut, February 12-13, Beirut, Lebanon (2016)
- Al-Zein, M., Al-Akl, N., Yazbeck, M., “Native Plant Species As Potential Ornamentals”; Conference: IFLA BEIRUT 2016 CONFERENCE, American University of Beirut, May 31 – June 02, Beirut Lebanon (ISBN 978-9953-0-3656-4) (2016)
- Rethinking Zgharta: Strategies for an Integrated Future – Published Workshop Proceedings - Section on Landscape, Ecology and Resource Efficiency (2016)

Workshops, Conferences and Symposia

- 2019 *Presenter*, of a paper entitled “Sustaining the landscape of cemeteries: Enhancing religious institutions’ contribution to sustainable cities and communities in Beirut”; COMMON GROUND, IFLA WORLD CONGRESS 2019, 18-20 September, Oslo Congress Center, Oslo, Norway
- 2019 *Presenter* with Fabian, M., of a lecture entitled “Holistic and Immersive Pedagogy of teaching: Addressing Global issues through local Initiatives”, LESSONS FROM THE PAST, VISIONS FOR THE FUTURE, ECLAS-UNISCAPE CONFERENCE 2019, 16-17 September, Norwegian University of Life Sciences, As, Norway
- 2019 *Tutor & Guest Lecturer*, Middle East Social Innovation Lab (MESIL) Intensive Program, 21-29 June, Ajloun Reserve, Kufranja, Jordan
- 2018 *Presenter*, “The Anglo-American Cemetery (AAC): A Future Vision”, 29th October, AAC, Sin El Fil, Lebanon
- 2018 *Presenter*, “Redefining the values of beauty in landscape architecture: the challenge of an emerging field in the urban context”; Symposium: FROM GARDEN ART TO LANDSCAPE ARCHITECTURE – TRADITIONS, RE-EVALUATIONS, AND FUTURE PERSPECTIVES, 14-15 September, Herrenhausen Palace, Hanover, Germany
- 2018 *Presenter*, “Urban ecologies: blurring boundaries between public and private”; Conference: CITY DEBATES 2018, 18-20 April, American University of Beirut, Lebanon
- 2018 *Presenter*, “Re-questioning the landscapes of death: Urban cemeteries as sites of conservation”, Conference: THE SPACE THAT REMAINS, 23-24 March, Lebanese American University, Lebanon
- 2017 *Presenter*, “The Potential of Urban Cemeteries in Sustainable Landscape and Urban Planning: The Case of Beirut”; Conference: LANDSCAPE FUTURES: UNISCAPE CONFERENCE 2017, June 19-21, University of Copenhagen, Copenhagen, Denmark
- 2016 *Co-Organizer*, of the IFLA BEIRUT 2016 CONFERENCE: Unfolding Middle Eastern Landscapes: Changing Forms, Evolving Tools, Transforming Meanings, American University of Beirut, May 31 – June 02, Beirut Lebanon
- 2016 *Presenter*, of a lecture entitled “The practice of Green Roofs in the Middle East: System or Trend”; and Session Coordinator of the session ‘Greening the Urban Landscape’; Conference: IFLA BEIRUT 2016 CONFERENCE, American University of Beirut, May 31 – June 02, Beirut Lebanon

- 2016 *Participant and Facilitator*, leading a group of professionals, academics and students to investigate, analyze and create strategies focusing on the theme of Landscape Ecology and Resource Efficiency in Zgharta; RETHINKING ZGHARTA: STRATEGIES FOR AN INTEGRATED FUTURE; June 23-25, Antonine University, Zgharta, Lebanon
- 2016 *Presenter*, along with Y. Abunnasr and R. Dagher of a lecture entitled “Towards a Comprehensive Assessment Manual for Design Studio Teaching: A Pilot Study from AUB Landscape Architecture and Architecture Undergraduate Programs”; Conference: SIXTH INTERNATIONAL CONFERENCE ON EFFECTIVE TEACHING AND LEARNING IN HIGHER EDUCATION, American University of Beirut, February 12-13, Beirut, Lebanon
- 2016 *Presenter*, of a short talk entitled “Campus Landscape: Extending Outwards”; PRESIDENTIAL INAUGURATION SYMPOSIUM: DEFINING MOMENTS AT AUB, American University of Beirut, January 25, Beirut, Lebanon
- 2014 *Organizer*, with the assistance of Y. Abunnasr, of a student workshop with Michael Jakob entitled “Alternative Reading to the Lebanese Landscape”. The workshop brought together landscape students from different higher education institutions in Lebanon (Lebanese University and ALBA) with the aim to discuss the field of landscape architecture in Lebanon and investigate ways in which to read the Lebanese landscape. American University of Beirut, Lebanon
- 2014 *Organizer*, of the local setup of the international exhibition “Swiss Touch in Landscape Architecture”. The exhibition is initiated by ProHelvetia and curated by Michael Jakob. It was brought to Lebanon with the support of the LDEM department and the Embassy of Switzerland in Lebanon
- 2014 *Participant*, along with C.Aramouny and Y.Abunnasr (lead), in the VENICE BIENNALE 2014 WORKSHOP. The workshop entitled ‘School of Tomorrow’ as part of the Swiss Pavillion brought together Landscape and Architecture students with the aim of exploring new ways of thinking about design and current problems facing societies in urban landscapes

Research and Development Grants

- 2019 **University Research Board (URB)**, American University of Beirut (Research Grant)
Project: The Role of Landscape in Promoting Inclusion on University Campuses – 2 year project
PI: **Al-Akl, N.**
Co-PI: Zurayk, R.
- 2019 **DAAD – Deutscher Akademischer Austauschdienst** (Interregional exchange and mobility grant)
Project: MESIL – Middle East Social Innovation Lab; Consortium of institutions
PI for the American University of Beirut: **N. Al-Akl**
- 2019 **COST – European Cooperation in Science and Technology** (Network & Mobility Grant)
Project: ENSEAD – European Network for Disposing of the Dead Sustainably (ENDDS) ; Consortium of institutions (13 countries) – 4 year proposal
PI for the American University of Beirut: **N. Al-Akl**
- 2019 **DAAD – Deutscher Akademischer Austauschdienst** (Interregional exchange and mobility grant)
Project: MESIL – Middle East Social Innovation Lab; Consortium of institutions
PI for the American University of Beirut: **N. Al-Akl**
- 2018 **SDG Grant - Global Compact Network Lebanon (GCNL)** (Research Grant)
Project: Sustaining the landscape of cemeteries: Enhancing religious institutions’ contribution to sustainable cities and communities in Beirut
PI: **N. Al-Akl**
- 2018-
2020 **Horizon 2020 – H2020-SC6-MIGRATION-2018** (Research Grant)
Project: ADMIGOV - Advancing Alternative Migration Governance; Consortium of partners
PI for the American University of Beirut: M.G.Trovato
Co-Pi for the American University of Beirut: **N. Al-Akl**
- 2018 **Volkswagen Foundation** (Travel Grant)
Project: Redefining the values of beauty in landscape architecture: the challenge of an emerging field in the urban context
PI: **N. Al-Akl**– to attend and present at “From Garden Art to Landscape Architecture” conference, Hannover, Germany

- 2018 **Mobile Lives Forum** (Research Grant)
Project: Mobility, Space and Wellbeing
PI: **N. Al-Akl**
- 2017- **University Research Board, American University of Beirut** (Research Grant)
2018 **Al-Akl, N.** (PI) and Talhouk, S. (Co-PI) – Design Guidelines for Restorative Urban Streetscapes
- 2016 - **Faculty Development Grant, American University of Beirut** (Travel Grant)
2017 **Al-Akl, N.** to attend and present at LANDSCAPE FUTURES: UNISCAPE CONFERENCE 2017, University of Copenhagen, Copenhagen, Denmark
- 2016 - **Teaching Startup Fund (Seed), FAFS, American University of Beirut** (Research Grant)
2017 **Al-Akl, N.** - Mapping cemeteries in Beirut: A step towards better understanding the potential of urban cemeteries in sustainable landscape planning –
- 2015 - **Center for Teaching and Learning (CTL), American University of Beirut** (Research Grant)
2016 Abunnasr, Y. (PI) and **Al-Akl, N.** (Co-PI) - Developing a Comprehensive Rubric for Design Studio Teaching Assessment in the Fields of Landscape Architecture and Architecture in Beirut
- 2013 **Faculty Development Grant, American University of Beirut** (Travel Grant)
Al-Akl, N. - to represent AUB and develop department visibility plan at the ASLA Annual Meeting and Expo, Boston, USA

Contributions.

In advancing the field and profession:

- Co-Founder and member of the administrative committee of *LELA* (Lebanese Landscape Association), a Lebanese NGO affiliated with IFLA (International Federation of Landscape Architects)
- Co-Organizer, theme coordinator, abstract reviewer and master of ceremony: IFLA BEIRUT 2016 CONFERENCE – Unfolding Middle Eastern Landscapes, American University of Beirut, May 31 – June 02
- Facilitator: Workshop “Rethinking Zgharta”
- Landscape Consultant: Bikfaya Municipality
- Committee Member & Representative of the LDEM Department – Garden Show and Spring Festival 2013, 2015 & 2016

In advancing the university landscape curriculum/teaching –learning experience:

- Worked on the LDEM Faculty Promotion Criteria:
 - Re-envisioned course LDEM207 Landscape History 1
 - Served as studio coordinator for LDEM241 Final Year Project
 - Implemented findings of personal research on design studio assessment in studio teaching (LDEM204 Cultural Landscapes)
 - Worked on enhancing student learning experience through design and coordination of new and renovated learning facilities (classrooms, labs, student areas, etc.)
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Name: Beata Dreksler

Rank: Assistant Professor

Education: (Doctoral Degree)

Institution	Number of Years Attended	Degree
WULS – SGGW (Poland)	5	PhD in Landscape Architecture
WULS – SGGW (Poland)	5	MSc in Landscape architecture
WAU (Holland)	1	Scholarship program
University of Warsaw	3	Individual Studies Program

Teaching Experience: (College level)

Institution	Years Taught	Subjects
American University of Beirut	3	Site Engineering, Internship and Professional Practice, Cultural Landscape Design, Design Fundamentals, Garden Design, Planting Design, Sustainable Water Management Techniques
WULS – SGGW (Poland)	6	Landscape planning and design, Engineering graphic
University of ISTMO (Guatemala)	1	Landscape design
University San Carlos of Guatemala – USAC	9	Development of MSc LA program, Landscape planning and design, Garden history

Practice Experience:

Firm or Agency	Number of Years	Responsibilities
IN.OUT (Poland)	11	Landscape architect, landscape and urban planner, owner
VALDREK S.A., (Guatemala)	2	Landscape architect, co-owner
ARQUITECTURA DEL PAISAJE (Guatemala)	5	Landscape architect, owner
Municipality of Guatemala City, (Guatemala)	2	Landscape architect
AECID (Agencia Española de Cooperacion International para el Desarrollo – Guatemala)	1	Development of urban strategies
METROPOLIS 2010 / DHV Consultants (Guatemala)	1	Development of urban strategies
Eko-Park (Poland)	3	Landscape architect, garden designer

Professional Registration: IUCN - International Union for Conservation of Nature – Member of Commission on Ecosystem Management for the period 2017-2020

IFLA / APAC – Association of Landscape Architects of Central America and Caribbean – a member of International Federation of Landscape Architect - IFLA, co-founder and vice-president since 2009

IALE - International Association for Landscape Ecology (since 1995)
ULI – Urban Land Institute – since 2016

Professional & Academic Activities.

