

AMERICAN UNIVERSITY OF BEIRUT

FACULTY OF AGRICULTURAL
AND FOOD SCIENCES

ANNUAL 2010-2011
Report

Preface

Dear Alumni and Friends,

It is a pleasure to share with you the 2010-2011 Faculty of Agricultural and Food Sciences' Annual Report. The report is a snapshot of the Faculty's accomplishments over the past year and showcases the major initiatives and developments that have taken place, illustrating FAFS's commitment to higher levels of excellence in teaching, research and outreach.

During this academic year, FAFS engaged in a dynamic strategic planning process revisiting its vision, mission and goals to guide the Faculty in its growth over the next five years. The new mission statement emphasizes commitment to human health and wellbeing through research, an aspiration for providing excellence in education and service that extends to the community, the region and the world.

In parallel to active strategic planning, the Faculty had the chance to implement a myriad of initiatives and programs focused on its commitment to high quality learning. In pursuit of enhancing existing programs, FAFS successfully developed and implemented program learning outcome measures for its seven undergraduate programs. The Faculty also secured approval from the Commission on Accreditation for Dietetics Education (CADE) to conduct an onsite evaluation for the accreditation of its Coordinated Program in Nutrition and Dietetics. In addition, the Landscape Design & Ecosystem Management department (LDEM) has secured involvement of the international community (International Federation of Landscape Architects (IFLA), the European Federation of Landscape Architects (EFLA) and the American Society of Landscape Architects (ASLA) in modifying its LDEM undergraduate program and establishing a new Masters in Landscape Architecture (MLA).

The Faculty also moved forward on new academic initiatives where a PhD in Biomedical Sciences/Nutrition jointly with the Faculty of Medicine was approved by BOT and an MSc in Rural Community Development (RCODE) was approved by the Faculty. In addition, FAFS has moved for establishing degree and non-degree programs in Food Security including a professional Master's program in collaboration with the Lebanese National Center for Scientific Research (CNRS), the International Center for Agricultural Research (ICARDA) and the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM). This step comes as a response to the growing regional and international concerns over food

insecurity, poverty and food safety and complements FAFS's engagement in pioneering initiatives that contribute to enhancing agricultural and food producing practices.

FAFS research productivity has been consistently increasing, this year faculty research funds have expanded with a total \$1,477,059 of new awards, the bulk of which being from international agencies and 83 publications have been produced in the form of refereed articles in international journals, abstracts and proceedings, books and book chapters. In addition, the faculty organized many conferences and seminars tackling issues of regional and global importance under the themes of food security, food safety and human wellbeing in collaboration and partnership with national and international organizations such as International Fund for Agricultural Development (IFAD), International Development Research Center (IDRC), Issam Fares Institute (IFI), ICARDA, CIHEAM-IAMB and CNRS-Lebanon. Main events included a *Regional Conference on Food Security in the Middle East & North Africa: The Role of Research & Academic Institutions*, a seminar on *Challenges of Rural Poverty in the Middle East and North Africa (AGSC)* and a symposium on *Consumer Protection and Food Safety*.

In parallel to its commitment to excellence in education and research, the Faculty's engagement in outreach is highlighted by the many activities of significance to the local and international community including native tree planting, animal welfare, balanced and sensible nutrition, urban greening, and conservation agriculture.

The details of these numerous achievements and others are outlined in the report.

Nahla Hwalla, Dean

FAFS

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I. Office of the Dean

A. Non-Academic Personnel

Nine non-academic employees' serve at the Dean's office as per table 1 below:

Table 1: Non-Academic Personnel

Name	Title
Fares, Mohamad	IT Manager
Haddad, Tharwat	Students Record Officer
Houri, Laila	Financial Officer
Khoury, Wafa	Executive Officer
Nabhani Zeidan, Maya	Program Review and Accreditation Officer (Joined Dean's Office on September 7, 2011)
Bilal, Lisa	Administrative Assistant (Resigned August 15, 2011)
Nakib, Nisrine	Secretary
Koubayssi, Rabia	Assistant for Student Services
Haidar, Imad	Junior Clerk

Major Activities of FAFS Dean's Office

- FAFS engaged in a dynamic strategic planning process that culminated in the completion of the the Faculty's 2012-2017 strategic plan.
- FAFS evaluated the effectiveness of its programs on student learning by successfully developing and implementing program learning outcome measures for its seven undergraduate programs. Findings on the AY 2010-2011 assessment were compiled in a report submitted to the University administration.
- FAFS worked towards reconfiguring and creating usable space in the existing facilities at the Faculty. Efforts resulted in establishing a videoconferencing room to accommodate the needs of faculty and students as well as the renovation and refurbishment of the FAFS Student Section and the graduate assistant room at the NFSC department.
- The FAFS Career center website was upgraded and improved to better serve students by expanding its database of companies, advertising announcements on upcoming job fairs and special employment days and by featuring links on how to enhance job skills.
- Several activities were carried out in line with the Faculty's strategic direction of developing its IT sevices. These included renovating FAFS's Computer Lab coupled with the instillation of 21 high end computers and industry leading software packages and retrofitting Classroom 102 and the lecture hall at AREC with audiovisual systems. In response to the need for better security of our facilities, a total of 24 CCTV surveillance cameras were installed both at FAFS Beirut campus and at AREC. Additionally, upon the recommendation of the Internal Audit department and for better accounting practices, all sales at the FAFS Pilot Plant and at AREC are now automated and recorded on an electronic system. This enables better tracking of transactions and allows for regular audits on the ongoing sales process.

B. Standing Committees

The Administrative Committee

Prepared by: Ms. Wafa Khoury, Executive Officer

Membership

Nahla Hwalla, Chairperson
Elie Barbour
Mustapha Haidar
Ammar Olabi
Salma Talhouk
Jad Chaaban, Assistant Dean for Academic Affairs

Lisa Bilal, Secretary

Actions

The committee held 9 meetings throughout the academic year 2010-2011 and the following actions were taken:

1. FAFS Program Review Schedule

The program review of FAFS departments was discussed and the committee agreed that each department will start the periodic review process for its programs according to the following schedule:

- | | |
|--|-----------|
| a) Nutrition and Food Sciences Department | 2010-2011 |
| b) Agricultural Sciences Department | 2011-2012 |
| c) Landscape and Ecosystem Management Department | 2012-2013 |
| d) Animal and Veterinary Sciences Department | 2013-2014 |

2. Capital Budget

The Committee members approved priority requests submitted by FAFS departments and AREC for capital budget 2011/2012.

3. Developing Strategic Plans

The committee members were informed about the initiation of the second strategic planning cycle and Chairpersons of departments were asked to revise their strategic plan in accordance with the new AUB's Guide for developing strategic plans.

4. AUB Initiative on Interdisciplinary Programs in Education and Research

The committee members were made aware of the document on Interdisciplinary Programs in Education and Research at AUB and were asked to review the draft and provide their input and comments on this document.

5. Graduate Assistants

The committee members approved the appointment of 40 graduate assistants in the various FAFS departments for the spring and Summer sessions 2011.

6. AREC

AREC management and activities were discussed and assessed.

The Advisory Committee

Prepared by: Dr. Maya Nabhani Zeidan

Membership

Nahla Hwalla, Chairperson

Fawwak Sleiman

Isam Bashour

Omar Obeid

Salma Talhouk

Shady Hamadeh

Imad Toufeili

Actions

The committee held seventeen meetings throughout the period from October 2010-September 2011 and the following actions were taken:

1. Faculty Research Leaves

Applications for (11) short term and (2) long term faculty development grants, (2) junior faculty research leaves and (22) special leaves with pay were approved.

Periodic paid research leave was also granted to Dr. Yusuf Abu Jawdeh for a period of one semester.

2. New Appointments

1. The committee recommended the recruitment of nine full time faculty members for the AY 2010-2011 and the fall semester 2011-2012: (1) Assistant Professor of Biostatistics in the NFSC department, (1) Visiting Professor of Clinical Nutrition in the NFSC department, (1) full-time Lecturer and (2) full-time Instructors at the NFSC department; (1) Visiting Professor of Horticulture in the AGSC department, (1) Visiting Lecturer and (1) full time Senior Lecturer of Agribusiness at the AGSC department; (1) Visiting Professor of Veterinary Sciences at the AVSC department. Of these, six offers have been accepted, two have been declined and one is still pending.
2. Departmental recommendations for part-time faculty members' recruitment were considered and the committee approved the following appointments for the AY 2010-2011 and fall semester 2011-2012: (10) in the NFSC department; (15) in the LDEM Department, (1) in the AVSC department and (11) in the AGSC Department.
3. Two Preceptor Associates were appointed, on a non-remunerative basis, at the NFSC department.
4. The committee approved the re-appointment of Dr. Salma Talhouk as Chairperson of the LDEM department for three years starting October 2011.
5. FAFS Strategic Planning Committee was formed composed of Drs. Chaaban, Hamadeh, Talhouk, Zurayk and Obeid.

3. URB Visiting Scholars

The committee approved departmental recommendations to invite Drs. Joseph Hotchkiss and Diana Twede as URB Visiting Scholars in the NFSC and AGSC departments; respectively.

Academic and Curriculum Committee

Prepared by: Ms. Rabia Koubayssi, Assistant for Student Services

Membership

Nahla Hwalla, Chairperson
Mohamad Abiad
Elie Barbour
Ali Chalak
Mustafa Haidar
Zeina Kassaify
Lara Nasreddine, Undergraduate ND/Coordinator
Ammar Olabi
Salma Talhouk
Registrar's Representative
Student Representative
Rabia Koubayssi, Secretary
Jad Chaaban, Assistant Dean for Academic Affairs

Actions

The Committee met 10 times during the academic year 2010-2011 and the following actions were taken:

1. *Approved Minor in Veterinary Sciences*

A minor in Veterinary Sciences was approved by the Committee. Students wishing to pursue a minor in Veterinary Sciences should complete 54 credits of science core courses offered during the second and third year of the Veterinary Sciences program.

2. *Approved 2nd B.Sc. in Agriculture for Agribusiness students*

The Committee approved a program to offer a 2nd B.Sc. degree in Agriculture for Agribusiness students. Students are required to complete a minimum of 45 additional credits with a minimum residency of three semesters.

3. *Approved 2nd B.Sc. in Veterinary Sciences*

The Committee approved the 2nd B.Sc. degree in Veterinary Sciences. Students are required to complete a minimum of 49 credits of Science core courses offered during the second and third year of the Veterinary Sciences program as listed in the AUB catalogue and complete a residency of three semesters, or its equivalent in FAFS.

4. *Approved policies and workflow for academic affairs petitions*

The Committee approved the proposal submitted by the Assistant Dean for Academic Affairs on the policies and workflow pertaining to online petitioning.

5. *Approved course offerings and introduction of new courses*

The Committee approved and modified spring, summer and fall course offerings. It also approved the following new courses:

LDEM 264 "*Interior Landscaping*" (3 cr.) to be offered during fall 2011-2012 as FAFS elective.

LDEM 244 "*Surveying for Landscape Design*" (3 cr.) to be offered during fall 2011-2012 in lieu of AGSC 227 "*Surveying and Irrigation Principles*".

AGSC 308 “*Plant Tissue Culture and Crop Improvement*” (3 cr.) to be offered during fall 2011-2012.

6. *Approved new minor in Food Systems*

Dr. Jad Chaaban, Assistant Dean for Academic Affairs, briefed the Committee on the objectives of having a minor in Food Systems. This is in line with the strategic plan of the Faculty whereby students will take one course from each discipline; this will enable students to broaden their horizon with this integrated program. The Committee approved the minor in Food Systems.

7. *Eligible students to go to AREC*

Nineteen students from the Agriculture program and twenty students from the Landscape program were deemed eligible to go to AREC during the spring semester of 2010/11. Classes at AREC were approved to start on February 14, 2011.

8. *Awarding B.Sc. degrees*

The Committee recommended to the Faculty awarding the BSc degree to 132 students distributed as follows: 41 students to receive a BSc in Nutrition and Dietetics, 20 students to receive a BSc in Nutrition and Dietetics – Coordinated Program, 32 students to receive a BSc in Food Science and Management, 18 students to receive a BSc in Landscape Design and Eco-Management and Diploma of Ingenieur Agricole, 16 students to receive a BSc degree in Agriculture and Diploma of Ingenieur Agricole, 4 students to receive a BSc degree in Agribusiness and one student to receive a BSc degree in Veterinary Science.

9. *Probation*

Based on AUB probation rules and regulations, the Committee acted to drop 3 students during academic year 2010/2011. Sixteen students were placed on probation. Five students were removed from probation

10. *New LDEM Curriculum*

The Committee approved the newly revised LDEM curriculum presented by Chair of LDEM Department. The Committee also approved to change the name of the degree from BS in Landscape Design and Eco-management to BS in Landscape Architecture.

The Admissions Committee

Prepared by: Ms. Tharwat Haddad, Student Records Officer

Membership

Nahla Hwalla, Chairperson
Mohamad Abiad
Mustapha Haidar
Zeina Kassaify
Fawwak Sleiman
Imad Toufeili
Jad Chaaban
Admission's Representative
Registrar's Representative
Student Representative
Tharwat Haddad, Secretary

Actions

The Committee held four meetings during the academic year 2010-2011 and the following actions were taken:

1. *Acceptance of Transfer Students*

The committee accepted the transfer of a total of 172 students from AUB and other universities as follows:

- Spring semester 2010-2011: a total of 63 transfer students of which 25 registered.
- Summer semester 2010-2011: a total of 17 transfer students of which 2 registered.
- Fall 2011-2012: a total of 92 transfer students of which 13 registered.

2. *Discussion of New Admission Proposal*

The Admissions Committee unanimously recommended to the Academic and Curriculum Committee to include the below paragraph in the AUB catalogue of AY 2012-2013:

“Holders of Lebanese or French Baccalaureate - Literature & Humanities (or a government secondary school certificate, or a certificate or diploma considered by the University to be equivalent to such baccalaureates) are allowed to join all majors in the Faculty of Agricultural and Food Sciences provided they take the following additional courses: CHEM 102 (except Agribusiness students), MATH 203 and BIOL 103, while holders of Lebanese or French Baccalaureate - Sociology & Economics (or a government secondary school certificate, or a certificate or diploma considered by the university to be equivalent to such baccalaureates) to take CHEM 102 (except Agribusiness students) and BIOL 103”.