- 2016 – Scientific committee member of International week, Aleksandras Stulginskis University, Kaunas, Lithuania

Competitions and Awards:

2017 1st prize in the competition for The Best Public Space in Poland 2017 (category: Public Space in Green), organizers: Society of Polish Town Planners and Association of Polish Cities, 1st Congress of Urban Politics in Cracov, Poland, October 17, 2017

2013 1st prize - City Park in Babice Stare, Competition for the design of city park

Memberships & Committees

2018	FAFS Social Committee
2017-2018	Visibility of LDEM
2018	Member of the Climate change committee for the The First FAFS Undergraduate Interdisciplinary Student Research Workshop
2017-2019	AUBotanic Committee member

CONFERENCES

2019 International Week 2019, , Agriculture Academy of Vytautas Magnus University, Business and Rural Development Research Institute, Kaunas, Lithuania a poster presentation during seminar: “Possibilities and perspectives for common research projects for studies and sciences” titled “AUBotanic as a common ground for joint activities and teaching – Creation of multiple users’ network.”

2018 10th International Congress on Education in Botanic Gardens BGCI, Warsaw, Poland, a poster titled “AUBotanic as a common ground for joint activities and teaching – Creation of multiple users’ network.”

2017 International week, Agriculture Academy of Vytautas Magnus University, Business and Rural Development Research Institute, Kaunas, Lithuania, Member of a scientific committee

2016 International week, Agriculture Academy of Vytautas Magnus University, Business and Rural Development Research Institute, Kaunas, Lithuania, November 21-25, Member of a scientific committee, Presentation: “Revitalization, recycling or envisioning of urban space in Africa?”

Grants

2019-23 COST Action CA17133 Implementing nature-based solutions for creating a resourceful circular city MC Observer

2018 Abebe G., Dreksler B., Fabian M. Ecological adaptability and economic viability of Mediterranean herbaceous plants: a new approach for creation, rehabilitation, and utilization of arid and semi-arid ecosystems (submitted - pending funder response)

Publications.

Published Refereed Articles

- **Dreksler B., Jaszczak A.** (2013) „Cemeteries – places of remembrance, tradition, and religion” in Cmentarze i Ogrody w Krajobrazie, O sacrum w symbolice, kompozycji i przemijaniu, Prace Komisji Krajobrazu Kulturowego Nr 22, Komisja Krajobrazu Kulturowego PTG Sosnowiec 2013 p. 31-39

Contributions.

Research about importance and the role of green areas in urban revitalization projects. Currently working on the role of green infrastructure in revitalization of the urban areas.

Name: Monika Fabian**Rank: Full time instructor**

American University of Beirut, Department of Landscape Design and Ecosystem Management

Education : (Masters Degree)

Institution	Number of Years Attended	Degree/Date Granted
Mediterranean Agronomic Institute of Chania (Crete, Greece) Department of Natural Product and Biotechnology	2	Master of Science (M.Sc.) / 2003
Corvinus University (Budapest, Hungary) Faculty of Horticulture Science, Department of Floriculture and Dendrology	6	Master of Science (M.Sc.)/ 2001

Teaching Experience: (College level)

Institution	Years Taught	Subjects
American University of Beirut, Department of Landscape Design and Ecosystem Management	9	Plant Materials, Plant Botany, Landscape Horticulture, Soils in Landscape

Practice Experience:

Firm or Agency	Number of Years	Responsibilities
AUB Botanical Garden	4	Development of plant labeling and documenting, introduction of new plant species , Responsible for educational activities for school children
IBSAR-Center for Nature Conservation and Sustainable Future	2	Responsible for IBSAR operational tasks
Oazsis-Orcideaház Garden Center Ltd.- Hungary	1	Manager of the firm; Responsible of the retail and wholesale trade, Responsible of sales and purchase, Responsible of supervision of 10-12 people
Rózsahegyi Ltd - Hungary	2	Co-manager; Responsible of supervision of 8-10 people, Responsible of sales and production of medicinal plants, Marketing work

Professional Registration:

N/A

Professional & Academic Activities.

- Member of AUBotanic, leading labeling and plant selection for AUB campus, organizing tours and gardening activities for adults and children
- Organization of vermicomposting conferences for local farmers and affiliated students and faculties.
- University for Seniors at AUB- Plant Identification walks
- Children workshops on gardening and composting

Publications.

- Dreksler, B. , **Fabian, M.** (2018) AUBotanic as a common ground for joint activities and teaching – creation of multiple users' network. BGCI's 10th International Congress on Education in Botanic Gardens, Warsaw, Poland 9-16 September, 2018
- Project collaboration with FAO: Improving the Nutrition of Syrian Refugees and Host Communities through Garden Walls, 2016
- Moledor, S., Chalak, A., **Fabian, M.**, & Talhouk, S. N. (2016). Socioeconomic dynamics of vermicomposting systems in Lebanon. Journal of Agriculture, Food Systems, and Community Development

Workshops and Conferences

2019 ECLAS UNISCAPE 2019- Norwegian University of Life Sciences, 15-18 September, 2019

2019 BGCI and the BigPicnic project (www.bigpicnic.net) 27 February 2019, Madrid, Spain

2018 Erasmus + at Lund Botanical garden, 21-27 May, 2018

Contributions.

I strongly believe that plant knowledge is an important part of professional skills of landscape architects and an insufficient knowledge of plants reflects the profession as a whole. To help the students improve and use their plant knowledge other than

teaching the Plant material and Horticulture courses I am involved in a setting up of the first online Landscape Plant Database for all Middle Easter region (including 21 countries) which is already used by all our undergraduate and graduate students plus anyone with a same profession in the area. As my research activity we are trying to introduce native species (woody and herbaceous) into landscape uses, mainly for green roofs and green walls for water sustainability which is essential in the Mediterranean regions.

Name: Nadim Farajalla

Rank: Part-Time Associate Professor

Department or unit: Issam Fares Institute for Public Policy and International Affairs – Climate Change and the Environment Program

Education: Doctoral Degree

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
University of Oklahoma	3	PhD Environmental Engineer/1995
University of Oklahoma	2	MS Environmental Engineer/1992
Utah State University	2	MS Irrigation Science/1989
American University of Beirut	4	BS General Agriculture/1985

Teaching Experience:

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	17	The Environment and Sustainable Development, Water and the Environment, Sustainable Water Management Techniques, Irrigation Methods for Landscape Design, Site Engineering I, Professional Practice, Landscape Seminar, Special Topics in Land and Water Resources, Seminar in Environmental Sciences
University of Oklahoma	1	Hydrological Modeling Instructor

Practice Experience:

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
Issam Fares Institute for Public Policy and International Affairs (IFI) at the American University of Beirut	11	Director of the Climate Change and Environment Program
SETS sarl	8	Advisor and then Director
Dar Al-Handasah	5	Senior Environmental Engineer
Stone Environmental Inc.	2	Senior Environmental Scientist
LACECO (Consultation)	1month	Rainwater harvesting infiltration and detention ponds (Jan. 2014) Design and sizing of detention and infiltration ponds
USUDS (Consultation)	1	Sustainable Mediterranean Cities: Saida (March 2013 – Dec. 2013): Development of strategies and general designs for sustainable urban water management in Saida and the vicinity.
The Other Dada (Consultation)	1	Garlic House - a Pilot Experimental Project. Researched and performed detailed calculations related to hydrology and wastewater treatment for re-use to target the Net Zero Water and Ecological Water Flow imperatives.

Professional Registration:

- Order of Engineers and Architects
- Professional Associations and Committees:
 - Founding member of the Lebanon Chapter of the International Association for Energy Economics (IAEE) Member of the Lebanese Ministry of Environment's Climate Change Coordination Unit.
 - Nominated member of the Vulnerability Assessment Working Group of the Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR)
 - Founding member of AWARENET (Arab Water Resources Network)
 - Member of the International Geosphere-Biosphere Programme (IGBP) and its Lebanon Chapter

University Service:

Chairperson of the LDEM program review committee (2013 – 2014)

Chairperson of the Graduate Ecosystem Management Program Committee – LDEM (2014 – to date)

Publications.

Books and Chapters in books

- Farajalla, N.S., El Amine, Y. and A. Shabban. 2018. “An Assessment of the Sustainability of Water Resources in the Litani River Basin” in *The Litani River, Lebanon: An Assessment and Current Challenges* (A. Shaban and M. Hamze editors). Springer International Publisher. Vol. 85. DOI: 10.1007/978-3-319-76300-2.
- Trovato, G.M., **Farajalla, N.S.** and O. Truglio. 2016. “Balanced Urban Development: Options and Strategies for Liveable Cities”, Editors: Basant Maheshwari, Vijay P. Singh, Bhadrani Thoradeniya, ISBN: 978-3-319-28110-0 (Print) 978-3-319-28112-4 (Online)
- **Farajalla, N.S.** Mhanna, M, and J. Jadam, 2014. “Integrated Development of Wadi Systems in Lebanon” in Water Scarcity, Security and Democracy: a Mediterranean Mosaic (de Chatel, Holst-Warhaft and Steenhius eds.). Published by Global Water Partnership Mediterranean, Cornell University and the Atkinson Center for a Sustainable Future. Ithaca NY, USA. ISBN 978-1-4951-1550-9
- **Farajalla, N.S.** 2013. “Future of Water Supply and Demand in the Gulf States,” in Water and Food Security in the Arabian Gulf, Emirates Center for Strategic Studies and Research ISBN 978-9948-14-622-3

Refereed Articles

- Hoff H, Alrahaife SA, El Hajj R, Lohr K, Mengoub FE, **Farajalla N**, Fritzsche K, Jobbins G, Özerol G, Schultz R and Ulrich A, 2019, A Nexus Approach for the MENA Region—From Concept to Knowledge to Action. *Front. Environ. Sci.* 7:48. doi: 10.3389/fenvs.2019.00048
- Position Paper on Water, Energy, Food and Ecosystems (WEFE) Nexus and Sustainable Development Goals (SDGs). Editors: C. Carmona-Moreno, C. Dondeynaz, M. Biedler, EUR 29509 EN, Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-76-00159-1, doi:10.2760/31812, JRC114177
- El Amine, Y., Abdallah, C., El Hajj, R. and **N.S. Farajalla**, 2018, Solid waste management in the MENA region: A comparative analysis of Lebanon, Jordan, and Tunisia, *Orient*, Volume 59 - IV: 33 - 48.
- Assaf, E. and **Farajalla, N.S.**, 2017. Deriving a Planting Medium from Solid Waste Compost and Excavation and Demolition Rubble, *Journal of Solid Waste Management and Technology*, Vol. 43, Issue 4 [*Corresponding Author*]
- Sisco L, Monzer S, **Farajalla N**, Bashour I, Saoud I.P, 2017, Roof top gardens as a means to use recycled waste and A/C condensate and reduce temperature variation in buildings, *Building and Environment*, doi: 10.1016/j.buildenv.2017.02.025.
- **Farajalla, N.S.**, 2017, Sustainable water management in the Near and Middle East, *Orient*, Volume 58: 11 - 17.
- Saoud, I. P., **Farajalla, N.S.**, Daou, Y. and A. Garza de Yta (2016). Socioeconomics of Rainbow Trout Aquaculture Along the Assi (Orontes) River in Hermel, Lebanon. *World Aquaculture* 47 (2): 39-45.
- **Farajalla, N.S.**, Daou, Y. and I.P. Saoud . 2014. Environmental Impact of Trout Aquaculture on the Lebanon Portion of the Assi River. *World Aquaculture*. December 2014 - [*Primary Author*]
- Haddad, E. A., **Farajalla, N.S.**, Camargo, M. Lopes, R. and F. Vieira. 2014. “Climate Change in Lebanon: Higher-order Regional Impacts from Agriculture,” *REGION*, Vol. 1 No. 1 [*Primary Author*]
- **Farajalla, N.S.**, and J.Jadam. 2014. “A Spatial Decision Support System For Siting Wastewater Treatment Facilities – Case Study In Lebanon,” *Annals of GIS*, (submitted July 2014 – under review) - [*Primary Author*]
- **Farajalla, N.S.**, Daou, Y., Garza de Yta, Y and I.P. Saoud. 2014. “Socioeconomic impact of rainbow trout aquaculture along the Assi River in Hermel, Lebanon” *Aquaculture Reports*, (submitted August 2014 – under review) - [*Primary Author*]

Working Papers

- **Farajalla, N.S.**, Chnais, E., and R. El Hajj. 2016. “Working Paper #36: Water, Energy, Food Nexus: An Outlook on Public Institutions in the Arab World”, Climate Change and Environment Program, Issam Fares Institute for Public Policy and International Affairs, American University of Beirut
- **Farajalla, N.S.**, Haydamous, P., and R. El Hajj. 2016. “Working Paper #35: Water, Energy, Food Nexus: An Outlook on Public Institutions in Lebanon””, Climate Change and Environment Program, Issam Fares Institute for Public Policy and International Affairs, American University of Beirut
- **Farajalla, N.S.**, Haddad, E., Camargo, M, Lopes, R. and F. Vieira. “ Working Paper #23: Climate Change in Lebanon: Higher-order Regional Impacts from Agriculture” Climate Change and Environment Program, Issam Fares Institute for Public Policy and International Affairs, American University of Beirut

Reports

Contributor to Position Paper on Water, Energy, Food and Ecosystems (WEFE) Nexus and Sustainable Development Goals (SDGs), 2019, Carmona-Morena, C., Dondeynaz, C., and M. Biedler Editors, EUR29509 EN, Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-76-00159-1, doi:10.2760/31812, JRC114177

- **Farajalla, N.S.**, Badran, A., El Baba J., Choueiri, Y, El Hajj, R., Fawaz, M., and A. Chalak. 2017. The Role of Informal Systems in Urban Sustainability and Resilience - A Review. Issam Fares Institute for Public Policy and

International Affairs, American University of Beirut. Accessed on April 16, 2018 at: http://website.aub.edu.lb/ifi/publications/Documents/research_reports/20170706_informal_systems.pdf [Primary Author]

- Choueiter, D. and N.S. Farajalla, 2016. National guidelines for greenhouse rainwater harvesting systems in the agriculture sector. MoE/UNDP. Beirut, Lebanon.
- Farajalla, N.S., Kerkezian, S. Farhat, Z., El Hajj, R. and M. Matta. 2015. "The Way Forward to Safeguard Water in Lebanon, National Water Integrity Risk Assessment" Submitted to Stockholm International Water Institute as part of a project financed by Swedish International Development Agency (SIDA), Climate Change and Environment Program, Issam Fares Institute for Public Policy and International Affairs, American University of Beirut [Primary Author]
- Farajalla, N.S., Abou Haidar, Ch., Chnais, E. and N. Modad, 2013. "Impact of Population Growth and Climate Change in Lebanon on Water Scarcity, Agricultural Output and Food Security" Submitted to FHI360 as part of larger study involving American University in Cairo and Columbia University and funded by the USAID (grant number 4345-03-FOG-2013-01). [Primary Author]
- Policy Briefs El-Hajj, R., Farajalla, N., Terpstra, T. and Jägerskog, A. 2017. 'Middle East and North Africa: A Case for Regional Cooperation Water-Energy-Food Security Nexus', Planetary Security Initiative 2 (3), The Hague, Netherlands
- El Hajj, R. and N.S. Farajalla, 2016. "Nexus Governance and the Role of Institutions" Climate Change and Environment Program, Issam Fares Institute for Public Policy and International Affairs, American University of Beirut

Conference Proceedings

- Trovato, G.M., Farajalla, N.S. and O. Truglio. 2014. "Gentrification versus Territorialisation: The Peri-Urban Agriculture Area in Beirut," International Conference on Peri-Urban Landscapes: Water, Food and Environmental Security, St Leonards NSW, Australia, July 8 – 11, 2014.
- Farajalla, N.S., Haydamous, P., El Hajj R. and S. Kerkezian. 2014." The Lebanese Water Energy and Food Nexus: A Policy and Institutional Analysis," Sustainability in the Water-Energy-Food Nexus. Synergies and Tradeoffs: Governance and Tools at various Scales, Bonn, Germany 19-20 May, 2014
- Farajalla, N., Assaf, E., Bashour, I. and S. Talhouk. 2014. "Deriving a Planting Medium from Solid Waste Compost and Construction, Demolition and Excavation Waste" European Geosciences Union, General Assembly, Vienna, Austria 27 April – 02 May 2014
- Hoff, H., Farajalla, N., Fritzsche, K., Graham, Ph., and A. Houdret. 2013 "Implementing the nexus in the MENA region" 2013 World Water Week - Climate Change Adaptation and Mitigation - Promoting Coherence, Stockholm International Water Institute, Stockholm September 1 – 6, 2013

Conference and Workshop Presentations

- Saoud, I. P., Daou, Y. and N. S. Farajalla., 2016 Assessing the Environmental Impact Of Trout Aquaculture On The Lebanon Portion Of The Assi (Orontes) River. Asian-Pacific Aquaculture Conference 2016, Surabaya, Indonesia, 26-29 April. Page 488.
- Saoud, I. P., Daou, Y. and N. S. Farajalla., 2016 Socioeconomic Impact of Rainbow Trout Aquaculture Along the Assi (Orontes) River In Hermel, Lebanon. Asian-Pacific Aquaculture Conference 2016, Surabaya, Indonesia, 26-29 April. Page 489.
- I. P. Saoud and N. S. Farajalla. 2015. Producing Food in Arid Lands: The Role of Aquaculture and the Choices to be Made. International Conference on Climate Change and Water-Energy-Food Nexus in the Arab Middle East, Amman, Jordan, December 2015.
- Sisco, L., Farajalla, N. S. and I. P. Saoud. 2015. Roof gardens decrease energy usage, improve food productivity, create urban social space and can be grown using recycled substrates and non- traditional water. International Conference on Climate Change and Water-Energy-Food Nexus in the Arab Middle East, Amman, Jordan, December 2015.
- Farajalla, N.S. Ghadban, E. and P. Haydamous, 2014' Is Solar Power Detrimental to Water Resources?," presented at the Arab Academy of Sciences' International Conference entitled "Energy Sustainability and Water Resource Management for Food Security in the Arab Middle East" Beirut, Lebanon December 12 – 13, 2014
- Farajalla, N.S., Haydamous, P., and R. El Hajj 2014. "A Window into the Future: What Can be Learned from the Impact of the 2014 Drought on the Economy of Lebanon." Presented at the UNFCCC's 20th Conference of Parties' side event entitled ""Economic Repercussions of Climate Change on Vital Sectors of the Lebanese Economy" Lima, Peru, December 6, 2014
- Farajalla, N.S., 2014."Water-Energy-Food Nexus in an Urban Setting" presented at the international experts meeting organized by Issam fares Institute for Public Policy and International Affairs and Friedrich-Ebert-Stiftung Beirut, Lebanon November 4 - 5, 2014
- Farajalla, N.S., Haydamous, P., and R. El Hajj 2014." Drought Policies, Management and Government Systems – Case of Lebanon". Presented at a regional workshop on Drought Policy, Governance, and Management Systems in the MENA Region. Organized by the Issam Fares Institute for Public Policy and International Affairs. Beirut, Lebanon, October 20, 2014

- **Farajalla, N.S.** Haydamous, P., El-Hajj, R., and S. Kerkezian, 2014. "Are Lebanon's Institutional Framework and Public Policies Ready for the Water-Energy-Food Nexus?" presented at the Fifth Beirut Water Week, organized by GWP, NDU Louaize, Lebanon May 22, 2014
- **Farajalla, N.S.** and E. Ghadban, 2014. "Implementation of the Water-Energy component in Lebanon – Costs and Benefits" presented at the Fifth Beirut Water Week, organized by GWP, NDU Louaize, Lebanon May 22, 2014
- **Farajalla, N.S.** Haydamous, P., Rizk, Ch., El-Hajj, R., and S. Kerkezian, 2014. "The Water, Energy, Food Nexus in Lebanon – Status and Potential" presented at a conference "The Nexus approach: The Road to Water, Energy, and Food Security in the Arab World" organized by Issam Fares Institute for Public Policy and International Affairs, Beirut, Lebanon January 22, 2014
- **Farajalla, N.S.** Haydamous, P., Rizk, Ch., El-Hajj, R., and S. Kerkezian, 2013. "The Water, Energy, Food Nexus: Lebanese Policy and Institutional Analysis" presented at the Annual Meeting of the Arab Academy of Sciences organized by ISESCO and the League of Arab States – a conference entitled "Water-Energy Nexus and Waste Water Treatment for a Sustainable Arab World," Beirut, Lebanon. December 6-7, 2013
- **Farajalla, N.S.** 2013. "Role of Research Centers in the Dissemination of the Arab Water Security Strategy" presented at the Policy Dialogue with major groups on the Implementation of the Arab Water Security Strategy and its Action Plan, organized by the UNEP-ROWA, GIZ and League of Arab States, Amman November 27 – 28, 2013
- **Farajalla, N.S.** 2013. "Impact of Climate Change on the Arab World," invited lecture presented at the University of Sao Paulo, August 6, 2013
- Saoud, I. P., **Farajalla, N. S.**, and M. Haidar. 2013. Using Aquaculture/Agriculture systems to increase water productivity. Regional Conference on Integrated Agriculture for Food Security and Adaptation to Climate Change (IAFSACC-2013). Ambo University, Ethiopia, June 2013.
- Saoud, I. P., Haidar, M. and **N. S. Farajalla.** Aquaculture/Agriculture systems to increase water productivity. WAS-Asia Pacific Chapter conference on Aquaculture in Arid Lands. Al-Ain, UAE, April 2013.
- **Farajalla, N.S.** 2013. "Adaptation of the Water Sector to Climate Change," Presented at the 4th Beirut Water Week - Technological Tools and Financing Mechanisms for IWRM: Complementing Hydro-diplomacy and Climate Change Adaptation Efforts, Organized by the EU Water Initiative, Global Water Partnership, and MedPartnership, February 20 – 22, 2013, Louaize, Lebanon.

Professional Activities:

- Represented Lebanon at the UN's Intergovernmental Panel on Climate Change (IPCC) in 2016 and 2017
- Member of the Lebanese delegation to the United Nation's Convention on Climate Change - conference of the parties (COP) in 2009, 2011, 2013, 2014, 2015, 2016
- Member of the Scientific Committee International Conference on the Integrated Management of the Environment – ICIME 2014 organized by the L'Institut Supérieur des Etudes Technologiques de Sfax, Tunisia, Le laboratoire Eau-Energie-Environnement, 25-28 Septembre 2014 Hammamet, Tunisia

Contributions.

Helped sensitize students to the issue of water scarcity and how best to deal with it in an arid region such as the Middle East. The courses I created to achieve this are:

- **LDEM 230 – Water and the Environment**

A required undergraduate course I had conceived and developed for landscape students. The course addresses physical hydrological processes and the interactions between these and the natural environment and the role of human activities.