The Graduate Studies Committee

Prepared by: Ms. Rabia Koubayssi, Assistant for Student Services

Membership

Nahla Hwalla, Chairperson
Hala Ghattas
Zeina Kassaify
Farah Naja
Lara Nasreddine
Imad Toufeili
Admission's Representative
Registrar's Representative
Rabia Koubayssi, Secretary

Actions

The Committee met 7 times during the academic year 2010-2011 and the following actions were taken:

1. *Program of study and thesis titles*

The Committee reviewed and approved the program of study and thesis titles of 32 students distributed as follows: 14 from NUTR, 9 from FTCH, 3 from ECOM, 2 from AGECE, 2 from PLPT, 1 from ANML, and 1 from SOILS.

2. *Acceptance of graduate students*

The Committee accepted 85 students out of 124 at the master's program with Nutrition attracting the largest number of applicants. Of the accepted candidates, 28 students were enrolled as follows: 12 Nutrition, 10 Food Technology, 2 Ecosystem Management, 2 Agricultural Economics, 1 Animal Science and 1 Irrigation.

3. *Petitions*

The Committee received and considered a total of 5 petitions from students. The majority of which were for changing status from prospective graduate to regular graduate (3), taking a graduate course as prospective graduate (1) and changing from thesis to non-thesis (1).

4. *Establishing a Graduate Council*

The Committee approved the Provost proposal for establishing a Graduate Council.

5. *Graduate Requirements*

The Committee voted to have all departments provide specific courses that prospective graduates need to take in order to satisfy the requirements for a change of status from prospective to regular graduate.

6. *Ph.D. Proposal for Biomedical Sciences*

The Committee approved the proposal recommended by the Nutrition and Food Sciences Department (NFSC) for a joint FM/FAFS degree in Biomedical Sciences/nutrition.

7. *Comprehensive Exam*

In line with the new unified policy, the Committee approved offering a new required 0 credit comprehensive examination course (396) in each discipline effective fall 2011-2012.

8. *Awarding the M.Sc. degree*

The Committee recommended to the Faculty awarding the MSc degree to 25 students in their respective majors: 16 in Nutrition, 3 in Food Technology, 3 in Irrigation, 2 in Animal Science and 1 in Agricultural Economics,

The Research Committee

Prepared by: Dr. Fawwak Sleiman, Professor

Membership

Yusuf Abou Jawdah, Chairperson (Oct.1, 2010-Feb.13, 2011)

Fawwak Sleiman, Chairperson (Feb.14-Sept.30,2011)

Lara Nasreddine, Secretary

Mohammad Farran

Nadim Farajalla

Omar obeid

Actions

During the academic year 2010-2011, the research committee held two meetings to establish proposal evaluation guidelines and to act on received research proposals. The following actions were taken:

1. *URB Research Proposals for 2010-2011*

- The Committee reviewed and evaluated 15 research proposals submitted to URB for funding (Table 2). The committee also requested the evaluation of each research proposal by four reviewers according to set guidelines and developed and deployed an electronic reviewer evaluation form.

Out of the Fifteen research proposals submitted for funding by URB, 11 proposals were only approved.

Table 2. Research proposals submitted to URB for funding during AY 2011–2012.

Principal Investigator	Proposal Titles
Abiad, Mohamad	The Impact of Various Escherichia coli Strains on Methane Gas Production from Farm and Kitchen Waste
Abou El Nasr, Yaser	A Network of Ancillary Botanical Gardens for ex-situ Conservation
Barbour, Elie	Impact of Mutations in Hemagglutinin and Neuraminidase Genes of Lebanese Endemic Avian Influenza on Resistance to Tamiflu Drug
Bashour, Issam	Antibiotic Uptake by Plants from Manure Amended Soil & its Potential Impact on Human Health
Chaaban, Jad	The Efficiency of Food Labeling as a Rural Development Policy: The Case of Olive Oil in Lebanon
Chalak, Ali	How Effective are Environmental & Health Labels at Capturing Market share? The Case "Zero Nitrate" Labels in the Lebanese Market for Bottled Water in Lebanon
Haidar, Mustfa	Salicylic Acid, Hydrogen Peroxide & Neem Oil for the Management of Orobanche Ramosa
Kassaify, Zeina	Implementation and Viability of Traceability Systems in Small and Medium Dairy Processing Plants
Naja, Farah	Dietary Patterns and their Association with the Metabolic Syndrome and its Components among Lebanese Adults
Nasreddine, Lara	Vitamin D Status in a Random Sample of the Adult Lebanese Population and its Association with Cardiometabolic Risk Factors
Nimah, Musa	Deficit Supplemental Irrigation Impact on Safflower Yield under Semi-arid Climate
Obeid, Omar	The Effects of Phosphorous on Postprandial Serum Lipid Responses in Healthy Subjects
Olabi, Ammar	The Effect of RYGB and SG surgery on Food Preferences and GI Symptoms in Post-Surgical Morbidly Obese Subjects
Toufeili, Imad	Estimation of the Relative Contributions of Intrinsic and Extrinsic Cues to the Purchase Intent of Honey
Yau, Sui Kwong	Evaluation of Early Sowing with Minimum Irrigation as a Technique to Improve Yield in Droughts under Climate Change

2. Review of External Research Proposals

The Committee reviewed and approved 5 research proposals submitted by FAFS Professors to the Lebanese National Council for Scientific Research (LNCSR).

3. Review of Research Leave Requests

The Committee reviewed requests and submitted recommendations for periodic research leave for Drs. Farah Naja and Mohamad Abiad.

The Library Committee

Prepared by: Dr. Sui-Kwong Yau, Professor

Membership

Mohamad Abiad
Ali Chalak
Zeina Kassafy (Spring semester)
Farah Naja (Fall semester)
Sui-Kwong Yau, Chairperson

Actions

1. Improving Library Services

In order to improve library services to students, the library Committee in cooperation with the Science and Agriculture Library, conducted two surveys on students using the Library to get their opinions and suggestions on how the Library can provide improved services. Results of the survey indicated the following: 1) the present library opening hours are agreeable to students, 2) students mainly visit the library for printing and photo-copying, studying and looking up references, 3) printers, PCs, and separated rooms for group work were among additional library facilities that students requested.

2. Library Facilities

The purchase of 10 new PC's and other items for the Agriculture Science Library was approved.

3. University Library Committee

The Chairperson attended the meetings of the University Library Committee, and sent faculty members relevant information by email when necessary.

Recommendations

The Committee recommended to arrange with the AUB librarians workshops for graduate students at the beginning of each semester on how to use data bases to search for relevant literature and how to use the package 'RefWorks' to organize, store, and format references for their thesis and research papers.

The Student Affairs Committee

Prepared by: Ms. Tharwat Haddad, Student Records Officer

Membership

Mohamad Abiad
Isam Bashour
Nadim Farajalla
Mustafa Haidar, Chairperson
Sui Kwong Yau
Student Affairs Representative
Student Representative
Tharwat Haddad, Secretary

The Committee met 4 times during the period of October 1, 2010 until September 30, 2011, and discussed disciplinary actions and FAFS awards. The following recommendations were made to the Dean:

1. *Disciplinary Actions*

- The FAFS Student Affairs Committee recommended to the University Disciplinary Committee the expulsion of one student from the Faculty effective February 2011.
- The FAFS Student Affairs Committee recommended giving a Dean's Warning to 2 students and a written reprimand to 3 students.

2. *FAFS Awards*

The Committee recommended the following students to receive FAFS awards:

- Joana Haidar Award **Ms. Walaa Siblani**
- FAFS Alumni Award **Mr. Rashad Bou Ghannam**
- Edgcombe Award **Mr. Samer Abou Nehme** and **Ms. Jessica El Asmar**
- Kashadurian Award **Mr. Peter Abrahamian**
- Dean Thomas Thuserland Prize for Graduate Excellence **Ms. May Khatab, Nutrition,**
- Abdul Hadi Debs Award **Ms. Maya Saadeh, Poultry Science**
- Penrose Award

The Committee reviewed the records of three nominees and recommended to the Dean all nominees, with no order of preference:

- Tonie Abi Nader
- Carine Daou
- Salwa Sabbagh

3. *AREC Day*

AREC Day was held on Sunday, May 15th , 2011. The event included a wide range of games, multi- cuisine and refreshment selection. About 300 students and guests attended the event this year.

C. University Committees

University Library Committee

Prepared by: Dr. Sui-Kwong Yau, Professor

Actions

- Two suggestions from FAFS Library Committee, regarding the physical merger of the Science and Agriculture Library with the Engineering Library, were put forward to the University Library Committee as follows:
 1. Discarding old printed journals and using the freed space to accommodate more computers and printers.
 2. Forming a sub-committee, with invited student members, to give suggestions and comments on the planned merger of the Science and Agriculture Library with the Engineering Library.
- Old books at the Science and Agriculture Library were discarded which created additional space at the library.

Senate Committee on General Education

Prepared by: Dr. Jad Chaaban, Assistant Professor

Actions

The General Education Committee held three meetings in 2010-2011 (October 2010, March 2011, May 2011) in addition to conducting follow-up on diverse GE program activities. The committee performed the following tasks:

- Follow-up on implementing of GE requirements: more GE courses applications were received and reviewed internally. The number of courses approved has increased from about 200 courses in September 2010 to 320 courses in September 2011.
- The GE Requirements' section in AUB undergraduate catalogue was updated and published to students on the Registrar's Office website. GE attributes were added on Banner to GE courses. A GE manual was published, and a GE section was added to the Provost's Office website.
- All AUB programs were re-evaluated for compliance with the GE requirements. The departments of Landscape Design and Agribusiness are still not compliant.
- Writing Across the Curriculum: intensive writing courses were offered with the support of the Writing Center.
- A GE section was added to the Middle States Commission on Higher Education Accreditation Monitoring Report.

D. Fund Raising and Endowment Funds

Mr. Michael Basrawi, FAFS Alumnus (1957) offered a donation to FAFS Dean's hardship fund. Solidere presented funds in support of the LDEM Symposium at AREC. The AUB President's Club donated \$32,000 towards the renovation and refurbishment of Student Lounges at AREC.

II. The Faculty

A. Academic Matters

Faculty Recruitment & Count

Recruitment efforts were successful in appointing Dr. Arumugam Kantharajah from the University of Western Sydney as a Visiting Associate Professor of Horticulture and Ms. Karin Seyfert as a full time Lecturer at the AGSC Department as of February 15, 2011.

The total number of Faculty Full Time equivalent (FTEs) for fall 2010-2011 was 41.12 distributed as follows:

- 25 FTE (Full-timers) in professorial ranks (8 Assistant, 2 Associate and 15 Full Professors)
- 7 FTE (Full-timers) in non-professorial ranks (2 Lecturers and 5 Instructors)
- 9.12 FTE (Part-Timers) (4.36 Senior Lecturers and Lecturers; and 4.76 Instructors & Assistant Instructors).

The distribution of FTE's by departments are shown in table 3

Table 3: FTE by Department

		Department				
		AGSC	AVSC	LDEM	NFSC	Total
Full-time	Professorial Rank	8	4	5	8	25
	Lecturer and Instructor			3	4	7
Part-Time		2.62	0.33	4.33	1.84	9.12
Total		10.62	4.33	12.33	13.84	41.12

In addition, a total of 7 full time Research Associates, Senior Research Assistants, and Research Assistants were hired on University funds in the departments of Agricultural Sciences, Animal and Veterinary Sciences, Landscape Design & Ecosystem Management and Nutrition and Food Sciences.

Academic Appointments and Leave With Pay

The following Faculty served as Chairs of FAFS departments:

- Elie Barbour; Animal and Veterinary Sciences department (Oct. 1, 2010–Sept. 30, 2013)
- Mustafa Haidar; Agricultural Sciences department (February 17, 2010–February 16, 2013)

- Ammar Olabi; Nutrition and Food Sciences department(October 1, 2009–Sept. 30, 2012)
- Salma Talhouk; Landscape Design and Ecosystem Management department (Sept. 11, 2008–Sept. 30, 2011).

Four professorial lines were advertised in 2011 of which one was filled with a visiting professor in horticulture in the AGSC department. The other three positions in Biostatistics, Nutrition and Animal and Veterinary Science are still pending.

During 2010/2011, three faculty members were on periodic paid research leave (Drs. Youssef Abou Jawdeh and Nadim Farajalla for 1 semester & Rami Zurayk for 1 year) and one faculty member was on unpaid leave (Dr. Jala Makhzoumi). Two Assistant Professors were on maternity leave for the Spring Semester 2011 (Drs. Hala Ghattas and Farah Naja).

Research Grants and Service Contracts

FAFS was successful in attracting research and service funding from Internal, local and international agencies for a total \$1,477,059. During this fiscal year, \$88,000 of the total amount were from URB (12 faculty members), \$72,877 were from local funding (4 faculty members) and the remaining \$1,316,182 from international funding agencies (6 faculty members).

Visiting URB Scholars

Two visiting URB scholars were invited to FAFS Dr. Diana Twede and Joseph Hotchkiss, Professors at Michigan State University, Professor Twede presented 3 lectures on the history, economics and logistics of packaging (AGSC), while Professor Hotchkiss gave 3 talks on new trends, research and education in food packaging (NFSC).

Accreditation and Program Review

FAFS secured approval from the Commission on Accreditation for Dietetics Education (CADE) to conduct an onsite evaluation for the accreditation of its Coordinated Program in Dietetics.

LDEM initiated contacts with the American Society of Landscape Architects (ASLA) and commenced the process of revising its current undergraduate curriculum in accordance to accreditation requirements. LDEM also organized a symposium in collaboration with the International Federation of Landscape Architects (IFLA) and the European Federation of Landscape Architects (EFLA) to discuss the state of the Landscape Architecture profession in Lebanon and the Middle East and the core competencies of the graduates.

FAFS successfully developed and implemented program learning outcome measures for its seven undergraduate programs.