- **LDEM 231 - Sustainable Water Management Techniques**

A required undergraduate course I had conceived and developed. In this course students are exposed to theoretical and practical aspects of sustainable water resources management namely in the areas of demand management and efficient water use and will learn about indigenous and exotic efficient landscape irrigation, surface and subsurface drainage design, rainwater harvesting, and water conservation

Name: George Ramzi Battikha

Rank: Senior Instructor

Education:

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
American University of Beirut	4	BS in Agricultural Engineering/1960
American University of Beirut	1	MSc in Horticulture/1961
University of California, Davis	2	MSc in Landscape Horticulture/1974
University of California, Davis	3	PHD Botany/1978

Teaching Experience: (College level)

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut, (Faculty of Agricultural and Food sciences)	51	General horticulture, ornamental horticulture, plant propagation, floriculture, landscape horticulture , landscape design, planting design, landscape management, landscape architecture history.
American University of Beirut (Faculty of Engineering and Architecture)	7	History of landscape architecture, principles of landscape design.
Lebanese University	13	Horticulture, Ornamental Horticulture, Landscape History
USEK	14	Floriculture, Paysagisme

Practice Experience:

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
Beirut Landscaping project (GREEN PLAN)	7	Head
Public Parks Beirut	30	Director
Exotica	3	Technical and Landscape Consultant

Professional Registration:

- Lebanese Order of Engineers and Architects - Beirut
- LELA Honorary member.

Contributions.

Many Private gardens in Lebanon and all Public Gardens in the city of Beirut and Many Parks and gardens in Saudi Arabia, Kuwait & Yemen etc.

Name: Halim Nader

Rank: Lecturer (Part-Time at LDEM)

Department or unit:

Landscape Design & Ecosystem Management (LDEM)

Faculty of Engineering & Architecture (FEA)

Education: Bachelor of Engineering, Civil Engineering

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
American University of Beirut	4	B.E. June 1980

Teaching Experience:

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut (Faculty of Engineering & Architecture)	38	Surveying
American University of Beirut (Faculty of Agricultural & Food Sciences)	8	Surveying and Base Plan Development

Practice Experience:

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
UNESCWA	21	Chief, Facilities Management including Engineering, Surveying & Construction Projects Management
Contracting & Engineering Works Co.	10	Engineering, Surveying & Construction Projects Management
Trading Engineering & Contracting Co.	10	Engineering, Surveying & Construction Projects Management
Al-Istishariyoun (Tukan & Partners)	2	Engineering, structural design of projects

Professional Registration:

- Member of Order of Engineers, Beirut
- PRINCE 2 Registered Practitioner

Contributions.

Teaching the Surveying and Base Plan Development course LDEM 291 advanced the knowledge and capability of landscape architecture by providing students with the basic technical knowledge of the principles of surveying and by developing their practical skills acquired in the field. Students were able to carry out field measurements using surveying equipment, analyze and process the collected data and produce base plans essential for any design project while working in teams.

Name: Noura Badran

Rank: Part-time Lecturer

Department or unit: LDEM

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
Académie Libanaise des Beaux-Arts	2	Masters Degree in Comics\Illustration/2008
Académie Libanaise des Beaux-Arts	3	Bachelors Degree in Comics\Illustration/2006

Teaching Experience:

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut (AUB), Department of Landscape Design and Ecosystem Management	3	Landscape Descriptive Drawing, Watercolor Workshops
Académie Libanaise des Beaux-Arts	2	Techniques D'expression

Professional Registration:

N/A

Professional & Academic Activities:

Exhibitions

2016 | Proletkult Art Exhibition at American University of Beirut (AUB), Beirut Watercolor Painting

2015 | Exhibition of original pages of the comic books L'histoire du Liban en BD Tome 1 et Tome 2 in the Salon du Livre francophone de Beyrouth 2015

Workshops

2018 | "Haneen" collective work of Syrian and Lebanese exhibition on the impact of war on Childhood

2018 | Summer Watercolor Workshops in July and August in private studio

2017 | Creative Comics Workshop for Syrian Children with the Goethe-Institute Lebanon and Intersos, Choueifat

2017 | Comics Workshop for French schools at the Arab Book Fair with the AEFÉ (Agence pour l'enseignement français à l'étranger)

2015 | Watercolor workshop at American University of Beirut (AUB), Landscape Department, Spring Semester

2015 | Watercolor workshop at Stage d'été à Batroun, Summer Camp for Children in Batroun, Lebanon

Publications

2014 | ARA*- illustrations of a children's book with Authors Nawal Traboulsi and Hanane Abboud, editions Academia (Man wa Salwa), Beirut

2014 | L'histoire du Liban en BD tome 2 - L'époque Romaine*- Illustrator and Co-author, editions Dar Arcane, Beirut

2013 | L'histoire du Liban en BD tome 1 - Les Phéniciens*- Illustrator, Colorist and Co-author, editions Dar Arcane, Beirut

Selected published illustrations

2015 | *Elle-Oriental Dubai* - background illustrations for Cartier jewelry

| *Terre des Hommes Lausanne* - brochure design and illustrations

| *Mercy Corps* - brochure design and illustrations

| *Depêche Mode* - fashion illustrations for a magazine (spring/summer collection)

Name: Ramzi Mezher

Rank: Part-time Lecturer

Education: (College and higher)

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
Swiss Federal Institute of Technology Zurich (ETH)	1	Master of advanced studies in landscape architecture/2008
American University of Beirut	5	Bachelor of architecture/2004

Teaching Experience: (College level)

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	9	Landscape Design fundamentals, Site Design, Technical Drawing, Descriptive drawing, AutoCAD

Practice Experience:

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
Nasser Nakib Architect	10	Senior architect
Vögt Landscape Architects	4 months	Landscape architecture trainee
PSLAB /Beirut	1	lighting fixtures designer / Product developer

Professional Registration:

Architect- Order of Engineers of Beirut

Professional & Academic Activities.

- Freelance landscape designer on several residential projects in collaboration with Atelier Hamra Studio.
- Participant in the competition of the campaign for the preservation of Dalieh / Beirut, in collaboration with Atelier Hamra.

Publications.

N/A

Contributions:

Throughout the different landscape design studios I have taught, I have pushed for a more extensive use of models as design thinking tools. In that regard I have introduced and encouraged the use of Kinetic sand as a model making material. The material is fairly unknown with the local professionals, but due its infinite malleability, it is ideal for developing design ideas especially in an academic context.

On a professional level I have maintained a sustainable design approach in the projects I have worked on, and negotiated the use of local vegetation and the preservation of water resources with clients who were not so inclined.

I have also recently collaborated with Atelier Hamra Studio, on a residential garden project in a degraded forest site. We developed a site restoration strategy and are currently working with a local nursery on the propagation of native plants for the project.

Finally I was active in the campaign for the preservation of Dalieh, a unique coastal site in the city of Beirut that is under threat by a new private development project.

I also took part in a design competition that was organized by the campaign with the aim of imagining a more sustainable future for the site. The competition was particularly interesting because local open competitions for public space are uncommon, and because it shed a light for the public on the importance of natural sites, and the role / capacities of landscape architects in preserving them.

Name: Wissam Melhem

Rank: Lecturer

Education: (College and higher)

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
Notre Dame University (NDU)	6	Architecture/2000
Notre Dame University (NDU)	3	Masters Landscape Urbanism/2011

Teaching Experience: (College level)

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut (AUB)	14	Technical Drawing, Computer Graphics, and design courses
Notre Dame University (NDU)	5	Architecture, Interior Design, Construction Detailing
American University of Science and Technology (AUST)	3	Interior Design courses

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
HAPSITUS Architects	17	Senior Architect

Professional Registration:

- Order of Engineer and Architects. Tripoli - Lebanon

Professional & Academic Activities:

- IBDAA (International Biodiversity Day at AUB) committee member

Publications:

- Natural Conservation Center (NCC/AUB) 2016 newsletter editorial: From Liberal to Neo-garbage City

Contributions.

As an architect, with a landscape urbanism background, and a lecturer teaching studios that deals with architecture, design, and landscape courses, I joined AUB and participated for many years with my students, in investigating through my courses, the potential of Landscape in redefining public space, with its social, cultural and environmental assets, in the context of Neo-Liberal emerging cities. Also as a university instructor this investigation brings to my students, a better understanding of the influence of Landscape on city development, a major subject of discussion and debate in contemporary design field.

This helped initiating with the contribution of my student's, aiming at the creation of "Icons" for the emerging Neo-Liberal system with its ability to express the social, cultural and environmental aspect of the city, and to express community lifestyle and ambition, that can fulfill the role of turning the city into a welfare, creative and vibrant node.

My experience through the Landscape Program lies in an attempt to show how small-scale public art/design projects can be conceived as a device for creating an identity in Neo-Liberal emerging cities and, as a consequence, how they are redefining the concept of producing new landscape Icons. These types of interventions, because they necessarily depend upon the hybridization of architecture, landscape, and design, will also be shown to be in line with the new design parameters that are emerging through the conceptual field of Landscape.

Name: Mona Khechen

Rank: Part-Time Instructor

Education: Doctoral

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
Graduate School of Design, Harvard University, Cambridge (MA), USA.	3	Doctor of Design in Planning
Development Planning Unit, the Bartlett, University College London, UK.	1	MSc in Development & Planning
American University of Beirut	5	Bachelor of Architecture

Teaching Experience: (College level)

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	8	Final Year Capstone Project at LDEM graduate urban design studio at ArD cultural landscape design

Practice Experience

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
The Lebanese Center for Policy Studies (LCPS), Beirut, Lebanon.	1	Project bid aimed at supporting the Durable Solution Platform (DSP) in assessing existing responses and proposing inclusive approaches for addressing the protracted displacement of Syrians in Lebanon, with focus on 3 sectors: Legal/social protection, education and livelihoods.
Beirut Urban Lab SETS, Beirut, Lebanon	1 6 months	Co-lead of shared spaces platform at Social Specialist and Advisor on Urban Regeneration, Urban Planning Consultant
Re-sources Group, Paris, France/ Beirut, Lebanon	1	Key Expert on Urban Programming
UN-Habitat Regional Office for Arab States (ROAS), Cairo, Egypt	1.5	Urban Planning Consultant
UN-Habitat, Iraq	1	Urban Planning Consultant
Economic & Social Commission for Western Asia (UN-ESCWA), Beirut, Lebanon	1.5	Consultant, First Social Affairs Officer (Urban Development Expert)
MORES, Beirut, Lebanon	1	Urban Planning Consultant (Team Leader)
Aga Khan Trust for Culture (AKTC), Kabul, Afghanistan.	1.5	Urban Planning Consultant (Team Leader)
Aga Khan Trust for Culture (AKTC), Syria.	1 month	Urban Planning Consultant
UNDP- IRAQ (Poverty and MDGs Unit), Amman, Jordan.	4 months	Consultant (Senior Planning Specialist)
World Bank, Washington D.C.	3 months	Urban Planning Consultant
Management Development Corporation, Beirut, Lebanon / Yerevan, Armenia.	1 month	Consultant
Koetter, Kim and Associates, Boston, USA.	1	Urban Designer
Institute for International Urban Development, Cambridge (MA), USA.	2 months	Research Fellow
Solidere, Beirut, Lebanon	8	Architect/Project Coordinator, Consultant
Institute for International Urban Development, Cambridge (MA), USA.	2	Researcher

Professional Registration: N/A

Professional & Academic Activities.