Faculty Professional Activities

Twelve faculty members received short term faculty development grants and presented papers and chaired sessions in scientific meetings (Drs. Youssef Abou Jawdeh, Yaser Abunnasr, Elie Barbour, Isam Bashour, Mustafa Haidar, Zeina Kassaify, Omar Obeid, Adib Saad, Fawwak Sleiman, Imad Toufeili; Sui Kwong Yau) Moreover, 2 members received a long term faculty development grant during summer 2011 (Drs. Ammar Olabi and Sui Kwong Yau).

FAFS Brown Bag Seminars: Dr. Soha Yazbek from the Faculty of Health Sciences gave a presentation at FAFS on “Obesity, is it grandpa’s fault” and . Dr. Youssef. Abou Jawdeh also presented an overview of research activities conducted at the Plant Pathology Lab.

Faculty Meetings

Prepared by: Ms. Wafa Khoury, Executive Officer

During the period October 1, 2010 to September 30, 2011, six regular faculty meetings were held at FAFS in which the following actions were taken:

1. *PhD Biomedical Sciences*

The Faculty approved introducing a PhD in Biomedical Sciences/Nutrition jointly with the Faculty of Medicine.

2. *Voting on Degrees*

Faculty members voted unanimously to award B.S. degrees in Agriculture and Diploma of Ingénieur Agricole, Agribusiness, Nutrition and Dietetics, Nutrition and Dietetics-Coordinated Program, Food Science and Management, Landscape Design and Eco-Management and Diploma of Ingenieur Agricole and Veterinary Sciences to 132 students and Master of Sciences to 25 students as recommended by the Academic Affairs Committee, effective October 2010, February 2011 and June 2011 consecutively.

3. *Awards*

Faculty members voted on the recommendation of the Student Affairs Committee to offer FAFS awards to the following students:

- Abdul Hadi Debs Endowment Award: Ms. Maya Saadeh.
- Dean Thomas Sutherland Award for graduate excellence: Ms. Maya Khatab
- Edgecombe Memorial Prize: Mr. Samer Abou Nehme and Ms. Jessica El Asmar
- Kashadurian Award: Mr. Peter Abrahamian
- FAFS Alumni Award: Ms. Rashad Bou Ghannam
- Joanna Haidar Award :Ms. Walaa Siblani
- Penrose Award: Ms. Salwa Sabbagh

4. *Committees Elections*

Elections were held on September 27, 2011 and FAFS members were elected to serve on FAFS standing and University committees.

B. Student Statistics

Student Enrollment (2010-2011):

The total undergraduate student enrollment in the Faculty for the year 2010-2011 summed up to 563 distributed as follows: 139 in Agriculture, 137 in Nutrition and Dietetics, 20 in Nutrition and Dietetics-Coordinated Program, 109 in Landscape Design and Ecosystem Management, 95 in Food Science and Management, 55 in Agribusiness, and 8 in Veterinary Science. Undergraduate enrollment in 2010-2011 decreased by 14% with respect to year 2009-2010; the drop was in NTDT (25%) AGRI (21%) and FSMT (14%) possibly related to combined effects of increase in composite score and low yield.

Total graduate student enrolment was 115. It increased from 95 students in 2006-07 to 115 in 2010-11. The majority of the graduate enrolment was in the NFSC department (86). In 2010-11 and in order to decrease the burden on NFSC faculty members and to improve the quality of supervision, a purposeful decrease in the graduate admission at NFSC Department was implemented by increasing admission scores. Accordingly, graduate enrolment in 2010-11

was slightly lower than that of 2009-10.

Table 4: Total Student Enrolment in various FAFS programs during the academic year 2010-2011

Undergraduate Enrollment	AY 2010-2011
NTDT	137
NTDT-CP (4 years)	20
FSMT	95
AGRI (4 years)	139
AGBU	55
LDEM (4 years)	109
VTSC	8
Total Undergraduate	563
Graduate Enrollment	
NUTR	53
FTCH	33
AGEC	6
IRRG	3
PLPT	3
PLSC	2
SOIL	2
ECOM	9
ANML	3
POSC	1
Total Graduate	115
Total (UG &G)	678

Historical Perspective (2010-2011):

Undergraduate enrollment increased from 506 in 2006/2007 to 563 in 2010/2011. By raising its acceptance standards to attract and retain high quality students, FAFS increased its undergraduate average Composite Score from 507 in 2007 to 529 in 2011 which may have caused a 10% drop in undergraduate enrollment for year 2010-2011. Table 5 shows undergraduate enrollment over the past 5 years.

Table 5: Number of Enrolled Undergraduate FAFS Students for the Last Five Academic Years

Major	06-07	07-08	08-09	09-10	10-11
NTDT	145	177	191	184	137
NTDT-CP	n.a.	n.a.	n.a.	17	20
FSMT	137	154	129	111	95
AGRI (4 years)	137	156	202	177	139
AGBU	n.a.	n.a.	6	62	55
LDEM (4 years)	87	120	104	98	109
VTSC	n.a.	n.a.	8	9	8
Total UG	506	607	640	658	563

Graduate enrollment increased from 95 in 2006/2007 to 115 in 2010/2011, this increase was mainly in the Nutrition and Food Technology programs. Table 6 shows graduate enrollment over 5 years.

Table 6: Number of Enrolled Graduate FAFS Students for the Last Five Academic Years

Major	06-07	07-08	08-09	09-10	10-11
NUTR	32	44	55	61	53
FTCH	20	25	24	32	33
AGEC	6	5	3	4	6
IRRG	5	6	6	5	3
PLPT	8	8	5	5	3
PLSC	3	1	2	2	2
SOIL	2	1	3	2	2
ECOM	10	3	5	10	9
ANML	4	2	6	3	3
POSC	5	3	2	2	1
Total Graduate	95	98	111	126	115

Student Admissions (2010-2011):

Undergraduate New Applicants:

During the academic year 2010-2011, a total of 2122 new applications were received at FAFS, of which 22% were accepted and 19% of accepted were enrolled. In the fall semester, the yield of admittance was 18% (78 out of 423 accepted students enrolled); whereas in the spring semester, the yield of admittance was 25% (12 out of 48 accepted students enrolled). The number of enrolled undergraduate new students was 90 showing a drop of 36% with respect to 2009-2010. This drop was probably due to the increase in composite score which accounted for lower number of acceptances by 9%. Table 7 shows the numbers and percentages of undergraduate new students who applied to the different FAFS majors, those who were admitted and those who actually enrolled for the first, second and summer semesters.

Table 7: Number of New Undergraduate Applicants, Admitted and Enrolled during the Academic Year 2010-2011

First Semester 2010/2011	Program	Applications	Admissions	Enrollment	% Yield
	NTDT	416	99	10	10%
	FSMT	304	62	15	24%
	AGRI	431	97	22	23%
	AGBU	350	65	12	18%
	LDEM	326	90	17	19%
	VTSC	60	10	2	20%
	Total	1887	423	78	18%
Second Semester 2010/2011	Program	Applications	Admissions	Enrollment	% Yield
	NTDT	48	6	1	17%
	FSMT	42	8	1	13%
	AGRI	62	14	3	21%
	AGBU	41	8	1	13%
	LDEM	33	11	6	55%

	VTSC	9	1	0	0%
	Total	235	48	12	25%

Undergraduate Transfer Applicants:

During the academic year 2010-2011, a total of 495 transfer applications were received at FAFS, of which 182 (37%) were accepted and 58 (32%) of accepted were enrolled. Table 8 shows the numbers and percentages of undergraduate transfer students who applied to the different FAFS majors, those who were admitted and those who actually enrolled for the first, second and summer semesters.

Table 8: Number of Undergraduates: Second Degree and Transfer Applicants, Admitted and Enrolled

First Semester 2010/2011	Program	Applications	Admissions	Enrollment	% Yield
	NTDT	75	26	13	50%
	FSMT	54	18	2	11%
	AGRI	27	16	4	25%
	AGBU	57	22	2	9%
	LDEM	60	12	10	83%
	VTSC	11	7	0	0%
	Total	284	101	31	31%
Second Semester 2010/2011	Program	Applications	Admissions	Enrollment	% Yield
	NTDT	38	15	9	60%
	FSMT	19	11	3	27%
	AGRI	19	11	3	27%
	AGBU	43	17	5	29%
	LDEM	30	4	3	75%
	VTSC	11	5	2	40%
	Total	160	63	25	40%
Summer Session 2010/2011	Program	Applications	Admissions	Enrollment	% Yield
	NTDT	10	2	0	0%
	FSMT	10	4	1	25%
	AGRI	6	4	0	0%
	AGBU	19	6	0	0%
	LDEM	6	2	1	50%
	VTSC	0	0	0	0%
	Total	51	18	2	11%

Graduate Applicants:

During the academic year 2010-2011, a total of 132 graduate applications were received at FAFS, of which 79 (60%) were accepted and 27 (34%) of accepted were enrolled. Application received in NUTR (58), FTCH (45) and ECOM (10) were high but there was a decline of 16%, 4%, and 38% respectively compared to last year 2009-2010. Table 9 shows the numbers and percentages of graduate students who applied to FAFS, those who were admitted and those who actually enrolled.

Table 9: Number of Graduate Applications and Admissions

Fall, Spring and Summer 2010-2011					
Program	Applications	Admissions	% Admitted out of applicants	Enrollment	% Yield
NUTR	58	31	53%	13	42%
FTCH	45	25	56%	9	36%
AGEC	6	4	67%	2	50%
IRRG	2	2	100%	1	50%
PLSC	3	3	100%	0	0%
PLPT	1	1	100%	0	0%
SOILS	1	0	0%	0	0%
ECOM	10	9	90%	1	11%
ANML	4	3	75%	1	33%
POSC	2	1	50%	0	0%
Total	132	79	60%	27	34%

Graduation (2010-2011):

FAFS graduated 132 undergraduate students in the fields of Nutrition and Dietetics (41), Nutrition and Dietetics – Coordinated Program (20), Food Science and Management (32), Landscape Design and Ecosystem Management (18), Agriculture (16), Agribusiness (4) and Veterinary Science (1). FAFS graduated 36 more undergraduate students in 2010/2011 than 2006/2007; this increase is mostly due to the introduction of the Nutrition and Dietetics Coordinated program and partly to the new Agribusiness and Veterinary Sciences programs. Many of our undergraduates continue their Masters education within our programs. FAFS also graduated 25 graduate students in the fields of Nutrition (16), Food Technology (3), Irrigation (3), Animal Science (2) and Agricultural Economics (1). The number of masters' graduates averaged 29 students over the last five years. Tables 10 and 11 show the distribution of graduated students among the different FAFS disciplines during past five years.

Table 10: Number of Graduated FAFS Undergraduate Students for the Last Five Academic Years

Major	06-07	07-08	08-09	09-10	10-11
NTDT	54	55	32	49	41
NTDT-CP	n.a.	n.a.	n.a.	17	20
FSMT	23	40	52	26	32
AGRI	11	14	8	9	16
AGBU	n.a.	n.a.	n.a.	1	4
LDEM	8	17	17	20	18
VTSC	n.a.	n.a.	n.a.	n.a.	1
Total UG	96	126	109	122	132

Table 11: Number of Graduated FAFS Graduate Students for the Last Five Academic Years

Major	06-07	07-08	08-09	09-10	10-11
NUTR	6	9	12	13	16
FTCH	8	4	8	9	3
AGEC	2	3	0	1	1
IRRG	2	0	3	0	3
PLPT	3	4	2	2	0

PLSC	2	1	0	0	0
SOIL	2	0	0	0	0
ECOM	6	4	1	1	0
ANML	1	1	2	1	2
POSC	3	1	2	1	0
Total Graduate	35	27	30	28	25

C. Centers and Units

Agricultural Research and Education Center (AREC)

Prepared by: Mr. Nicolas El Haddad, AREC Farm and Facilities Manager

Support Staff

There are 36 non-academic employees at AREC as per below distribtuion:

AREC Administration

El-Haddad, Nicolas	Farm & Facilities Manager
Yazbeck, Mirna	Secretary
Hajj Hasan, Hussein	Sales Attendant/Store Keeper
Yazbeck, Bilal	Driver/Purchaser

AREC Physical Plant

Ghosn, Hisham	Gateman/Watchman
Haidar, Naji	Assistant Mechanic
Hajj Hasan, Fuad	Boiler Operator/Pipe Fitter
Hajj Hasan, Ali G.	Gateman/Watchman
Hajj Hasan, Khayrieh	Maid
Hajj Hasan, Mohamad	Gateman/Watchman
Hajj Hasan, Shehadeh	Janitor
Kak, Mohamad	Gateman/Watchman
Masri, Ali	Gateman/Watchman
Mouna, Hasan	Day &/or Night Attendant (Elect. & Boiler)
Mussawi, Kuzhayyah	Gateman/Watchman
Nasser, Haidar	Janitor
Rumeh, Abdel-Karim	Farm Attendant
Sindian, Ali	Head Mechanic
Zein, Bassam	Mason

AREC Production

Abou Eid, Abdallah	Field Worker
El Ali, Ibrahim	Animal Attendant
Hajj Hasan, Ahmad Kassem	Livestock Production Head
Hajj Hasan, Ahmad Khalil	Creamery Operator
Hajj Hasan, Ali T.	Field Worker
Harb, Mohamad	Animal Attendant
Kayyal, Hatem	Agronomy Foreman
Mussawi, Abbas	Machine Operator
Safar, Shady	Livestock & Poultry Production Supervisor
Takesh, Nayef	Machine Operator
Yazbeck, Ali	Assistant Agronomy Foreman
Yazbeck, Hussein	Animal Attendant
Zureik, Mohamad	Poultry Production Head

AREC Cafeteria

Hamiyeh, Walid	Cook
Kayyal, Ali	Food Service Worker

AREC Library

Sleiman, Samar

Library Assistant II

AREC Activities

AREC facilitated faculty research, teaching and service activities as follows:

During the spring and summer semesters a total of 39 students spent their spring and summer sessions at AREC (19 AGR III and 20 LDEM III). AREC staff continued to assist students in the implementation of their projects and demonstrated the different systems of engines and the use of farm machinery and acquainted them with the different practical farm operations on daily basis.