Awards:

- Jeffrey Cook Award (offered by University of California at Berkeley) for best paper by a scholar submitted for the 10th IASTE conference held in Bangkok, 15-18 December 2006.
- Getty Foundation/University of Washington Summer Institute Fellowship on “Constructing the Past in the Middle East”, Istanbul (Turkey) and Thessaloniki (Greece), 02- 29 July 2006.
- Harvard University Graduate School of Design Tier II Grant, from Fall 2001 to Spring 2003.
- Joint Japan/ World Bank Scholarship Award 1999-2000.

- British Foreign and Common Wealth Office Chevening Scholarship Award 1999-2000 (declined).

Memberships and Affiliations:

- Member of ICOMOS – Lebanon.
- Member of the Lebanese Order of Engineers and Architects.
- Member of ADR – a Lebanese NGO for rural development.
- Member of the Civil Campaign to Protect Dalieh of Raouche.

Teaching Beyond the Classroom:

<p><u>Arab Center for Social Sciences, Amman, Jordan.</u> 07/2018</p>	<p><u>Trainer: Offered a 5 days workshop on Mixed Methods for 14 Scholars of Urban Studies from Palestine, Jordan, Lebanon, Egypt and Algeria. Gave a seminar on the state of scholarship in Urban Studies with a focus on the Arab region and supported workshop participants in developing their research proposals. Co-trainers: Kevin Swartout (Odum Institute, USA) and Serge Yazigi (AUB).</u></p>
<p><u>EPOS (Italy) and COSV (Italy / Lebanon), Beirut, Lebanon</u> 03/2018</p>	<p><u>Trainer: Offered a 4-day training on urban planning and infrastructure to 15 Syrian professionals. The training relied on case studies presentation (derived from the trainers’ own work experiences) to stimulate the discussion on the challenges of post-war reconstruction of Syrian cities. Co-trainer: Serge Yazigi (AUB).</u></p>
<p><u>AUB Neighborhood Initiative, Beirut, Lebanon</u> 10/2013 – 05/2016</p>	<p><u>Consultant/ Research Associate: Led the “Gentrification and Urban Change in Ras Beirut” Project, a collaborative undertaking between the AUB Neighborhood Initiative and London School of Economics (LSE) funded through a grant received from the Middle East Center at LSE.</u> <u>Involvement:</u></p> <ul style="list-style-type: none"> • <u>Produced a concept paper to guide the research: “An Inquiry into Current Urban Change Processes in Ras Beirut: Is This Gentrification?” (January 2014) (available online).</u> • <u>Co-organized of an academic conference under the framework of City Debates 2015 (see conferences).</u> • <u>Published two papers on topic gentrification and urban change in Beirut (see publications).</u> • <u>Oversaw the design of a GIS database on mapping new construction in Beirut.</u> • <u>Invited to LSE as an associate researcher (Aug. - Oct. 2015), and gave a talk at the Middle East Centre.</u>
<p><u>Mundus Urbano Programme, Darmstadt, Germany; Barcelona, Spain; Grenoble, France</u> 11/2014</p>	<p><u>Guest Lecturer (3 weeks): Invited to contribute to the Mundus Urbano masters programme. Offered a short course on Urban Heritage and Development at TU-Darmstadt University, a public lecture at the Universitat Internacional de Catalunya (UIC), and a workshop at The University Pierre-Mendès-France (UPMF).</u></p>
<p><u>Freie Universität / Humboldt Universität zu Berlin, Germany</u> 09/2011 to 12/2013</p>	<p><u>Senior Fellow: Invited as an urban planner to participate in the research project “Archaeotopia” of the Berlin-based “Cluster of Excellence – TOPOI”. Selected topic: The archaeological site of Carthage (Tunisia) – mainly its appropriation and manipulation by different interest groups (co-investigator: Stefan Altekamp). The research involved: fieldwork in Carthage (2 visits) and 2 months deskwork in Berlin (15 Oct -15 Dec 2011). Output: 1) a public presentation (held in July 2012 in Berlin), 2) an academic publication (see publications).</u></p>

Conferences and Workshops

- Invited by COSV (an Italian NGO) to the final event of their “Tahdir” programme on building the capacity of Syrian professionals (Beirut, July 2019).
- Invited by the Arab Center for Social Sciences to attend and contribute to ACSS Third Research Forum held in Amman, Jordan in March 2018. Chaired a session and co-lead a discussion seminar.
- Invited by AUB and UCL to a workshop entitled “The Vital City: Time and space in the unpacking of displacements, crisis and city futures in Lebanon”, RELIEF program (Beirut, January 2018).
- Invited by the Socialist Forum to speak at the Labor Day Conference on urban development and displacement. (Beirut, April 2017)
- Participated in and contributed to the preparation for UN-Habitat Expert Group Meeting on Migration and Inclusive cities in the Arab Region. (Beirut, October 2016)
- Invited by the Arab Council for the Social Sciences to participate in “Towards a Critical Security Studies in the Arab World” workshop. (Beirut, April 2016)

- Invited to City Debates conference on “Urban Policy Mobilities and International Aid”, American University of Beirut Acted as a discussant in a session entitled “Living Refuge”. (Beirut, March 2016)
- Invited to Symposium at the American University in Cairo co-organized with the American University of Beirut (AUB) on the role of universities in their neighborhoods (Cairo, October 2015)
- Invited by the Middle East Centre at the London School of Economics (LSE) to present research findings of the “Gentrification and Urban Change in Ras Beirut” Project. (London, October 2015)
- Invited by the AUB Neighborhood Initiative to a workshop at the American University in Cairo addressing the role of urban universities in improving the livability of their immediate context (Cairo, March 2015).
- Co-organized City Debates conference entitled “Other gentrification: Urban change beyond the core”, the annual conference of the Graduate Programs of Urban Design, Planning and Policy at AUB. Introduced the main theme of the conference and presented a paper entitled “The Remaking of Ras Beirut: Gentrification and the Politics of Mobility”. (Beirut, March 2015)
- Invited to a seminar on housing and rental law in Lebanon. Participated in the recommendations session. (Beirut, December 2014)
- Invited to the Arab Towns Organization (ATO) 16th General Conference. Presented a paper (in Arabic) on bridging the urban divide in Western Asia as part of a workshop organized by UN-ESCWA on "Pro poor urban strategies in the Arab countries". (Doha, May 2013)

Publications.

Academic peer-reviewed publications

- “The Remaking of Ras Beirut: Displacement beyond Gentrification” in *City*, 22:3, 375-395, DOI: 10.1080/13604813.2018.1484643
- “Third Carthage: Struggles and Contestations over Archaeological Space” in *Archaeologies*, Volume 9, Issue 3, December 2013. Co-author: Stefan Altekamp. <https://link.springer.com/article/10.1007%2Fs11759-013-9243-2>

Published professional papers and reports

- UN-Habitat (February 2018), “Migration and Inclusive Cities: A Guide for Arab City Leaders”. <https://unhabitat.org/books/migration-and-inclusive-cities-a-guide-for-arab-city-leaders/>
- UN-Habitat (October 2016), “Profile of Mosul City, Iraq: Multi-Sector Assessment of a City Under Siege”. <http://unhabitat.org/city-profile-of-mosul-iraq-a-city-under-siege/>
- UN-ESCWA (June 2014), “Social Justice in Arab Countries: Challenges and Recommended Courses of Action”. http://www.escwa.un.org/information/publications/edit/upload/E_ESCWA_SDD_14_TP-2_E.pdf
- UN-ESCWA (December 2013), “Social Justice: Concepts, Principles, Tools and Challenges”. http://www.escwa.un.org/information/publications/edit/upload/E_ESCWA_SDD_13_TP_9_E.pdf

Other publications

- Comments on the new heritage law, the Legal Agenda, No 53, February 2018 (In Arabic): <http://legal-agenda.com/article.php?id=4228>
- “Capitalism and Lebanon’s Coast: Drawing Lines of Division in the Sand”, in *The Legal Agenda*, No 49, May 2017 (in Arabic). English translation: <http://legal-agenda.com/en/article.php?id=3711>
- “The reconstruction of Beirut in the beginning of the 21st century” with Hayat Gebara and Bruno Marot, in *The Legal Agenda*, No 48, March 2017 (in Arabic): <http://legal-agenda.com/article.php?id=3623>
- “Mapping New constructions in Beirut (2000-2013)” with Hayat Gebara and Bruno Marot, in *Jadaliyya*, 16 November 2016: [http://www.jadaliyya.com/pages/index/25504/mapping-new-constructions-in-beirut-\(2000-2013\)](http://www.jadaliyya.com/pages/index/25504/mapping-new-constructions-in-beirut-(2000-2013))

Community and Public Involvement.

Review committee member on the Small Grant Program of the Arab Council for Social Sciences (2018).

Steering committee member on “Think Housing: The First Competition for Housing Alternatives in Beirut” organized by Public Works Studio, UN-Habitat, and the Order of Engineers & Architects in Beirut (2018).

Peer-reviewed a number of articles submitted for publication in scholarly journals, including TDSR and IJURR.

Advisory group member of the AUB Neighborhood Initiative (2014-2015).

Member of the American University of Beirut Reconstruction Unit (2006 - 2007).

Member of Club MEDINA – a student organization at the Harvard Graduate School of Design concerned with urban planning and design issues in the larger Middle Eastern Region – (2001- 2004).

5/2014 – on going: *The Civil Campaign for the Protection of Dalieh of Raouche, Beirut, Lebanon*: Working with other campaign members (a diverse group of professionals, academics and activists) on safeguarding the site of Dalieh, a natural and cultural heritage site and one of the last waterfront open spaces in Beirut, from turning into another high-end private beach resort.

Involvements: Acted as a steering-committee member on an ideas competition to solicit alternative visions for the site. Placing Dalieh on the World Monuments Fund watch list for 2016-2017.

12/2015 – 05/2016 *Beirut Madinati*: Participated in writing up the program of Beirut Madinati (a volunteer-led campaign to elect a municipal council of qualified, politically unaffiliated individuals in the upcoming contest of May 2016).