AREC provided assistance to faculty members and graduate students in the following research projects:

- Management of *Orobanche Ramosa* in Potato with Sub-lethal Doses of Glyphosate.
- Nutritional Values of De-hulled Safflower Meal for Poultry.
- Biogas production by installing a bio-digester that will transform the organic waste of the cattle to methane gas.
- Effects of rotation - Comparing barley performance after a previous crop of safflower, chickpea, or barley.
- Conservation agriculture in order to study its economic and environment importance.
- Potato tuber production in controlled environment multispan greenhouse.

Services:

Several workshops were carried out at AREC that aimed at community development and outreach:

- “Middle East Water and Livelihoods Initiative” workshop with the participation of ICARDA, UC Davis University, Utah State University, Lebanese Agricultural Research Institute, and the American University of Beirut.
- “Conservation Agriculture” workshop organized by FAFS in collaboration with GIZ organization-Germany.
- “Bedouin Nutrition Education and Communication” organized by Dr. Hala Ghattas (Assistant Professor, NFSC) and 25 students.
- The Beirut Landscape Symposium with the participation of the international and the European landscape federations.
- Provided AUB pilot plant, dietary department, healthy basket, and Mrs. Carla Mrad’s diet center with AREC produce.

AREC as Show Case

New techniques in farm production and processing were adopted at AREC:

- Establishing a new composting plant and installing the necessary equipment
- Installing a new bio-digester to transform the organic waste of the cattle to methane gas.

- Using drip irrigation system for field corn in order to reduce the cost.
- Direct planting of crops in around 55 % of the total planted area due to its economic and environment importance.
- Applying fertilizers according to the results of soil analysis and crop requirements.
- Analyzing dairy products for bacteria.

The Environment and Sustainable Development Unit (ESDU)

www.esdu-aub.org

Prepared by: Dr. Shadi Hamadeh
Dr.Salwa Tohmé Tawk

Personnel:

Shadi Hamadeh, ESDU Director
Diana Abi-Said, Administrative-Financial Officer
Mounir Abi-Said, Training and Organizational Development Specialist
Ziad Moussa, Capacity Development & Outreach Officer
Salwa Tohmé Tawk, Knowledge Management Officer/ Training and Organizational Development Specialist

Highlights on ESDU activities during 2010-11:

During the academic year 2010-2011 ESDU was granted around 300,000 US Dollars from different international donor agencies mainly the International Development Research Centre (IDRC), the RUAF foundation (Resource Centers on Urban Agriculture and Food Security based in Netherlands), The Food and Agriculture Organization (FAO), and Georgetown University Washington through its Center for International and Regional Studies in Doha, Qatar.

-Community Development: “From Seed to Table” Program:

The From Seed to Table” (FStT) program aims at facilitating the development of sustainable urban agriculture through the implementation of a value chain approach. It tackles some of the agriculture constraints which are lack of support services and appropriate technologies, lack of organization among urban farmers by supporting poor farmers to develop safe and sustainable production, processing and marketing systems.

The program was initiated in 2007 when ESDU became the 7th center of Urban Agriculture under the RUAF foundation (Resource Centers on Urban Agriculture and Food Security based in Netherlands). In 2010-2011, pilot activities were implemented in Sana’a-Yemen and Amman-Jordan and include activities such as training of trainers (of local support organizations and farmer leaders), formulation and implementation of projects and organization of exchange visits between groups of producers. In addition, two Arabic UA magazines issues were issued published and distributed to the MENA region: issue 11 (from English UAM 22): Building resilient cities and Issue 12 (from English UAM 23): The role of urban agriculture in sustainable nutrient management. All issues of the magazine are published on the website www.urbanagriculture-mena.org regularly managed and updated by ESDU. Two more issues are in the production process in the time of this present report. Several publications are expected to be published in 2012.

-Networking: “Regional initiative on capacity development in Communication for Development (ComDev) in support of food security and climate change adaptation efforts”:

The Food and Agriculture Organization (FAO) of the United Nations established with ESDU in 2008 a portal for communication for practitioners in development in the Near-East region (www.comdev-neareast.org). In 2011, a concept note and a proposal on “Effective Communication for Agricultural Research and Extension Systems: supporting small-scale farmers to achieve sustainable integrated water management in Mediterranean countries” were developed and submitted to Karianet as a response to a competitive call for innovative applied research concerning knowledge management in rural development in the Middle East and North Africa (MENA) region (in partnership with the International Development Research Centre and the International Fund for Agricultural Development).

-Capacity building: “Mainstreaming Evaluation Theory and Practice in the MENA region”:

The project funded by the International Development Research Center (IDRC) aims at building capacity in evaluation theory and practice in the MENA region. A workshop was organized in Beirut June, 2011 and was attended by 5 MENA countries (Egypt, Jordan, Morocco, Syria and Tunisia) in addition to Lebanon.

-Research study: “Urban Agriculture: A Sustainable Solution to Alleviating Urban Poverty, Addressing the Food Crisis, and Adapting to Climate Change; two pilot city case studies: Amman-Jordan; Akkar-Lebanon”:

This study initiated in 2011 and funded by Georgetown University, Washington, through its Center for International and Regional Studies at its campus in Doha, Qatar, is assessing existing urban agriculture activities in 2 low-income neighborhoods in 2 pilot cities in Lebanon and Jordan respectively.

-New academic program: the RCODE Masters of Sciences program in Rural and Community Development (RCODE):

The RCODE program initially developed in 2003 was updated and is being processed through proper AUB channels. It will hopefully be launched in 2013.

III. Departmental Reports

A. Department of Agricultural Sciences

Prepared by: Dr. Mustapha Haidar, AGSC Chairperson
Ms. Alia Sabra, AGSC Departmental Research Assistant

Highlights

Two new faculty members joined the department in 2010-11, Dr. Arumugam Kantharajah (Ph.D, Technical University of West Berlin, Germany, Visiting Associate Professor) and Dr. Karin Seyfert as full time Lecturer for the Spring Semester 2011 only. The department will continue to seek candidates to fill a position in Agribusiness Marketing and Management.

A minor in Agriculture 2nd BSc. degree in Agricultural Sciences and Ingénieur Agricole for Agribusiness students was launched last year.

The 2010-11 academic year witnessed the introduction of summer school for around 50 students from Germany, Jordan, Syria and Lebanon for two weeks at AREC as a part of a summer school training program (II) to strengthen the intercultural dialog about Conservation Agriculture between all participants and to promote Conservation Agriculture in the Arab region. Agriculture students received special attention and were provided with an opportunity to obtain hands-on learning experiences (Experiential Learning Model) through AREC. Students at AREC had the chance to work with the private sector such as Unifert and visited the surrounding AREC community.

Another significant development is the establishment of a new tissue culture lab and the adoption of conservation system (No-Till) at the Agricultural Research and Educational Center (AREC). The no-till system was also introduced into around 11,000 du in different regions of Lebanon. Moreover, the department produced over 20,000 virus free-mini potato tubers, setting the stage for transferring the technology for seed potato production to the Lebanese private sector.

The manuscript submitted by Dr. Mustapha Haidar received the Constantin Rebeiz Award (CA and CC Rebeiz Award) for Agricultural Research at FAFS.

A space strategy was developed and implemented to optimize the use of the current space in the department.

Fifty-one courses were offered, forty-one undergraduate and ten graduate courses. Two tutorials and theses were also offered to graduate students. Four students earned an MS degree, three in Irrigation and one in Agricultural Economics. Published research included ten refereed articles.

Personnel

The AGSC department has eight full time faculty members, one visiting Associate Professor, one full-time lecturer, nine part-time faculty members (total FTE: 10.62 based on First Semester data), two senior research assistants (1 on research grant), one full time research assistant and seven part-time research assistants appointed on research grant. Ten graduate assistants were appointed for Fall, Spring and Summer semesters. The below tables detail the personnel in the Agricultural Sciences department.

Full-time Faculty

Mustapha Haidar	Professor, Chairperson
Youssef Abou Jawdeh	Professor
Isam Bashour	Professor
Kant Kantharajah	Visiting Associate Professor
Jad Chaaban	Assistant Professor
Ali Chalak	Assistant Professor
Musa Nimah	Professor
Adib Saad	Professor
Sui Kwong Yau	Professor
Karin Seyfert	Lecturer

Part-time Faculty

Efat Abou Fakhr Hammad	Senior Lecturer
Moatasim Sidahmed	Lecturer
Youssef El Khalil	Senior Lecturer
Joanna El Aridi	Lecturer
Hashem El Hussein	Instructor
Patricia Sfeir	Instructor
Rami Ollaik	Instructor
Youssef Doughan	Instructor
Mohamad El Zein	Instructor

Research Assistants

Lucia Hanna	Senior Research Assistant
Hana Sobh	Senior Research Assistant (on grant)
Alia Sabra	Departmental Research Assistant (May 15, 2011 –October 31, 2011)
Leila Sarkis	Departmental Research Assistant (March 1 – April 30, 2011)
Maan Jawhari	Research Assistant (on grant)
Manal Al Arab	Research Assistant (on grant)
Nadia Naamani	Research Assistant (on grant)
Jamil Samsatly	Research Assistant (on grant)
Rani Bassil	Research Assistant (on grant)
Rami Salem	Research Assistant (on grant)
Carla Lebbos	Research Assistant (on grant)

Graduate Assistants

Jamil Hanna Samsatly	Fall 2010
Rani Joseph Bassil	Fall 2010
Abbas Hadi Farran	Fall 2010
Elie Tony Shdeed	Fall 2010
Mohamad Zeid Safieddine	Fall 2010
Pascal Abdallah Harb	Fall 2010, Spring 2011
Rasha Mohammad Moussawi	Fall 2010, Spring 2011
Souhad Raafat Abou Zaki	Fall 2010, Spring 2011
Pardie Karamanoukian	Spring 2011
Mohamad Ali Khalife	Spring, Summer 2011

Teaching

The Department offered required and elective courses specific to the B.S degrees in Agriculture with a Diploma of *Ingénieur Agricole* and BS in Agribusiness.

Student Enrollment in Courses

Fall 2010-2011

Course	Instructor	Credits	Enrollment
AGSC 221	Dr. Abou Fakhr	3	29

AGSC 294	Dr. Abou Fakhr	1	7
AGSC 232	Dr. Abou Jawdeh	3	27
AGSC 202	Dr. Bashour	1.5	21
AGSC 202	Dr. Nimah	1.5	21
AGSC 299	Dr. Bashour	2	3
AGSC 215	Dr. Bashour	3	19
AGSC 395	Dr. Bashour	1	4
AGSC 384	Dr. Chaaban	3	6
AGSC 211	Dr. Chalak	3	24
AGSC 301	Dr. Chalak	1.5	7
AGSC 301	Dr. Hamadeh	1.5	7
AGSC 204	Dr. El Aridi	1.5	10
AGSC 204	Mr. El Zein	1.5	10
AGSC 213	Mr. El Hussein	3	6
AGSC 212	Miss Frangieh	1	57
AGSC 241	Miss Frangieh	1	20
AGSC 220	Dr. Haidar	3	22
AGSC 236	Ms. Jawhar	3	19
AGSC 239	Ms. Jawhar	0	23
AGSC 240	Ms. Jawhar	0	9
AGSC 248	Ms. Jawhar	3	8
AGSC 212	Dr. Khalil	2	57
AGSC 241	Dr. Khalil	2	20
AGSC 262	Dr. Nimah	3	5
AGSC 310	Dr. Nimah	3	3
AGSC 288	Mr. Ollaik	3	27
AGSC 201	Dr. Saad	2	31
AGSC 294	Dr. Saad	2	7
AGSC 296	Dr. Saad	1	9
AGSC 235	Ms. Sfeir	2	25
AGSC 317	Dr. Farajalla	3	6

Spring 2010-2011

Course	Instructor	Credits	Enrollment
AGSC 203	Dr. Abou Fakhr	1	16
AGSC 265	Dr. Bashour	3	21
AGSC 202	Dr. Bashour	1.5	9
AGSC 202	Dr. Nimah	1.5	9
AGSC 377	Dr. Chaaban	3	4
AGSC 300C	Dr. Chaaban	3	1
AGSC 301	Dr. Chalak	1.5	5
AGSC 376	Dr. Chalak	3	7
AGSC 389	Dr. Chalak	3	2
AGSC 210	Dr. Chahine	3	28
AGSC 253	Dr. Chahine	3	28
AGSC 212	Mr. Doughan	1	68
AGSC 213	Mr. El Hussein	3	14
AGSC 222	Dr. Haidar	0.5	18
AGSC 222	Mr. Haddad	0.25	18

AGSC 222	Dr. Kantharajah	0.25	18
AGSC 284	Dr. Haidar	3	18
AGSC 224	Dr. Kantharajah	3	20
AGSC 319	Dr. Kantharajah	3	4
AGSC 212	Dr. Khalil	2	68
AGSC 228	Dr. Nimah	3	19
AGSC 201	Dr. Saad	2	18
AGSC 203	Dr. Saad	1	16
AGSC 296	Dr. Saad	1	17
AGSC 292	Ms. Seyfert	5	6
AGSC 255	Ms. Seyfert	3	30
AGSC 225	Dr. Tawk	3	15
AGSC 203	Dr. Yau	1	16
AGSC 395	Dr. Yau	1	1
AGSC 231	Dr. Yau	3	18

Summer 2010-2011

Course	Instructor	Credits	Enrollment
AGSC 256	Dr. Chahine	1	24
AGSC 223	Dr. Haidar	2	19
AGSC 226	Dr. Sidahmed	3	19
AGSC 233	Dr. Farran	0.5	3
AGSC 233	Dr. Abou Jawdeh	0.5	4
AGSC 233	Dr. Sleiman	0.5	3
AGSC 233	Dr. Haidar	0.5	9
AGSC 300A	Dr. Talhouk	1	1

Completed Theses

- Manal Al Arab, Musa Nimah (Adviser), Optimization of water allocation under deficit irrigation case study: agricultural areas along the Litani river basin (Spring 2011).
- Abbas Farran, Musa Nimah (Adviser), Irrigation Scheduling in Response to Climate Change: A GIS Approach (Spring 2011).
- Pascale Harb, Jad Chaaban (Adviser), Trade Openness and Growth in the Middle East Region (Spring 2011).
- Carla Jammous, Musa Nimah (Adviser), Water Use for Optimal Water Productivity, Case Study: Southern Litani Basin Lebanon (Fall 2010).