Name: Balsam El-Ariss

Rank: Part-Time Instructor

Education: College

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
Graduate School of Design, Harvard University, Cambridge (MA), USA.	2	Master in Architecture II (MArchII)
Swiss Institute of Technology (ETH Zurich)	7	Bachelors in Architecture (BArch) Masters in Architecture (MArch)

Teaching Experience: (College level)

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	8	Final Year Capstone Project at LDEM graduate urban design studio at ArD cultural landscape design

Practice Experience

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
Freelance Architect/ Design Consultant	8	Preliminary Project assessment / Strategy development/ Review of feasibility and market studies for Design briefs / Program Design Briefs for consultants / design stages follow-up and review, Review on any design related issue and recommendations for Program and Design services
NREC Kuwait (The National Real Estate Company in Kuwait) Solidere s.a.l	2 4	Design reviews and follow-up Architecture Department Manager: Senior Architect, Project coordinator:
Skidmore, Owings & Merrill LLP, New York, USA	3	Architect: Value Engineering and Interior design review Space/floor planning/ elevating for high-rise for a mixed-use tower competition
Lamunière et Devanthery, Geneva, Switzerland	6 months	Architect:
Nabil Gholam Architecture and Planning, Beirut, Lebanon	1	Architect
Bernard Khoury Architects, Beirut Lebanon	6 months	Architect: Site Supervision and design detailing: Design and Program proposal
Batimat Architects, Beirut, Lebanon	3	Architect: Design development and site supervision of several small projects in Lebanon
Herzog & de Meuron, Basel, Switzerland	6 months	Junior Architect: Design competitions and proposals

Professional Registration:

N/A

Publications:

N/A

Name: Dima Rachid**Rank:** Part-Time Lecturer**Education:**

Institution	Number of Years Attended	Degree/Date Granted
Harvard University Graduate School of Design	2	MLA/2015
American University of Beirut	4	BS Landscape Design and Ecosystem Management + Diploma of Ingenieur Agricole

Teaching Experience: (College level)

Institution	Years Taught	Subjects
American University of Beirut	2.5	Capstone Studio, Cultural Landscape Design
University of Southern California, School of Architecture	1 semester	Core Studio Lecturer in the Master of Landscape Architecture+Urbanism Program. Landscape + Urbanism Territorial Studio titled Camp Urbanism to Migrant Housing: A Landscape Approach

Practice Experience:

Firm or Agency	Number of Years	Responsibilities
Studiolibani Landscape + Urbanism	3	Founding Partner
Freelance	4	Lead Landscape Architect, Private Housing w/ Aziz Barbar (Architect, MDes, Harvard GSD), Liberia, December 2016- present Landscape Designer, <i>Port Loko High School Campus</i> Pre-Concept w/ Ali Karimi (Architect, MArch, 2 Harvard GSD), January 2015
Collaboration With LACECO	1	Lead Landscape Architect, <i>Public Park Project</i> for the Municipality of Beirut Landscape Consultant, MAF Waterfront City
AHBE Landscape Architects, Los Angeles, California	1	Landscape Designer
Collaboration With Samir Khairallah & Partners and Atelier Hamra	1	Landscape Designer + Site Landscape Designer, <i>Kempinski Summerland Resort</i>

Professional Registration:

International Landscape Collaborative, since 2017

Order of Engineers and Architects, since 2010

Professional & Academic Activities.Awards:*Santa Monica Airport Park* Competition w/ AHBE Landscape Architects, Finalist, Los Angeles, CA, 2015*Wet Corridors*, B-More Resilient Competition: Most Innovative Award w/ Aziz Barbar (MDES, Harvard GSD), American Institute of Architects (AIA), Baltimore, 2015

Honor for Excellence Award, American Society of Landscape Architects (ASLA), Harvard GSD, 2015

Druker Traveling Fellowship, Finalist, Harvard Graduate School of Design, 2015

Publications.Book Chapters:*Ecological Planning in Post-Military Landscapes: Case of the Demined Territories in the Litani River Watershed- Lebanon*, **International Landscape Collaborative, Santiago, Chile**, March 2019*Life-styled: Health and Places*, as part of the **Health and Places Initiative at Harvard University**, Book by David Mah and Leyre Asensio, 2016

Conferences:

Places that Remain, Conference Speaker, Lebanese American University, March 2018

At the Interface, Online Lecture, University of Mazendaran, Iran, December 2017

Exhibited Work:

Minor Paradises, Amman Design Week w/Civil Architecture, Amman, 2019

Ephemeral Urbanism, at 15th International Architecture Exhibition of La Biennale di Venezia: Reporting from the Front, w/Rahul Mehrotra, Felipe Vera, and Jose Moratilla, Venice, Italy 2016

Reclaiming Vacant Properties Conference, Wet Corridors w/Aziz Barbar displayed at the AIA Baltimore Exhibit, Baltimore 2016

UN-Built, Pavilion by the Harvard Graduate School of Design, DesignxMiami, w/Ali Karimi, Miami, Florida 2015

Caen Island: Public Space, Visions for Ile-de-Caen, work displayed in Ile-de-Caen, France, 2014

Contributions. Contributed expertise to local and international landscape projects, linking the landscape to issues such as migration and reclamation. Fostered many collaborations that combined expertise and that spoke about the experience of landscape in the global south.

Name: Sara Hage

Rank: Part-Time Lecturer

Education:

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
Ecole Nationale Supérieure d'Architecture de Paris la Villette – Paris, France	2	Post-masters in Architecture and Urban Project – Minor 'Development'
Ecole Nationale Supérieure d'Architecture et de Paysage de Bordeaux – Bordeaux, France	4	Landscape Architect -Paysagiste d.p.l.g.
Lycée d'enseignement général et de technologie agricole de l'Aulne, Châteaulin – Châteaulin, France	1	"BTS aménagement paysager" – technical degree in landscaping.

Teaching Experience: (College level)

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	8	Landscape Fundamentals, Landscape Design 2, Landscape Appreciation, Natural Landscape Design
Academie Libanaise Des Beaux Arts	1	Landscape Management

Practice Experience:

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
Les Plus Beaux Villages du Liban NGO	2	Jurist, label for the preservation of rural heritage and the promotion of sustainable rural tourism.
Freelance	15	'Sentier d'interpretation' in Zouk Mosbeh - Installation-MK3D Vendome- Public bench on Vendome stairs-Mar Mikhael with {hage}{zahr} landscape architecture - Public projects in Jezzine in collaboration with architect C. Zahr and the municipality of Jezzine - Lebaa Development Project - 2004 Recommendation and Landscape Chart for Mayrouba

Professional Registration: N/A

Professional & Academic Activities. N/A

Publications. N/A in past 5 years

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Name: Salwa Sabbagh

Rank: Part-Time Instructor

Education:

Institution	Number of Years Attended	Degree/Date Granted
American University of Beirut	4	Masters of Urban Design/2015
American University of Beirut	2	BS in Landscape Design and Eco-Management/2011

Teaching Experience: (College level)

Institution	Years Taught	Subjects
American University of Beirut	2	Urban Landscape Design, Urban Landscape Design

Practice Experience:

Firm or Agency	Number of Years	Responsibilities
W/Urbane – Independent Project Consultant	1	Project Urban Designer
Middle East Airlines - Independent Project Consultant	3	Landscape Design Advisor, Project Coordinator / Client Representative, MEA Campus Master Plan Development , Project Designer
UNIT44	4	Project Coordinator / Designer
LilMadina Initiative	4	Independent Research Consultant
Jala Makhzoumi	3	Landscape Designer and Research Assistant
LACECO	1	Landscape Designer and Research Assistant

Professional Registration:

Lebanese Landscape Association (LELA), Beirut Lebanon	Since 2015
ISOCARP	Since 2015
Order of Engineers and Architects, Beirut Lebanon	Since 2011

Professional & Academic Activities.

Workshops and Contributions:

National Conference: Organizer

Career Trends and Opportunities in Agriculture, Nutrition and Landscape Design w/ WAAAUB FAFS Chapter - November 2012, April 2015, October 2018

Organized both WAAAUB FAFS Chapter symposiums in collaboration with Faculty of Agricultural and Food Sciences (FAFS), AUB.

"نحو تحسين آليات عمل أداة الضم والفرز العام" w/ Lilmadina Initiative

December 2015

Organized by LilMadina Initiative in collaboration with Issam Fares Institute - AUB.

International Conference: Organizer and contributor

16th International Architecture Exhibition

March 2018

"Places that Remains in the Lebanese territory, un-built spaces, their qualities, their histories and their potential" the conference is organized in line with the theme of 16th International Architecture Exhibition in Venice: "Freespace".

Contributed a paper titled "Transforming Space Remains into Fundamentals of Urban Development Through the Ecological Landscape Design Approach to Planning."

International Federation of Landscape Architect (IFLA) Beirut

May 2016

"Unfolding Middle Eastern Landscapes: Changing Forms, Evolving Tools, Transforming Meanings" w/LELA

Contributed a paper titled "Rethinking Planning Tools through the Ecological Landscape Design Approach: Saida Case Study"

National Design Workshops and Exhibitions: Participant

Qamleh Stream

March 2015

Organized by LilMadina Initiative workshop. Saida, Lebanon.

Al-Wastani and the future urbanization of Saida

June 2014

Co-organized by Municipality of Saida, USUDS and Hariri Foundation. Saida, Lebanon.

East Wastani land pooling and subdivision, Lebanon

April 2014

Organized by LilMadina Initiative workshop. Saida, Lebanon.

International Conference and Workshops: Participant

IFLA 2019 – Common Ground

Sept 2019

International IFLA Congress Co-organized with NLA, Oslo, Norway

IFLA 2016 – Tasting the Landscape

April 2016

International IFLA Congress Co-organized with AIAPP, Turin, Italy

Publications.

2018

Makhzoumi, J. and Al Sabbagh, S. “Landscape and Urban Governance: Participatory Planning of the Public Realm in Saida, Lebanon”. *Land* 7(2), pp. 1-13.

Name: Cornelia Krafft

Rank: Part-Time Lecturer

Education:

Institution	Number of Years Attended	Degree/Date Granted
Academy of Fine Arts, Vienna	2	MA of Scenography / Fine Arts

Teaching Experience:

Institution	Years Taught	Subjects
American University of Beirut (AUB)	8	FAFS (LDEM): Spacial Structures and Movement, MSFEA(ARCH): Senior lecturer for Stage- & Costume Design and for Spacial Structures and Movement Department of Fine Arts: ssistant Professor for “Design in Theater” and “Performance Art”
University of Arts (UdK), Berlin	1	DAAD scholar and Guest lecturer at the Department of Scenography
University of Applied Arts Vienna	12	Lecturer for installation & performance art ,Department of Stage-, Film Set Design

Practice Experience: N/A

Professional Registration: N/A

Professional & Academic Activities.

Art Exhibitions:

07/2017 The shield the black feathers and the pendulum of time (video) and whole series of objects, drawings and costumes on
Athena and the Crow installed as part of the permanent collection at the Archeological Museum at Parco Scolacium Borgia, I
06/2016 7 rooms 7 artists:Beirut Conversations, installation, group exhibition, Art House Beirut, LB
06/2015 Representative artist for national section of Lebanon for PQ 2015 the International Quadrennial for Performance design
& Space Prag, CZ
07/2014 Open studio; Solo exhibition at MARMA artist in residency Berlin, D
04/2014 7th Spring Cultural Salons for Modern Art, installation, group exhibition, Pomorie , BG
Exhibition Design
04/2018 Sea of Tales; interactive exhibition design: 800m2 children area at the International Book Fair in ADNEC, Abu Dhabi,
UAE
05/2014 A more abundant life; interactive exhibition design on handwritten magazines from
1899-1933; President’s Club of AUB, Westhall AUB

Grants/Scholarships

07- 08/2016
Artist in Residence for Performance & Film Project at the Festival Armonie d’Arte, Calabria , I
10/2015 - 03/2016
Scholarship by the German Academic Exchange Service (DAAD)
in collaboration with the University of Arts Berlin , D
2015 Full sponsorship granted by AUB PRESIDENT’S CLUB for book publication:
MUTE MOVEMENTS- a collective performance art journey through Beirut 2009-2014
Publisher: AUB PRESS, LB
2015 Financial support by DAAD for lecture at the University of Arts Berlin ,D
2014 Selected international artist for residency April –July 2014 at MARMA Berlin, D
2014 FAAH, AMPL and FAS of AUB supporting the performance “After 100 Springs, Beirut, LB
2013 Art and Humanities Initiative (AHI of AUB) for “sawt wa samt” interactive exhibition, Beirut

Lectures and Workshops

09 - 12.2019 Bauhaus 100 - a scenographic intervention on modernist buildings in Lebanon

Collaboration with the international Blind Spot Project by Prof. Karen Kipphoff from the Norwegian Theater Academy and the American University of Beirut, LB

14,17/03/2018 Lecture The Ephemeral and Timeless Power of Nature and Landscapes Translated into Art and Workshop The Memory of Salt at the Department of Landscape Design, AUB, LB

6-7/06/2016 In the dough of freedom; Workshop and Guest lecture at Department of Stage- and Filmset Design, University of Applied Arts Vienna, A

02/12/2015 The Orient and Occident in the work of Cornelia Krafft, guest lecture and workshop Movement and Objects at the London College of Fashion Research Hub University of Arts London, UK

23/03/2015 Artist Round Table at the International Atelier for Young Festival Managers (by EFA) Massrah Al Madina, Beirut, LB

13/01/2015 Performing within the voids of Beirut Scenography Department of the Institute of Performing Arts, University of Arts Berlin, D

19/04/2013 Performing within the voids of Beirut Workshop and Guest lecture at the University of Applied Arts Vienna, A

05/04/2013 Talk 20 Speaker at the 7th edition at AUB; LB

- 4.&5./11/2014 Shirin Neshat (artist, filmmaker) - lecture, studio visit and screening of *Women without Men*
- 9-11/10/2014 'Beirut: Bodies in Public.' first Performance Art Conference in Lebanon in Cooperation with Kings College London
- 9,10/10/2014 Karen Kipphoff (performance artist) - *Casting Bodies* a live performance and lecture and workshop *Placements Objects_Bodies_Landscape*
- 17/04/2013 Peter Sellers (director, choreographer)- lectures, screenings and studio visit

Publications.