Research Funding

Internal Grants

Three members of the department received URB funds and one member received funds from Issam Fares Institute for Public Policy and International Affairs as below:

University Research Board(URB)

- Abou Jawdeh, Youssef. Development of Lebanese tomato with type multi- resistance to Tomato yellow leaf curl virus (TYLCV) soil borne pathogens and abiotic stress .
- Chalak, Ali. Consumer Inertia and the Role of Awareness Campaigns in Valorizing Safety and Hygiene in Food Markets of Developing Countries: The Case of Lebanon.
- Sui Kwong, Yau. Effects of different levels of stubble retention on crop growth, development and yield, and soil organic matter buildup under zero versus tillage.

Issam Fares Institute for Public Policy and International Affairs

Chalak, Ali, Dr. Abiad, Mohamad and Dr. Bashour, Issam. Recycling Farm Biomass for Biogas Production: Implications for Rural Livelihoods and Greenhouse Gas Emissions.

Local, Regional and International Grants

Eight members of the department were successful in attracting national and international grants as below:

- Abou Jawdeh, Youssef. Control of new threatening cucurbit-infecting whitefly-transmitted geminiviruses in the Middle-East. USAID.
- Abou Jawdeh, Youssef. Integrated Pest Management in the Near East. FAO.
- Abou Jawdeh, Youssef. Development and Improvement of Local Seed Potato Production in the Middle East . USAID.
- Chaaban, Jad. Industrial Organization of Fresh Foods Value Chains in the Middle East. Georgetown University Center for International and Regional Studies.
- Chaaban, Jad & Ghattas, Hala. Poverty of Palestinian Refugees in Lebanon: Analysis and Targeting United Nations Relief and Works Agency for Palestine Refugees in the Near East. UNRWA
- Chaaban, Jad. Generating Evidence to Support Policies for Raising Taxes on Tobacco Products in Lebanon. International Development Research Center. IDRC.
- Sui Kwong, Yau. Early sowing and irrigation to increase crop yield in arid areas – phase I. LNCSR.
- Sui Kwong, Yau. Collaborative research on boron tolerant legume accession screening. ICARDA.

Publications

International Refereed Journals (Corresponding/Senior author*)

Ten articles were published in international refereed journals by AGSC faculty members as indicated below:

- Dakhil, H.A., Abou-Fakhr Hammad, E., El-Mohtar C, and **Abou-Jawdah, Y***. (2011) Survey of leafhopper species in almond orchards infected with almond witches'-broom phytoplasma in Lebanon. Journal of insect Science 11:60 available online: insectscience.org/11.60.
- **Haidar M.A***, C. Gharib and Sleiman FT. (2010) Survival of weed seeds subjected to sheep rumen digestion. Weed Research 50: 467-471.
- Mansour, W., **J. Chaaban***, J. Litchfield (2011), "The Impact of Migrant Remittances on School Attendance and Education Attainment: Evidence from Jordan", International Migration Review Vol. 45 Number 4 Winter.
- **N. Salti*** and J. Chaaban (2010), "Role of sectarianism in the Allocation of Public Expenditure in Post-War Lebanon", Int. J. Middle East Stud. 42, 637–655.
- Reid, S., **Chalak, A***. and Hecht, J. (2010). 'Determining the optimal investment plan for water utilities: the case of Three Valleys Water.' Water Science and Technology: Water Supply 10(3): pp. 367-375.
- Rashid, A*., E. Rafique, A.U. Bhatti, J. Ryan, N. Bughio and S.K. Yau. (2011) Boron deficiency in rainfed wheat in Pakistan: incidence, spatial variability and management strategies. Journal of Plant Nutrition 34: 600-613.
- Temsah, M., Hanna, L., **A. T. Saad***. (2010). Histological Pathogenesis of Pseudomonas savastanoi on Nerium oleander. Journal of Plant Pathology 92:397-403.
- Wakim, R., **I. Bashour***, M. Nimah, and I. Toufeili. (2010). Selenium Levels in Lebanese Environment. Journal of Geochemical Exploration. JGE 107(2210) 94-99.
- **Yau, S.K***, M. Nimah and M. Farran. (2011) Early sowing and irrigation to increase barley yields and water use efficiency in semi-arid Mediterranean conditions. Agric. Water Manage. 98: 1776-1781.
- **Zurayk, Rami***, Chaaban, Jad, Sabra, Alia (2011), Ensuring that potential Gulf farmland investments in developing countries are pro-poor and sustainable. Food Security. Volume 3, Issue 1 (2011), Page 129-137.

Book Article or Chapters

- Nimah Musa (2011). Agriculture in the Arab Countries. *Book Chapter* (Chapter1; pp. 1-74). Beirut, Lebanon: Arab Forum for Environment & Development (AFED).

Abstracts and Conference Proceedings (Corresponding/Senior author*)

- **Abou-Jawdah, Y***, Sobh H., Samsatly J., Najjar C. and Jawhari M. (2011). Incidence and molecular characterization of whitefly transmitted cucurbit viruses in Lebanon. Book of Abstracts, page 94. Fourth conference of the international working group on legume and vegetable viruses (IWGLVV). May 16-20, 2011; Antequera, Málaga, Spain.

- Abou Mehdi, N., **Chalak***, A. and Toufeili, I. (2011). 'The Purchase intent of honey is influenced by sensory properties, price and health Claims.' Abstract, 9th Pangborn Sensory Science Symposium, Canada, 4-8 September 2011.
- Alameddine, A., **I. Bashour***, A. Saad, M. Nimah and M. Sidahmed. (2010). Effect of NH₄OH on Nematode, Fusarium and Verticillium Wilt Infections in Tomato. (Accepted for presentation in the 19th World Congress of soil Science. Brisbane, Australia August 2010).
- Bouamra-Mechemache, Z. & **Chaaban, J.** (2010). "Is the Protected Designation of Origin (PDO) Policy Successful in Sustaining Rural Employment?", 116th Seminar, October 27-30, 2010, Parma, Italy 94987, European Association of Agricultural Economists.
- **Chaaban, J.**, Ghattas, H., Habib, R., Hanafi, S., Sahyoun, N., Salti, N., Seyfert, K., Naamani, N. (2010), "Socio-Economic Survey of Palestinian Refugees in Lebanon", Report published by the American University of Beirut (AUB) and the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).
- Chaaban, J. (2010), "The Political Economy of Attracting Public Funds: The Case of Lebanon", Working Papers 550, Economic Research Forum, revised Sep 2010 (with Nisreen Salti).
- **Chalak, A.***, Toufeili, I., Abou Mehdi, N. and Scarpa, R. (2011). 'Religiosity, health claims and purchasing behaviour: a generalized mixed logit model of the Lebanese market for honey'. Abstract accepted at the Second International Choice Modelling Conference, Oulton Hall, Yorkshire, UK, 4 - 6 July 2011.
- **Chalak, A.**, Reid, S. and Hecht, J. (2010) 'Using Bounded Bayesian Mixed Logit Models to Capture Heterogeneous and Shifting Public Attitudes towards Climate Change Risks.' Paper presented at the workshop on "Risk Elicitation and Stated Preference Methods for Climate Change Research, EnviroChange, University of Trento, Trento, 21-22 October 2010.
- **Haidar M.*** and Shabala S. (2011). Ion flux kinetics in blue-light grown dodder seedlings. *Proceedings* 11th World Congress on Parasitic Plants, Italy, (**Abstract**, page 31).
- Hecht, J., **Chalak, A.***. and Reid, S. (2010). 'How equitable are proposed water and sewerage service improvements? Evidence from a marketing analysis of stated preference data.' Paper presented at the 80th Annual Conference of the Southern Economic Association, Atlanta, Georgia, 20-22 November 2010.
- **Nimah.M.N*.**, Roula M. Bashour, Isam I. Bashour. (2010). Pepper yield and Quality as influenced pattern of root zone wetting and deficit irrigation. VI International Symposium on Irrigation of Horticultural Crops (ISHS). Chili, North America.
- **Nimah.M.N***, Roula M. Bashour, Isam I. Bashour. (2010). Effects of Regular Deficit Irrigation and Root pattern Wetting on Yield of Potato. VI International Symposium on Irrigation of Horticultural Crops (ISHS) 2010 Chili, North America.

- **Nimah, M.N.***, R. Bachour & R. Rabaa. (2010). Comparison between Irrigation with Saline Water and Regular Deficit Irrigation on Potato Yield MERC Potato Symposium 2010. Larnaca, Cyprus.
- **Nimah, M.N.***. and R. Bashour (2010). Modeling Deficit Irrigation Water Productivity as a Function of Crop Root Depth Proceeding ASABE annual international meeting section SW31 Innovation in irrigation in Pittsburg, Penn USA.
- Bachour R. USU, M. Arab AUB, **M.N. Nimah**, AUB; Mackee, MAC (2011). Research Priorities for Water and Irrigation System Management on the Orontes Benchmark Site, Lebanon Middle East Water and Livelihoods Initiative (WLI), Improving Rural Livelihoods through Sustainable Water and Land-use Management in the Middle East. ICARDA WLI pp 38.
- **Saad, A.T.***, L. Hanna, M. Temsah. (2010). First report of blue stain fungi associated with decline of pine trees in Lebanon Phytopathology 100:S111.
- **Yau, S.K*.**, M.N. Nimah, and M.T. Farran (2011) Early Sowing and Irrigation to improve yields and water use efficiency under climate change. Page 305, in Extended Summaries of the International Conference on Preparing Agriculture for Climate Change, Feb 6-8, 2011, Ludhiana, India.
- **Yau, S.K*.**, M.T. Farran, and M.N. Nimah (2010) Early Sowing and Irrigation - Differential Response of Barley and Oat. In Abstracts (CD format) of the International Annual Meeting of the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, October 31 - November 3, 2010, Long Beach, USA.
- **Yau, S.K***, Nimah.M.N, Mohamad Farran. (2010). Early Sowing and Early Irrigation on Oat Yield in the Bekaa, 17th Scientific meeting, Lebanese Association for Advancement of Science 2010.

Services

Youssef Abou Jawdeh

AUB

- Member and Chairperson of the FAFS Research Committee.
- Member of the University Research Board

Others

- Member of the Pesticide committee / Ministry of agriculture.
- Member of the vegetable committee / Ministry of agriculture.
- Member of Almond Phytoplasma Committee / Ministry of agriculture.

Isam Bashour

AUB

- Member of the FAFS Advisory committee.
- Member of the FAFS Student Affairs Committee.
- Internship to a student from EARTH University for a period of 3 months (September 26 to December 17, 2010)
- Supervised Soil Analysis at AGSC and gave recommendations to farmers. (Fall 2011).
- Report on Conservation Agriculture in Lebanon (cooperation with GTZ) (Fall 2011).

Ali Chalak**AUB**

- Member of the FAFS Academic and Curriculum Committee.
- Member of the FAFS Library Committee.
- FAFS Assistant Marshall in Commencement Ceremony.
- Program Learning Outcomes Assessment Plan for the B.Sc. in Agriculture.
- Member of the Nature Conservation Center for Sustainable Futures Executive Committee.
- Member of the Food Security and Policy in the Middle East Steering Committee.
- Member of the AUB Web Oversight Committee.
- Member of the AUB Publications Committee.

Jad Chaaban**AUB**

- FAFS Assistant Dean for Academic Affairs.
- Member of the FAFS Strategic Planning Committee.
- Coordinator of Undergraduate Studies, Agribusiness Program, FAFS.
- Representative of FAFS to the following AUB committees:
 - 1) University Program Learning Outcomes Committee, 2), Interfaculty Financial Aid Committee, 3) University Committee on General Education, 4) and Internal Review Committee.

Others

- President, Lebanese Economic Association www.leb-econ.org (since 2007).
- Expert, Middle East Youth Initiative, Wolfensohn Center for Development at Brookings and Dubai School of Government (since 2007).

- Associate Researcher, Toulouse School of Economics, GREMAQ-INRA, France (since 2005).

Mustapha Haidar

AUB

Chairman of the Agricultural Sciences Department, FAFS.

Member & Chairperson of the FAFS Student Affairs Committee.

AREC Academic Coordinator.

Member of the FAFS Admission Committee.

Member in the FAFS Program Learning Outcomes Committee.

Agricultural Science Department representative on the CTL-Program Learning Outcomes

Others

- Recipient of the C. and C. Rebeiz Best Research Paper Award. (2010).
- Organized and participated in the workshop about Promoting Conservation Agriculture in the Arab Region-DAAD Project, Conducted by AUB, JKI, HOCHCHORE WEIHENSTEPHAN-TRIEDSOLF University of Applied Science. Sept 6-17 2011 AREC, AUB.
- Participated in the executive and organizing committee of the Arab Society for Plant protection that was held at ICARDA, Aleppo, March 2011.
- Participated in the executive and organizing committee on the conversation Agriculture that was held in Beirut, April 2011.
- Participated in the executive and organizing committee on the conversation Agriculture that was held in Amman, Jordan, July 2011.
- Participated and accompanied 10 students from the AGSC department (7 undergraduates and 3 graduate students) as part of the DAAD (German Academic Exchange Service) Summer School project, University of Applied Sciences in Triesdorf, Germany between September 19 and October 3, 2010.
- Secretary and Treasurer, Arab Plant Protection Society.

Musa Nimah

AUB

- Member in the Program Learning Outcomes Committee
- Member in the FAFS Graduate student committee.
- Member in the Extended Advisory Committee at the Faculty of Engineering & Architecture.

Others

- Member, founder and comptroller of the Friends of Water, Lebanon.
- 40 years of Service Award, Order of Engineering, Lebanon.
- Services as chair/convener either of department, of committees of university task forces.

Adib Saad***AUB***

- Member of Ad Hoc Committee on Sustainable Agriculture Program, AGSC.
- Served as Due Process Monitor to attend the meetings of the OSB Departments and Extended Advisory Committee in the Faculty Promotion process.