Books:

MUTE MOVEMENTS: A Collective Performance Art Journey through Beirut 2009-2014

Contributions. Involvement in the field is inductive of out-of-the box thinking in the context of Landscape Architecture. Experimental and experiential exploration into space.

Name: Rania Abboud

Rank: Part-Time Instructor

Education:

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
Notre Dame University	6	Bachelor of Architecture
Lebanese University	2	Masters in Urban Planning [coordinated of the INSA-LYON Tempus program (European Union)]
Lebanese University	4	PhD in Art and Sciences : Urban Planning

Teaching Experience: (College level)

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
Lebanese University	5	Construction Document Classes, Computer Aided Design
American University Of Sciences and Technology	9	Teaching first, second and third year's classes (BA in Interior Design): Interior Design, Computer Aided Design I, Computer Aided Design II and Technical drawing.
American University of Beirut	11	Drawing I and II: technical & descriptive drawing-Computer Aided Design: AutoCAD 2D, 3D, and 3D Max and Surveying. Geographic Information System and Technical drawing

Practice Experience:

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
Innovative Institutional IDEAS	7	Director of GIS department
State University of New York, Center for Legislative Development	4	Teaching and training in AutoCAD 2D and ARCGIS (for municipalities).
Stalq	2	Project and Quality Control Manager

Professional Registration: N/A

Professional & Academic Activities. N/A

Publications. N/A

Contributions: encouraged the more widened use of Geographic Information Systems within Landscape Architecture and the software relevant to the profession

Name: Joelle Baroud

Rank: Part-Time Instructor

Education:

<u>Institution</u>	<u>Number of Years Attended</u>	<u>Degree/Date Granted</u>
University of Oxford	1	MSc Sustainable Urban Development
American University of Beirut	4	BS Landscape Design and Eco-Management and Diploma of Agricultural Engineer.

Teaching Experience: (College level)

<u>Institution</u>	<u>Years Taught</u>	<u>Subjects</u>
American University of Beirut	5	Technical Drawing' and 'Site Scale Design: Public Park and Private Garden

Practice Experience:

<u>Firm or Agency</u>	<u>Number of Years</u>	<u>Responsibilities</u>
Freelance	6	Design and coordinate the implementation of various small to medium scale including event spaces, private residence gardens, streetscapes and commercial parking lots.

SIOM	4	Window Display Designer
ARK Design and Consultancy Services	1	Landscape Architect

Professional Registration: N/A

Professional & Academic Activities: N/A

Publications: N/A

Contributions. Brought forward a sustainability approach to all projects worked on and all studios given, used landscape expertise and knowledge to tie in with other disciplines

F. FACILITIES INFORMATION

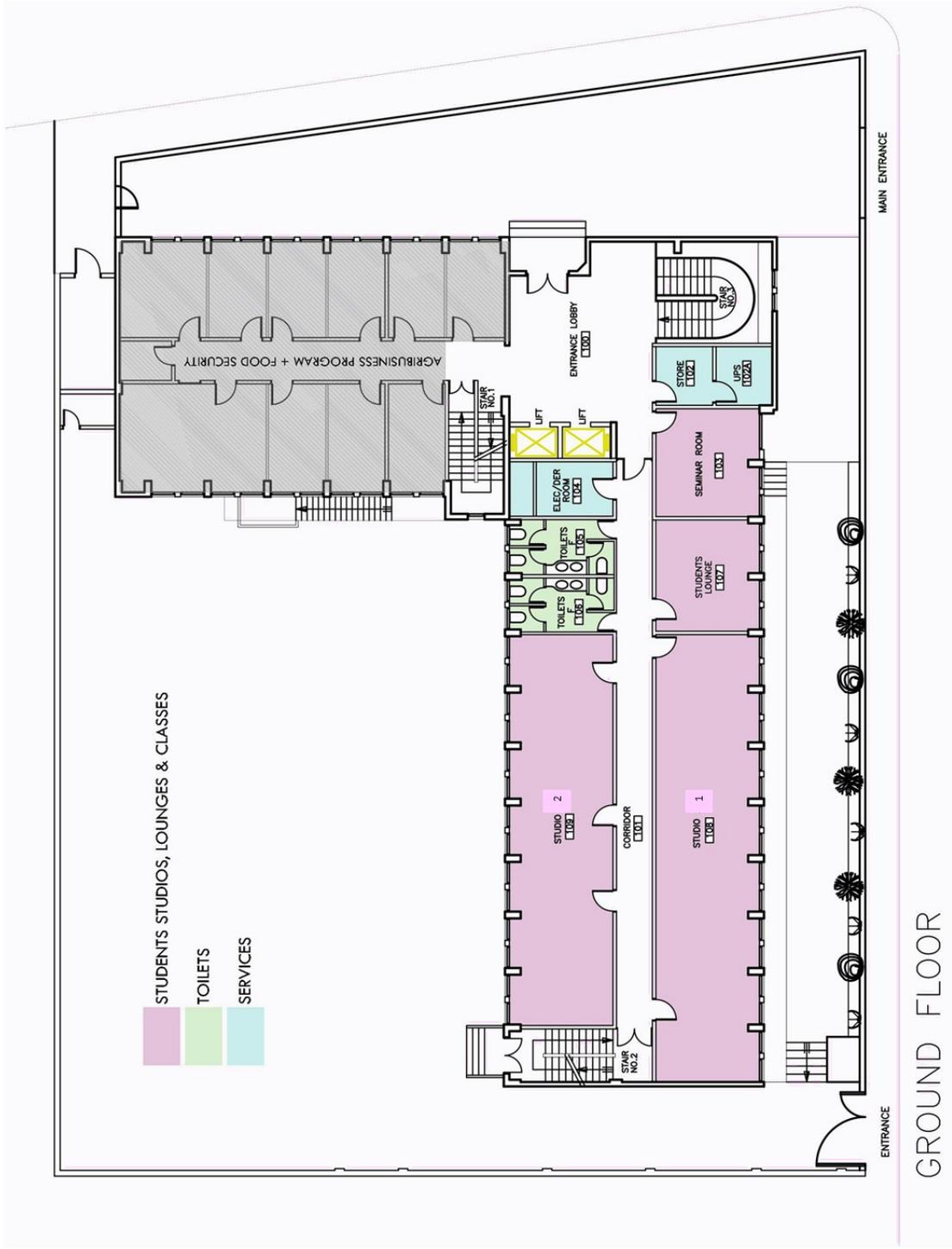
Instructions

1. Tabulate space data as shown below.
2. Describe any steps that are being taken to improve the spaces.
3. Include floor plan(s) on standard 8 1/2" x 11" sheets. Label these plans to identify various types of spaces and who controls/uses it.
4. If spaces are shared by other programs or departments, indicate this on the spaces affected.

Program Facilities

Floor	Room #	Size (Sqm)	Max. Capacity Normal Max. Users	Type of Space (studio, office, storage, etc.)	Shared Use (S) Exclusive Use (E)
Ground Floor	100	48.6	N/A	Entrance Lobby	(S)
	101	40	N/A	Corridor	(S)
	102	6.5	N/A	Store used by LDEM	(E)
	102A	6.5	N/A	Building UPS room	(S)
	103	22	15	LDEM Seminar Room	(S)
	104	11	N/A	Elec/Der Room	(E)
	105	11	N/A	Toilets Female	(S)
	106	11	N/A	Toilets Female	(S)
	107	22.3	26	Students Lounge	(E)
	108	91	26	BLA Studio 1	(E)
	109	79.5	26	BLA Studio 2	(E)
	Stairs 01	12.7	N/A	Vertical Circulation	(S)
	Stairs 02	14.8	N/A	Vertical Circulation	(S)
	First Floor	200	15.4	N/A	Elevator Lobby
201		48	N/A	Corridor	(S)
202		13.2	1	LDEM Administrative Officer	(E)
203		21.3	9	LDEM Departmental Research Assistant + Graduate Assistants	(E)
204		11.3	N/A	Elec/Der Room	(S)
205		22.5	12	Shared Part-timers/ research assistants on grants	(E)
206		11.2	N/A	Toilets Female	(S)
207		11.2	N/A	Toilets Male	(S)
208		90	26	BLA Studio 4	(S)
211		98.5	26	Studio 3	(S)
215		11.3	1	IGESP Coordinator Office	(E)
215A	24	1	LDEM Chairperson Office	(E)	

Floor	Room #	Size (Sqm)	Max. Capacity Normal Max. Users	Type of Space (studio, office, storage, etc.)	Shared Use (S) Exclusive Use (E)
	216	17.4	1	Faculty Office	(E)
	217	17.4	1	Faculty Office	(E)
	218	11.3	N/A	Photocopy & Storage	(E)
	219	17.6	1	Faculty Office	(E)
	220	10	1	Faculty Office	(E)
	221	17.2	1	Faculty Office	(E)
	222	14	1	Faculty Office	E
	223	33	20	LDEM Meeting Room/ Faculty Lounge	(E)
	224	26	1	Faculty Office	(E)
		25.3	N/A	Printing & Modeling Shop	(E)
	Stairs 01	12.7	N/A	Vertical Circulation	(S)
	Stairs 02	14.8	N/A	Vertical circulation	(S)