Others

- Chaired Committees appointed by the National Civil Service Council to examine and recommend qualified agricultural engineers for research positions, technical positions and administrative positions at the Lebanese Agricultural Institute.
- Chaired a Committee appointed by the National Civil Service Council to examine and recommend qualified agricultural engineers for various positions at the Ministry of Agriculture.
- Chaired a Committee appointed by the National Civil Service Council to examine and recommend qualified agricultural engineers for positions at the Ministry of Economy and Trade.
- Chaired a Committee appointed by the National Civil Service Council to examine and recommend qualified teachers for various positions at the Technical Agricultural Schools.
- Executive Secretary of the Agricultural Committee of the International Chamber of Commerce, Lebanon.
- Appointed by the Lebanese minister of Agriculture as a member of the National Committee on Stone Fruit Trees.
- Appointed by the Lebanese minister of Agriculture as a member of the National Committee on Pome Fruit Trees.
- Invited Lecturer for one week in a graduate program on "IPM of Mediterranean Fruit Tree Crops" at the Mediterranean Agronomic Institute of Bari (CIHEAM), Italy. April 10 -14, 2011.
- Supervising diagnosis of plant diseases as service to farmers and giving recommendations for management.
- Continues to serve as Senior Editor of "*Phytopathologia Mediterranea*".

Sui Kwong Yau

AUB

- Member & Chairman of the FAFS Library Committee.
- Member of the FAFS Student Affairs Committee.
- Member of the University Library Committee.
- Member of the Expanded Advisory Committee for FHS on promotion.
- Member of the University Ranking Committee.
- Chair of the sub-committee on AGSC activities at AREC.
- Served as a mentor for the Visiting Associate Professor of horticulture, Dr. Kantharajah.

Others

- Board member of the International Crop Science Society.
- Associate Editor of Crop Science.

Participation in Workshops and Conferences

Youssef Abou Jawdeh

- Attended a total of six workshops on Integrated pest management in tomato were given in cooperation with the FAO and the Ministry of Agriculture, in the following regions: Abdeh (North), Baakline , Jbeil (Byblos), Sour (Tyr), Jiyeh and Bekaa; December 2010 (Fall 2011).
- Attended a total of three workshops on Integrated pest management of greenhouse crops were given in Akkar region in Cooperation with UNDP.
- Attended a meeting of the USAID working group on whitefly transmitted Cucurbit begomoviruses. Aqaba, Jordan, January 2-5, 2011.
- Attended a meeting of the USAID working group on seed potato production. Cyprus, March 26-28, 2011.
- Attended the fourth conference of the international working group on legume and vegetable viruses (IWGLVV). Antequera, Málaga, Spain, May 16-20, 2011.
- Attended the International course on biological control: “22th Entomology course”, Koppert biological systems, Rotterdam, the Netherlands, June 7 to 9, 2011.
- Attended the regional conference on “Food Security in the Middle East and North Africa: The Role of Academic and Research Institutions”, AUB, June 2-3, 2011.

- Attended the workshop on “Developing Hydroponics to Access International Markets” Spring 2011.

Isam Bashour

Participated in the workshop about Promoting Conservation Agriculture in the Arab Region-DAAD Project, conducted by AUB, JKI, HOCHCHORE WEIHENSTEPHAN TRIESDORF University of Applied Science. Sept 6-17 2011. AREC

Jad Chaaban

- Attended and presented a paper at the Workshop on Alternative Livelihoods to Tobacco Farming held at the International Development Research Center (IDRC), Ottawa, Canada, June 2011.
- Attended the National Council for Scientific Research (CNRS) seminar on Air Quality, AUB, “Economic Impact of Air Pollution”. May 2011.
- Institut français du Proche-Orient - Friedrich Ebert Stiftung, “Les Palestiniens sur le marché du travail libanais”.(04/2011).
- Attended the Human Rights and Peace Club and the Secular Club at the American University of Beirut, “The Cost of the Sectarian System”. April 2011(04/2011).
- Attended the “Consumer Protection and Food Safety Symposium” held at FAFS. March 2011.
- Attended and presented a paper at the WAAUB Second MENA Regional Meeting, held in Damascus, Syria. March 2011.
- Attended the “Launching the Results of the AUB-UNRWA Socio-Economic Survey of Palestinian Refugees in Lebanon”. AUB. December 2010
- Attended the UNESCWA Expert Group Meeting on Governance and Conflict Relapse, “Sectarianism and Public Expenditure” May 2011.
- Attended and presented a paper at the Workshop on Migration in the Arab Region: Causes and Consequences held in Istanbul, Turkey. April 2011.

Mustapha Haidar

- Accompanied 10 students from the AGSC department in the DAAD (German Academic Exchange Service) Summer School which was held in the University of Applied Sciences in Triesdorf, Germany between September 19 and October 3, 2010.
- Participated in many Workshops in the North and Beq’aa serving the community.
- Attended the Arab Society for Plant protection executive board meeting-Aleppo, March 2011.

- Participated in the DAAD workshop preparation on sustainable agriculture, Beirut, April 2011.
- Attended and presented a paper entitled” Ion flux kinetics in blue-light grown dodder seedlings” at the 11th World Congress on Parasitic Plants, Italy, June 2011.
- Participated in the DAAD workshop preparation on sustainable agriculture, Amman, Jordan, July 2011.
- Organized and Coordinated the Summer School DAAD project to promote conservation agriculture in the Arab world-DAAD for 60 students/professors from Germany, Jordan, Syria and Lebanon at AREC, AUB between Sept 5-17, 2011.

Musa Nimah

- Participated in the workshop about Promoting Conservation Agriculture in the Arab Region-DAAD Project, Conducted by AUB, JKI, HOCHCHORE WEIHENSTEPHAN-TRIEDSOLF University of Applied Science. Sept 4-17 2011 . AREC.
- Attended the WLI Extension and Water Management training workshop, University of California at Davis Utah State University, ICARDA, and AUB at AREC, Lebanon. June 2011.
- Attended the Food security conference in the Middle East and North Africa, AUB, June 2011.

Adib Saad

- Attended the regional conference on “Food Security in the Middle East and North Africa: The Role of Academic and Research Institutions”, American University of Beirut, June 2-3, 2011 (Summer 2011)
- Attended the workshop on “Developing Hydroponics to Access International Markets” (Spring 2011)

Sui Kwong Yau

- Participated in the training workshop on ‘Mahara e-portfolios’ organized by ACC for academic uses on May 11, 2011
- Participated in the workshop organized by ACC on ‘e-porfolios’ for academic uses on Apr 14, 2011
- Attended the International Conference on Preparing Agriculture for Climate Change held on Feb 6-8, 2011, in Ludhiana, India.
- Attended a workshop on team-based learning by Dr. Nathalie Zgheib on Oct 19, 2010.

- Participated in the Round-Table “Technology Aids for Team-Based Learning” by Prof. Neil Smith on Oct 21, 2010.

Consultancies

Isam Bashour

UNDP: Fertilization of vegetable crops in Akkar (Spring 2011).

Ali Chalak

- Judge for the Qatrah Beverage Product Innovation Competition 2010, Arab Beverage Association and the American University of Beirut (2010 & 2011).
- WTA and WTP valuations for investment planning – Yorkshire Water Services. ICS Consulting, UK (2011).
- Econometric analysis of water customer data from a UK National Water Survey. ICS Consulting, UK (2010).

Mustapha Haidar

National Consultant to Undertake a Survey of *S. elaeagnifolium* in Lebanon, Sponsored by FAO, July 2011.

Strategic Challenges

- After the recent increase in AUB tuition fees, AGSC department needs to look for innovative mechanisms to attract more undergraduate students, especially those from rural areas, to enroll in the Agriculture Science program in the near future. Curriculum revisions should tackle prominent issues like meeting future climate change mainly water, drought and plant health challenges and choosing the right educational tools to conserve and use water more efficiently.
- The department will have to introduce new sustainable technologies to support agricultural growth; strengthen the adaptation and mitigation to climate change in Lebanon and the region throughout research and sustainably introduced technologies; develop a multi-disciplinary research unit where different scientists can work together; fortify the partnership with the private sector, NGOs and regional institutions and empower out-reach activities at AREC. To accomplish these challenges new full time professors in the field of entomology, extension, farm machinery and practices and biotechnology should be recruited along with allocation of adequate space and support.

B. Department of Animal and Veterinary Sciences

Prepared by Dr. Elie K. Barbour, Chairperson

Highlights

The Department graduated its first student from the Veterinary Sciences program, with high distinction. This student is now pursuing her studies for a DVM degree in Szent Istvan University in Hungary, based on the Memorandum Of Understanding that the Department has established with this accredited institution.

The Animal and Veterinary Sciences (AVSC) Department was active in the promotion of the BS program in Veterinary Sciences. The faculty at the department participated in a promotion campaign covering around 20 Lebanese high schools during which students were introduced to the new program.

A fundraising activity to solicit funds for the renovation of a barn at AREC for use as laboratories for the new Veterinary Sciences program was organized by Dr. Farran in coordination with Dr. Barbour and the Office of Development at AUB. This activity took place during the Annual Meeting of the World Poultry Science Association, Lebanese Branch, in Rotana Hazmieh on July 23, 2011.

The Department revised and modified the curriculum of the BS in Veterinary Sciences and started its implementation on newly admitted Veterinary Sciences students, effective Fall of 2011-2012. The revision involved the reduction of the social sciences requirements from 9 cr. to 6 cr. to match the AUB General Education rules. In addition, a 6 cr. Histology course was replaced with a 3 cr. course and two 2 cr. courses in clinical chemistry. Finally, the AVSC 206 Clinical Diagnostics (2 cr.) course and a 2 cr. tutorial course were added. The total number of credits of the new curriculum is 102 credits. The impact of these changes will be assessed in the coming academic years through the procedure of Assessment of the Program Learning Outcomes.

The Department completed the recruitment process for a new full time faculty member, with a DVM and a PhD degree, to teach courses related to Veterinary Medicine field, updating the present curriculum, and working for the establishment of a new MS program in Veterinary Sciences. The Department selected Dr. Ors Petnehazy, from Hungary, for this post who later on declined the offer. The Department is going to launch a new recruitment cycle to fill this position for the next academic year 2012-2013.

The Department was active in research and development with 2 projects funded internally and 9 projects funded by external agencies.

The Department faculty managed to produce 8 abstracts and proceedings, 12 full articles in peer-reviewed international journals, and two articles in a peer-reviewed local journal.

The Department graduated 2 students with MS degree.

Personnel

The AVSC Department has 4.33 FTE's out of which four are full time faculty members. The Department also employs one Senior Research Assistant and one research assistant who are

appointed on research grants. Four graduate assistants were appointed for the first and the second semesters as well as the Summer Session. The Department also has one support staff. The below tables detail the personnel in the Animal and Veterinary Sciences department:

Full time Faculty

Elie K. Barbour	Professor, Chairperson
Fawwak T. Sleiman	Professor
Mohamed T. Farran	Professor
Shady K. Hamadeh	Professor

Research Assistants

Lina Jaber	Senior Research Assistant
Nadim Rawda	Research Assistant on grant

Graduate Assistants

Maya Saadeh
Tamar Kassabian
Hamdi Shaar

Support Staff

Houssam Shaib	Senior Technician
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Teaching

Student enrollment in courses

Fall 10-11

Course	Credits	Enrollment	Instructor
AVSC 204	2	4	Elie Barbour
AVSC 207	1	2	Elie Barbour
AVSC 210	2	6	All AVSC faculty
AVSC 212	1	2	Elie Barbour
AVSC 215	4	4	Shadi Tarek
AVSC 241	3	21	Fawwak Sleiman
AVSC 243	3	19	Shady Hamadeh
AVSC 271	3	22	Fawwak Sleiman and Mohamad Farran
AVSC 275	3	15	Elie Barbour
AVSC 281	3	6	Mohamad Farran
AVSC 299	2	1	Fawwak. Sleiman
AVSC 304	3	3	Elie Barbour
AVSC 330	3	4	Fawwak Sleiman

Spring 10-11

Course	Credits	Enrollment	Instructor
AVSC 209	2	6	Fawwak Sleiman and Mohamad Farran
AVSC 220	3	32	Fawwak Sleiman, Mohamad Farran and Elie Barbour
AVSC 222	3	21	Fawwak Sleiman
AVSC 224	3	24	Elie Barbour

AVSC 242	3	11	Fawwak Sleiman/ Shadi Hamadeh
AVSC 277	2	6	Shadi Hamadeh
AVSC 278	3	19	Fawwak Sleiman/ Mohamad Farran
AVSC 281	3	6	Mohamad Farran
AVSC 299	2	1	Fawwak Sleiman
AVSC 299	2	2	Elie Barbour
AVSC 300 C	3	3	Elie Barbour
AVSC 300C	3	1	Mohamad Farran
AVSC 334	3	3	Mohamad Farran

Summer 2011

Course	Credits	Enrollment	Instructor
AVSC 226	3	24	Mohamad Farran
AVSC 299	2	1	Mohamad Farran
AVSC 299	2	1	Fawwak Sleiman

Completed Theses

- Saade M., Optimization of Sperm Sexing and Gene Characterization in Goats, 2011, Dr. Barbour adviser, Dr. Hamadeh and Dr. Sleiman Committee members. This thesis is awarded the Abdul Hadi Debs Endowment Award for the Academic year 2010-2011.
- Kassabian, T., *Escherichia Coli*-Induced Mastitis in Cows of Lebanon: Virulence Genes Frequency and Antimicrobial Resistance Modulation, 2011, Dr. Barbour adviser, Dr. Hamadeh and Dr. Sleiman Committee members.

Research Funding

Internal Grants

Two faculty members received URB grants as below:

University Research Board (URB)

- Hamadeh, Shadi. Development of an empirical model for the responses of small ruminants to water deprivation in arid areas: a Meta-analysis approach.
- Barbour, Elie. Molecular adaptability of H9N2 avian influenza virus to mammalian cells of hamsters.

Local, Regional and International Grants

Seven members of the department were successful in attracting national and international grants as below:

- Barbour, Elie. Optimization of genetic markers characterization in goat's sperms: A prerequisite to future selection strategy. LNCSR.