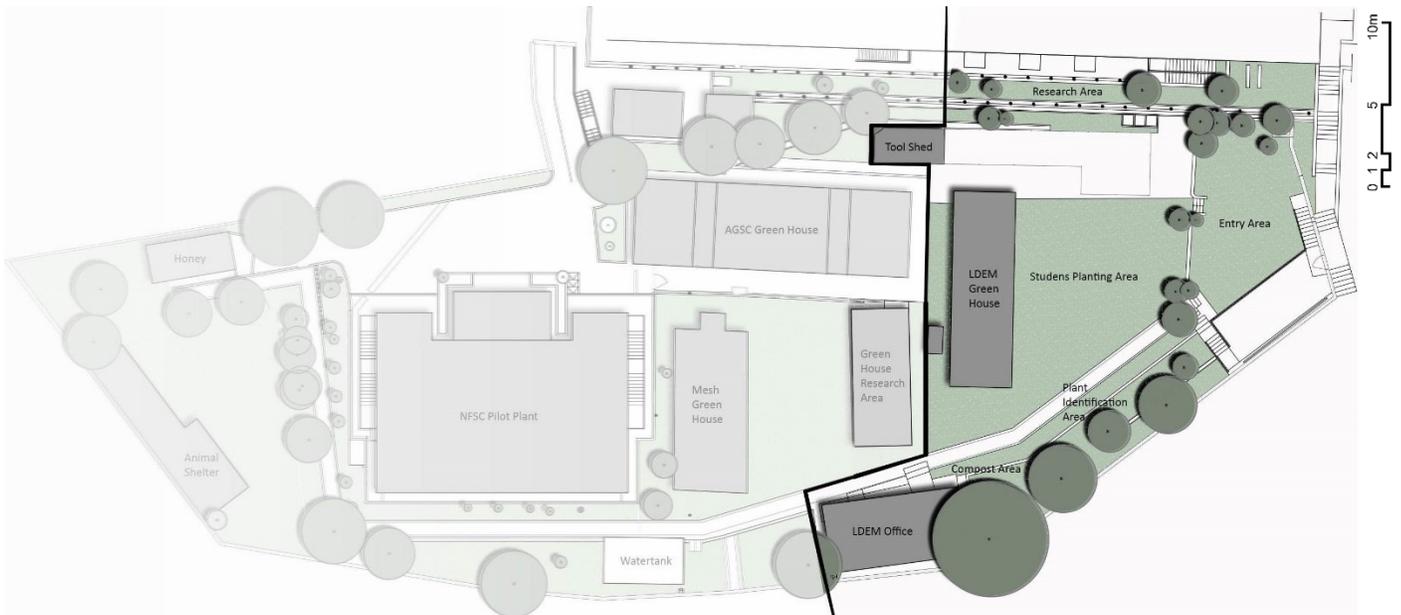
FIRST FLOOR

Green House Area/FAFS Eco-Unit

The Green house area is located on the main campus and is used for outdoor teaching, faculty and graduate students research as well and community service. Currently the space is shared with other departments at FAFS. The plan below shows the section dedicated to LDEM with the respective current area space uses in the table below. This space will be undergoing renovations based on the following design drawings.

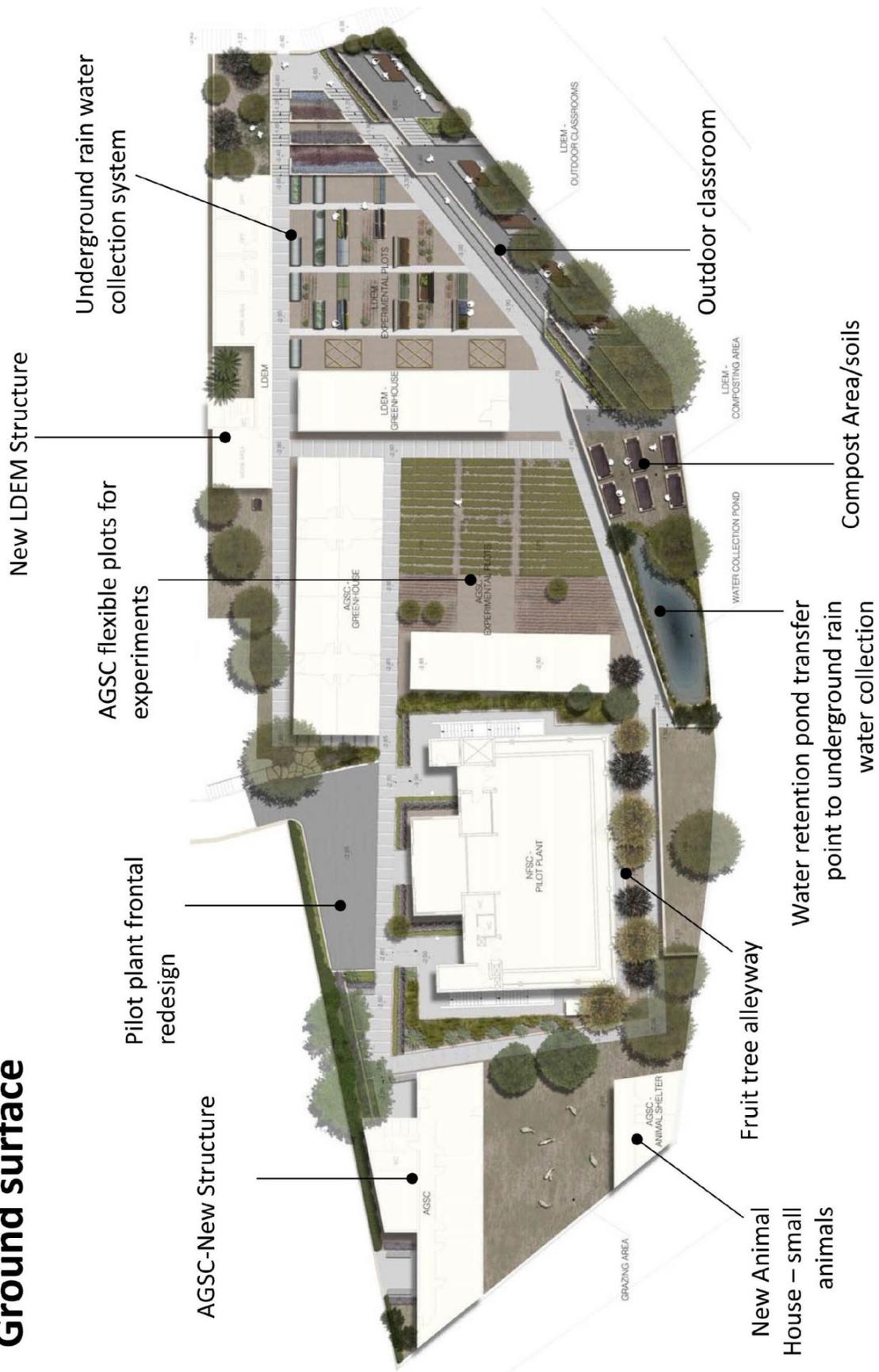
Existing Areas

Space Name	Area (sqm)
LDEM Green House	86.3
Students Planting Area	217.5
LDEM Office	70.8
Compost Area	51.6
Plant Identification Area	122.5
Research Area	84.5
Entry Area	139
Tool shed	18.5
Total	790.7



Existing Green House Area Plan: Darker Green area is used and managed by LDEM

Master Plan Design Ground surface



Master Plan Design Roof Surfaces

New AGSC Green roof

Roof green house for food production, bee hives, hydroponic units for urban agriculture.

New LDEM Green roof and facades

Focus on native and adapted plants – monitor performance of building interior, exterior and water retention



New NFSC pilot plant roof

Green roof over entrance canopy – monitor Roof Energy generation, solar and potentially wind (to be verified)

AGSC integrated food production system

Vertical closed loop vertical agriculture unit.



Proposed Design of Green House Area



FACULTY OF AGRICULTURAL AND FOOD SCIENCES (FAFS)

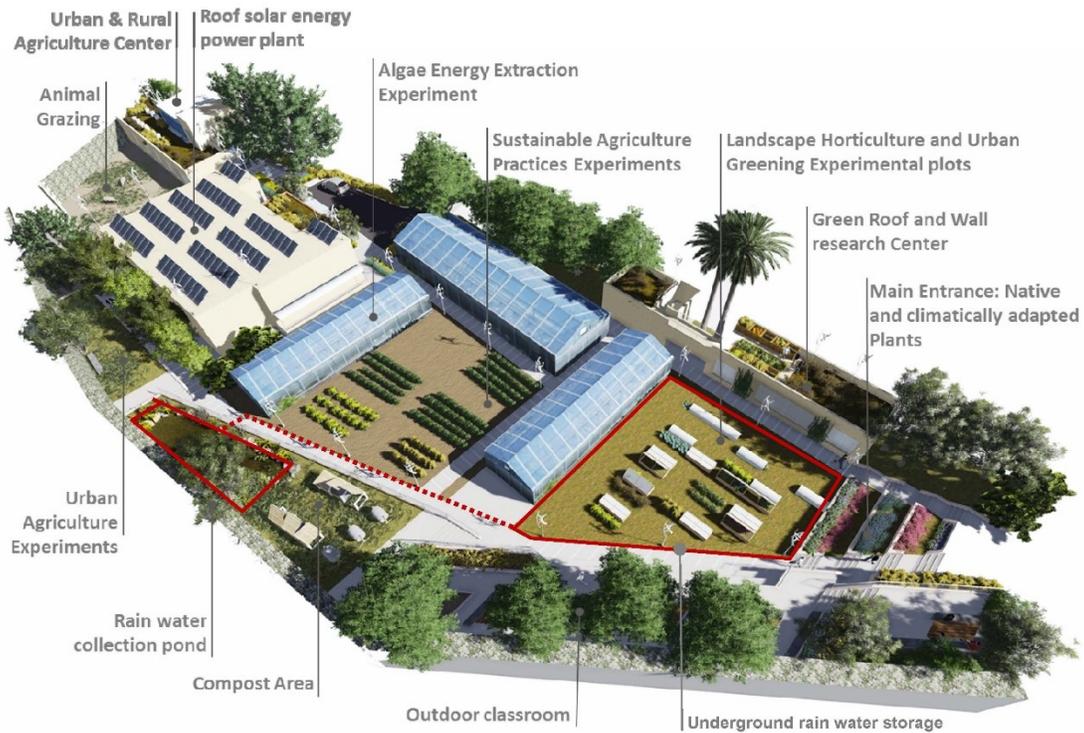
FAFS ECO-UNIT

Resilience Lab for teaching, research, and outreach



Overall project view

FAFS ECO-UNIT is a lab for teaching, research, and outreach on resilience, enabling students and faculty members to address current and future challenges to ensure a healthy earth, healthy food, and healthy people. It is a visionary prototype of collaboration between multiple academic disciplines, private and public sectors that is unique in Lebanon and the Middle East Region.



Project location (red) with AUB campus

Project Outlook

Preparation is underway for design development and implementation over the next three years offering a variety of opportunities for monetary and/or in-kind donations. The location within AUB's forested green middle campus allows possibilities to recognize donors as champions of sustainability and resilience in the region.

Layout design Yaser Abunnasr March 2015

FAFS ECO-UNIT

FACULTY OF AGRICULTURAL AND FOOD SCIENCES
AMERICAN UNIVERSITY OF BEIRUT



Green roof for food production

Project Components

The project area is **1,800 m²** and includes • Agriculture research facilities • Urban greening research facilities (green roofs and walls) • Solar power generation plant • Underground rain water storage • Sustainable agriculture experiment plot • Student experiment plots • Outdoor class room for hands-on teaching • Soil compost area • Rain water retention pond • Native and climatically adapted plants research • Center for outreach engagement

Project Principles

- Sustainable landscape and building design
- Mediterranean character design with local material
- Energy self-sufficiency through solar, wind and algae
- Water self-sufficiency through rain water collection, storage and re-use
- Sustainable agriculture practices
- Food production through urban agriculture techniques (vertical agriculture, hydroponics, aquaponics, etc.)
- Urban greening (green roofs, walls and public space)
- Continuous scientific monitoring, data generation and sharing



Main entrance with native plants terraces and student experimental area



Student outdoor class for hands-on teaching



Sustainable agricultural practices plot

Credits Yaser Abunnasr (Design) • Mahmoud Bou Kanaan (Renderings) • Rouba Dagher (Analysis) • Omar Aridi & Mahmoud Bou Kanaan (Survey)

Support for the design by the Departments of Agriculture • Landscape Design and Ecosystem Management • Nutrition and Food Sciences at The Faculty of Agricultural and Food Sciences • AUB

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Layout design Yaser Abunnasr March 2015



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