- Farran, Mohamad. Studies on the nutritional and feeding values of feedstuffs produced from locally cultivated and processed safflower, hemp and low toxin faba beans for poultry. LNCSR.
- Farran., Mohamad Effect of a Dietary Herbal Supplement on the Performance and Carcass Quality of Broilers. Phytoganics Ltd.
- Hamadeh, Shady. Urban Agriculture: A sustainable solution to alleviating urban poverty addressing the food crisis and adapting to climate change. Two pilot city case studies: Amman, Jordan and Akkar, Lebanon. CIRS-George Town University Qatar.
- Hamadeh, Shadi. Urban Agriculture- From Seed to Table. RUAF/IDRC
- Hamadeh, Shadi. Outcome Mapping: Regional Capacity Building in MENA – Phase II. IDRC.
- Hamadeh , Shadi. Communication for Development. FAO.

Publications

International Refereed Journal Articles (Corresponding/Senior author*)

- Jaber L.S., Hanna, N., Barbour, E.K., Abi Said, M., Rawda, N., Chedid, M., and **Hamadeh, S.K.***. Fat mobilization in water restricted Awassi ewes supplemented with Vitamin C. Journal of Arid Environments. 2011.
- Zouhairi, O., Saleh, I., Alwan, N., Toufeili, I., **Barbour, E.***, and Harakeh, S. 2010. Antimicrobial Resistance of Staphylococcus species isolated from Lebanese Dairy-Based Products. Eastern Mediterranean Health Journal, 16(12), 1221-1225.
- **Barbour E.K.***, Itani H.H., Sleiman F.T., Saade M.F., Harakeh S., Abdel Nour A., and Shaib H. A. Comparison of different immune components in local and imported Saanen goats, Tropical Animal Health and Production, In Press.
- **Barbour E.K.***, Itani H.H., Shaib H.A., Saadeh M.F., Sleiman F.T., Abdel Nour A., and Harakeh S. 2010. The Koch's postulate of Arcanobacterium pyogenes and its immunogenicity in local and imported Saanen goats. Veterinaria Italiana, 46(3):319-27.
- Haidar M.A.*, Gharib C., Sleiman F.T. 2010. Survival of weed seeds subjected to sheep rumen digestion. Weed Research. 50:467-171.
- Shaib H.A., Cochet N., Ribeiro T., Abdel Nour A.M., Nemer G., Saade M.F., and **Barbour E.K.***. Pathogenicity and amino acid sequences of hemagglutinin cleavage site and neuraminidase stalk of differently passaged H9N2-avian influenza virus in broilers. Advances in Bioscience and Biotechnology. 2(4): 198-206.
- Yau, S. K., M.N. Nimah, and **M.T. Farran***, 2011. Early sowing and irrigation to increase barley yields and water use efficiency in Mediterranean conditions. J. Agwat (in press).
- **Barbour, E. K.***, Halawi, H., and Shaib, H., Jaber, L. S., and Harakeh, S. Impact of competitive non-protective antigens in a vaccine on seroconversions to protective antigens in chickens. Veterinaria taliana. In press.
- Saleh, I., **Barbour, E.***, Kumosani, T., and Harakeh, S., Cheese as a Reservoir for Antimicrobial Resistance of *Escherichia coli* and Staphylococcus spp. In: "Advances in Medicine and Biology", Volume 35. Nova Science Publishers, Inc. Hauppauge, NY 11788; 2011, in press

Local / Regional Refereed Journal Articles (Corresponding/Senior author*)

- Saab Abi Saab, **Fawwak T. Sleiman***, Najib Kallasy, Walid Y. Darwish and Pauline Y. Aad. 2011. Effect of adaptation and heat stress on reproductive performances of fat-tail Awassi rams in Eastern Mediterranean, Lebanese Science Journal. (In Press).
- Tohmé Tawk S., Moussa Z., Abi Saiid D., **Hamadeh S***. 2011. Developing Value Chains in Amman, Jordan. Urban Agriculture Magazine. Number 25. Accessed from www.ruaf.org.

Abstracts and conference proceedings (Corresponding/Senior author*)

- **Farran M. T.***, G. W. Barbour, N. N. Usayran, S. K. Yau, and G. Salameh, 2010. Production and Egg Quality Parameters of Laying Hens Fed De-hulled Safflower Meal in Partial or Total Substitution of Soybean Meal. XIIIth European Poultry Conference. August 23 – 27, 2010. Tours, France, P 380.
- Yau, S. K., **M.T. Farran***, and M.N. Nimah, 2010. Early Sowing and Irrigation-Differential Response of Barley and Oat. In Abstracts (CD format) of the International Annual Meeting of the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, October 31- November 3, 2010, Long Beach, USA.
- M. Ragy Darwish, Pierre Khoury, Rania Khalil and **Fawwak Sleiman***. 2010. Optimal feed formulation using bio-wastes as alternative sources: A cost minimization approach. LAAS Proceedings; November 12-13, 2010. Pages 38-39.
- Ghadban, E., Talhouk S., Bashour I., Chedid M., and **Hamadeh S***. 2010. Adapting a European sustainability model to a local context in semi arid areas of Lebanon. Proceedings of the 9th European IFSA Symposium, Vienna, Austria, 4-7 July.
- Yau, S. K., M.N. Nimah, and **M.T. Farran***, 2011. Early Sowing and Irrigation to improve yields and water use efficiency under climate change. Page 305, in Extended Summaries of the International Conference on Preparing Agriculture for Climate Change, Feb 6-8, 2011, Ludhiana, India.
- **Sleiman F. T.***, H. H. Itani, E. K. Barbour, M. T. Farran, and Z. G. Kassaifi, 2011. Milk composition, blood cellular and chemical components of Saanen and local Lebanese goats. In Abstracts of the Annual Meeting of the American Dairy Science Association, July 10 – 14, 2011. Louisiana, USA.
- Abi Saab S., **F. T. Sleiman ***, F. Ayoub, and P. Y. Aad, 2011. Effect of protein restriction on body characteristics and fat storage in Awassi sheep. In Abstracts of the Annual Meeting of the American Dairy Science Association, July 10 – 14, 2011. Louisiana, USA.
- Tohmé Tawk S., Moussa Z., Marroush Abi Saiid D., Abi Saiid M., **Hamadeh S***. 2011. Redefining a sustainable role for Urban Agriculture in the Middle East and North Africa. Watch letter of CIHEAM (International Centre for Advanced Mediterranean Agronomic Studies). Number 18: Urban and Periurban Agriculture in the Mediterranean Area. Accessed from www.ciheam.org.

Services

Elie Barbour

AUB

- Member of the FAFS Administrative Committee and the FAFS Academic and Curriculum Committee.

- Chairperson of the Animal and Veterinary Sciences Department.
- Coordinator of AUB-LaSalle Memorandum of Understanding.
- Coordinator of AUB-Szent Istvan University Memorandum of Understanding.
- Establishing cooperation with El Purpan in France for exchange of faculty and students.
- Pursuing the cooperation with the development office for fundraising.
- Advisor to all Veterinary Sciences students.

Others

- Editorial Board of Veterinaria Italiana and the World Animal Health Organization Journals.
- Technical advisor to Jezzine beneficiary farms (120 farms) Organized and hosted the World Animal Day celebration, in collaboration with BETA organization, on October 4, 2010.
- Organized a meeting with Animals Lebanon, represented by Mr. Jason Mier, on December 22, 2010 in the presence of Professor Hamadeh. It was agreed during that meeting to cooperate on different Animal Welfare issues, including the establishment of regulations with the Ministry of Agriculture for illegal trade of wild animals.
- Organized a meeting between LaSalle University, represented by their coordinator Dr. Afif Abdelnour, and the chairman of the Agricultural Sciences dept., Professor Mustafa Haidar, on December 17, 2010, for activating the exchange of Agriculture students and faculty between the two institutions.
- Investigation of disease outbreaks on major poultry farms of Lebanon (NewCastle, Infectious Bronchitis, Infectious Bursal Disease virus).

Mohamad Farran

AUB

- Member of the FAFS Research Committee
- Continued working with AVSC Chairperson and the Director of the office of Development to promote the Vet. Science program as a follow up to a previous meeting held on March 29, 2011.
- Promoted the vet science program in two special presentations to high school students at “College de Notre Dame Al-Jamhour” on April 16, 2011.
- FAFS representative on the “Poultry Committee” at the Ministry of Agriculture.
- FAFS Representative on the National Feedstuffs Committee” at the Ministry of Agriculture.
- Member on the Faculty of Medicine Expanded Advisory Committee on promotions.
- Continued in collaboration with Dr. S. K. Yau the work at AREC on rainfed faba beans cultivars (low in toxins) where the seeds could be used as protein sources in poultry rations.
- Organized a fundraising activity for the renovation of barn at AREC to be used as labs for the veterinary sciences program. This activity was coordinated with Dr. Barbour and the Office of Development and was included in the Annual Meeting of World Poultry Science Association, Lebanese Branch, July 23, 2011.

- Attended as a supervisory committee member, the PhD thesis defense of Mr. Elie Awwad FEA, AUB.

Others

- Helped several animal farmers and crop growers either on individual basis or through NGOs or UN organizations in Lebanon.

Appeared on New TV (Lilnashr Program) to clarify broiler packaging issue. April 9, 2011.

Member of Board of Administration, Lebanese National Council for Scientific Research, October 14, 2003 to date.

- Member of the Scientific Advisory Committee, CIHEAM.
- Vice President for World Poultry Science Association, Lebanese Branch.
- Member of the Lebanese Association for Advancement of Sciences.
- Advisor to the Speaker of the House on the Parliamentary Committee for Agriculture and Tourism.
- Reviewer for national research proposals.
- Reviewer for refereed journal.
- Member of Rural Women Award Committee, the National Observatory for Women in Agriculture and Rural Areas (NOWARA).
- Helping several animal farmers and crop growers either on individual basis or through NGOs or UN organizations in Lebanon
- National Project Coordinator for a Telefood project on Poultry (FAO and Ministry of Agriculture).
- Member of the National Committee at the Civil Service Board to select Veterinarians for the Ministry of Agriculture, August 2011.
- Attended CNRS board meetings and meetings for the council agricultural committee.
- Evaluated several research proposals submitted to CNRS.
- Attended meetings of the Parliamentary Committee for Agriculture and Tourism.
- Continued to serve as National Project Coordinator for a Tele-food project on Poultry (FAO and Ministry of Agriculture).
- Obtained a recognition award from HE the Minister of Agriculture in Lebanon for the organization and implementation of a national poultry workshop designated specifically to MOA employees, 2011

- Awarded a Certificate of recognition by the WPSA Lebanon Branch for services to the branch and research activities in the service of the poultry industry, 2011

Shadi Hamadeh

AUB

- Coordinator of the Environment and Sustainable Development Unit (ESDU).
- Member of the FAFS Advisory Committee.
- Member of the FAFS Strategic Plan Committee.

Others

- Executive Board member of RUAF.
- Coordinator of the National Training Unit under the NEMTA project supported by IFAD.

Fawwak Sleiman

AUB

- Member of the FAFS Advisory Committee
- Member of the FAFS Admissions Committees
- Member of the University Admissions Committee
- Member of the University Disciplinary Committee.
- Member of the University Senate.
- Member of the Senate Committee on Faculty Affairs.
- Appointed by President on the Senate Pension Plan Working Group

Participation in Workshops and Conferences

Elie Barbour

- Participated in a seminar sponsored by Cobb Company entitled: “Enhancing efficiency and profitability in broiler production”, Intercontinental Hotel, Faraya, April 6, 2011.
- Attended and presented a paper at the American Society for Microbiology Annual Meeting in New Orleans, May 20-24, 2011.
- Attended and presented two papers at the second KASCRSL Research Conference, AUB Hostler Center, May 14-2011.
- A decade of scholarship in research and writing: AUB book exhibition 2011. My exhibited book entitled: “Zoonoses and the contribution of disease-free pets to human health: a guide for pet owners” by Elie K. Barbour and Mathew, T., Thajema publishers, West Orange, NJ, USA.
- Keynote speaker and chairman of one session on “the use of Herbal medicine in Animals”, at the 2nd International Symposium on Medicinal Plants, their cultivation and aspects of uses”, held in Petra, Jordan, between 3-4 November, 2010.
- Attended and presented a poster at the CIOSTA Conference 2011, Vienna, June 29-July 3, 2011.

- Presented a lecture at the Annual Meeting of World Poultry Science Association, Lebanese Branch, July 23, 2011, at the Rotana Hotel, Hazmieh, Lebanon.

Mohammad Farran

- Invited to give a lecture on “substitutes to illicit crops” at the annual conference for Arab Association on Addiction held on May 7, 2011, Crown Plaza, Beirut.
- Presented a lecture at the Annual Meeting of World Poultry Science Association, Lebanese Branch, July 23, 2011, at the Rotana Hotel, Hazmieh, Lebanon.
- Attended, presented a PowerPoint presentation, and submitted a national report entitled: “Capacities of the SNO countries to manage and plan the traditional scale dairy sector in support of food security and poverty alleviation enhanced” at the Expert Consultation Meeting on Small-Scale Dairy Sector Development for Countries in the Oriental Near East. July 12-14, 2011, Cairo, Egypt.
- Organized, as a VP for the WPSA-Lebanon Branch, a scientific conference jointly with the AVSC department and presented two lectures.

Fawwak Sleiman

Attended and presented a poster in the annual meeting of the American Dairy Science Association, July 10 – 14, 2011. Louisiana, USA.

Shadi Hamadeh

- Attended the Third Annual Conference of the Arab Forum for Environment and Development under the theme: “Sustainable management of water resources in the Arab world”, that was held in Beirut, on 4-5 November 2010.
- Invited speaker at the Regional Conference on Food security in the Middle East and North Africa. June 2-3, 2011.

Strategic Challenges

- The AVSC Department is still facing the challenge of securing the needed infrastructure for the new BS in Veterinary Sciences in terms of laboratories, special equipment, treatment and surgical rooms, live animal specimens, and most important the need for the renovation of one old poultry barn at AREC to contain the new laboratories and purchased high-end equipment.
- The Department has to attract more undergraduate students to the new BS program and for that purpose more promotion activities are considered as well as securing scholarships. Strategic partnerships with NGOs should be activated to highlight the role of the Department in serving Animal Welfare through education.
- The Department has to attract more graduate students.
- The Department is still working to establish a Zoonoses center as part of its strategic plan.

- The Department is attempting to develop a new degree of Doctor in Veterinary Medicine (DVM) with the help of US schools of Veterinary Medicines.
- The Department will attempt to implement the MOU established between the Animal Care facility unit at the Medical School and the AVSC Department for the efficient use of space to contain the already purchased instruments for training of the Veterinary Sciences students.

C. Department of Landscape Design & Ecosystem Management

Prepared by: Dr. Salma Talhouk, Chairperson
Ms. Nadine Modad, LDEM Departmental Research Assistant

Highlights

Department academic activities

The Department completed a major revision for its undergraduate program and submitted it to the FAFS Academic Curriculum Committee (ACC) and received approval in July 2011. The Department also submitted to the Center for Teaching & Learning (CTL) its first Annual Program Learning Outcomes Assessment Report which included the two Program Learning Outcomes (PLOs) that were chosen to be evaluated during the Academic year of 2010-2011 and these were: Fall PLO “Communicate (formulate, synthesis) ideas and concepts of landscape architecture orally, textually, graphically, and through multiple media” and the Spring PLO “Interpret (evaluation) the landscape into its respective layers. Following the outcomes of the Fall report, a special meeting was held to coordinate the Course Learning Outcomes (CLOs) between all design studio classes. Upon completion of the full document, the assessment report was circulated to all faculty and the findings will be integrated in future meetings and retreats.

Department professional activities

The Department organized the Beirut Landscape Symposium 2010 which was held in AREC in October 22-23, 2010. The event which was under the auspices of the International Federation of Landscape Architects (IFLA) and the European Federation of Landscape Architects (EFLA) and with financial support from Solidere and AUB’s Provost office, was the first initiative in Lebanon and the region to formalize the profession of landscape architecture as a new and independent profession. The Department also participated in this year Beirut Garden show which was held in May 2011 and displayed promoting material for the program.

Department outreach activities

AUB: The Department organized winter and spring plant sales in front of AUB’s West Hall with participation from LDEM I students. The Department also produced its first Final Year Projects Yearbook. Senior students, class instructors, and the English writing center collaborated on this project.

Community: The Department received around 160 children of different ages from the International College (IC) and showcased plants and different horticultural activities. The Department has launched an urban greening project with Palestinian women in the camp of Ain el Helwe. This project is in collaboration with the Center for Civic Engagement and Community Service (CCECS), encourages planting of edible plants on roofs and balconies. The Department also exhibited greenwall prototypes developed by LDEM I students during the Hamra Festival and organized a student performance “Human Sprawl” as well as a public performance in Hamra/Beirut with LDEM students, “abandoned_alive”.

A Learning environment for students

The Department invited two landscape architects, Mr. Adriaan Geuze who gave a public lecture which was entitled “West 8” and met with LDEM Faculty and students (March 2011), and Mr. Yan Bunge, who participated in the Final Year studio teaching during April 15 to April 17, 2011.

New Faculty

The Department appointed Landscape Architect and PhD candidate, Mr. Yaser Abunnasr, as visiting Assistant Professor for a period of two years effective September 2010 as well as Landscape Architect and founder of Studio B, Germany, Ms. Elke Berger as a Visiting Lecturer for one year effective September 2010.

Student activities

The department supported the reactivation of the Landscape Student Society during Fall 2010-2011. To date, there are 65 members. Its major goal is to introduce landscape design students to the profession. The Society has planned and executed two main events so far, in collaboration with the other societies in FAFS. These are the acquaintance party in October 2010 and the Christmas dinner party in December 2010.

Faculty on Leave

Dr. Nadim Farajalla was on Paid Research Leave during the Fall term 2010-2011, from October 2010 till February 15, 2011.

Dr. Jala Makhzoumi was on unpaid Leave for one year from October 2010 till September 2011.

Dr. Rami Zurayk was on Paid Research Leave for one year, from October 2010 till September 2011.

Consultancies

The Department recruited a consultant, Dr. Maya Zeidan, to work on the accreditation of the undergraduate program and on the creation of a new MSc. program in Landscape Architecture (October 2010 –till February 2011). Another consultant, Mr. Robert Allam (Bachelor of Landscape Architecture), was recruited to prepare the departmental material for the Beirut Garden show which was held in May 2011. The Department also recruited graphic designer, Ms. Zeina Moedad, to design and follow through publication of a booklet for the Beirut Landscape Symposium event which occurred in October 2010.

Personnel

The LDEM department had eight full time faculty members, seventeen part time faculty members (Total FTE's: 12.33 based on First Semester data) and ten research assistants out of which eight were appointed on grants. Seven graduate assistants were appointed for the academic year 2010-2011. The department has one support staff. The below tables detail the personnel in the Landscape Design and Ecosystem Management department.

Full Time Faculty

<i>Salma N. Talhouk</i>	<i>Professor and Chairperson</i>
Yaser Abunnasr	Visiting Assistant Professor
Elke Berger	Visiting Lecturer
Monika Fabian	Instructor
Nadim Farajalla	Associate Professor
Jala Makhzoumi	Professor
Julie Weltzien	Lecturer
Rami Zurayk	Professor; Director of IGESP

Part Time Faculty

George Battikha	Lecturer
Bachar El-Amine	Lecturer
Reem Fayyad	Assistant Instructor
Sara Hage	Lecturer
Ammar Haidar	Instructor
Maha Issa	Instructor
Nahida Khalil	Lecturer
Arlette Lteif	Lecturer
Rania Masri	Lecturer
Fawzi Melhem	Instructor
Wissam Melhem	Lecturer
Ramzi Mezher	Lecturer
Nour Raad	Assistant Instructor
Dima Rachid	Assistant Instructor
Rabih Shibli	Lecturer
Lama Yasmin Tawk	Assistant Instructor
Mariana Yazbek	Lecturer

Research Assistants

<i>Nadine Modad</i>	<i>Departmental Research Assistant</i>
Bassam Hamzeh	Part-time Research Assistant (on grant)
Carol Itani	Part-time Research Assistant (on grant)
Kassem Jouni	Full-time Research Assistant (on grant)
Wassim Kays	Full-time Field Expert (on grant; Dr. Salma Talhouk/IBSAR)
Miriam Mattouk	Full-time Research Assistant (on grant; Dr. Salma Talhouk/IBSAR)
Rasha Moussawi	Full-time Research Assistant (Dr. Talhouk/CCECS)
Dima Ousta	Full-time Research Assistant (on grant; Dr. Salma Talhouk/IBSAR)
Rasha Talhouk	Part-time Research Assistant
Lama Yasmin Tawk	Part-time Research Assistant (on grant; Dr. Salma

	Talhok/ IBSAR)
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Graduate Assistants

Yara Daou	Ecosystem Management
Farah El Samarai	Ecosystem Management
Dima Fay	Ecosystem Management
Bassam Hamzeh	Ecosystem Management
Noura Hazim	Ecosystem Management
Carol Itani	Ecosystem Management
Moustapha Itani	Ecosystem Management

Support Staff

Elias Abi Samra	Greenhouse Technician
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Teaching

Courses Offered

During the academic year 2010-2011, the Department offered a total of 26 undergraduate courses and 1 graduate course. Among the undergraduate courses (9) were design studios and (17) were lecture based courses.

New Courses

During the Summer term 2010-2011, The Department proposed two new courses:

“Interior Landscaping”, 3cr. (LDEM 264), to be offered by the Department as a FAFS elective course effective Fall term 2011-2012.

“Surveying for Landscape Design”, 1 cr. (LDEM 244), to be offered by the Department as a required course effective Fall term 2011-2012 instead of AGSC 227 “Surveying and Irrigation Principles” which was offered during Spring term at AREC.

Both these courses were approved by the Academic and Curriculum Committee (ACC) during late Summer term 10-11.

Student Enrollment in Courses

Fall 2010-2011

Course	Credits	Enrollment	Instructor(s)
LDEM 200	4	29	W. Melhem (P)/J. Weltzien
LDEM 201	3	16	B. El Amine
LDEM 203	3	21	S. Hamadeh
LDEM 204	6	20	J. Weltzien(P)/ Y. Abunnasr/ M. Yazbek
LDEM 209	4	31	S. Talhouk/M. Fabian (lab)
LDEM 215	3	29	E. Abou Fakhr/ M. Haidar/ A. Saad (P)
LDEM 216	6	27	M. Issa (P)/B. El Amine/R. Fayyad/G. Battikha
LDEM 217	3	26	A. Lteif/ R. Talhouk (lab)
LDEM 241	6	21	R. Shibli (P)/ S. Talhouk/E. Berger (visiting)/ D. Rachid
LDEM 245	3	23	F. Melhem
LDEM 290	3	19	G. Battikha
LDEM 295	1	22	G. Battikha

Spring 2010-2011

Course	Credits	Enrollment	Instructor(s)
LDEM 202	6	22	M. Issa(P)/ R. Mezher/ N. Raad
LDEM 211	3	19	S.Talhok(P)/ M. Fabian (lab)
LDEM 212	3	24	George Battikha
LDEM 227	3	24	A. Saad (P)/ E. Abou Fakhr/ M. Haidar/ L. Hanna (lab)
LDEM 228	6	21	J. Weltzien (P)/ Y. Abuunatr/ M. Yazbek
LDEM 242	6	21	Rabih Shibli(P)/ E. Berger/ N. Khalil/ D. Rachid
LDEM 245	3	20	N. Farajalla
LDEM 246	6	24	B. El Amine (P)/W. Melhem
LDEM 261	3	16	J. Weltzien
LDEM 263	3	21	M. Yazbek (P)/ S. Hage
LDEM 265	3	20	G. Battikha (P)/ L. Tawk
LDEM 296	1	21	N. Farajalla
LDEM 630	3	17	R. Masri

Summer 2009-2010

Course	Credits	Enrollment	Instructor(s)
LDEM 250	3	17	W. Melhem (P)/ R. Mezher

Completed Theses

- None

Research Funding**Internal Grants**

One new faculty member received funds from FAFS seed money as below.

FAFS

- Abunnasr, Yaser. URB. Mapping Green Infrastructure in Greater Beirut. Duration: November 1, 2010-June 30, 2011

Local, Regional and International Grants

Two faculty member were successful in attracting national and international grants as below:

- Talhouk, Salma. Nature conversation (IBSAR-AUB). Duration: 2010-2011. Funded by Coca Cola Foundation.
- Talhouk, Salma (IBSAR-AUB / University of Ottawa). Benefits, risks, viability and resilience of an ecosystem food and health model in rural Lebanon. Duration: 2009-2012. International Development Research Center (IDRC), Canada – Ecohealth program.
- Talhouk, Salma. Seeds of hope trees for tomorrow, a participatory ex situ conservation approach. Duration: 2007-2011. Donor: Individuals and institutions.

- Talhouk, Salma (IBSAR-AUB). Biodiversity Village Award. Duration: October 1, 2010 – October 31, 2011. Funded by Coca Cola Foundation.
- Weltzien, Julie. 4D Dance Design-Design Dance, Reestablishing Physical Connections to the Abandoned Environment. The Mellon Foundation for the Arts and Humanities.

Publications

A total number of 4 articles in international referred journals were published by the LDEM faculty members as indicated below.

International Refereed Journals (*Corresponding/Senior author)

- Abdul-Rahman, S., Saoud, I. P. Owaied, M. K., Holail, H., **Farajalla, N.S***. Haidar, M. and J Ghanawi, 2011, “Integrated Aquaculture/Agriculture Increases Vegetal Crop Growth and Yield, and Improves Water Use Efficiency in Semi-Arid Regions”. Journal of Applied Aquaculture (In press).
- Atallah, S., I. El Saliby, R. Baalbaki, and **S. N. Talhouk***. 2010. Effects of different irrigation, drying and production scenarios on the productivity, postharvest quality and economic feasibility of *Origanum syriacum*, a species typically over-collected from the wild in Lebanon. Journal of the Science of Food and Agriculture. (wileyonlinelibrary.com) DOI 10.1002/jsfa.4191.
- **Zurayk, R. ***, Chaaban, J., and Sabra, A. 2011. Ensuring that potential Gulf farmland investments in developing countries are pro-poor and sustainable. Food Security. Volume 3, Issue 1 (2011), Page 129.
- **Zurayk, R.** 2010. Global Views of Local Food Systems: Reflections on the growing worldwide local food movement. From Incidental to Essential: Urban Agriculture in the Middle East. Volume 1, Issue 2. Journal of Agriculture, Food Systems, and Community Development. ISSN: 2152-0801 online, December 2010. (Regular editorial column).

Articles in other Journals

- **Farajalla, N.S.**, 2011. ”Water Resources and the Challenges Facing Lebanon,” in B’Here – Annual Review Lebanon, Beirut, Lebanon Arab Communications Consult. March 2011.
- **Farajalla, N.S***, Dagher, L., Marktanner, M. And Ph. Zgheib, 2010 “ The National Economic, Environment and Development Studies (NEEDS) for Climate Change Project – Lebanon” a report prepared and submitted to the UNFCCC and the Ministry of Environment.
- Sami Abdul-Rahman, I. Patrick Saoud, Mohammed K. Owaied, Hanafy Holail, **Nadim Farajalla**, Mustafa Haidar and Joly Ghanawi Integrated Aquaculture/Agriculture Increases Vegetal Crop Growth and Yield, and Improves Water Use Efficiency in Semi-Arid Regions. Journal of Applied Aquaculture. (In press).

Book Article or Chapter

- Yazbek, M., N. Machaka-Houri, M.S. Al-Zein, S. Safi, N. Sinno, and **S.N. Talhouk***. 2011. Important plant areas of the south and east Mediterranean region, priority sites for conservation: Lebanon. In: Important plant areas of the south and east Mediterranean region, priority sites for conservation. Eds: E.A. Radford, G. Catullo, and B. de Montmollin. 2011. IUCN, Gland, Switzerland and Malaga, Spain.
- **Zurayk, R.** Can sustainable consumption preserve the mediterranean landscape? MEDITERRA 2012. CIHEAM, Paris, France (In press).
- **Zurayk, R.** 2011. Feeding the Arab Uprisings: In: Al-Zubaidi, L., Abu Ayyash, A., Khoury, D. and Paul, J. (eds.). Perspectives: Political Analysis and Commentary from the Middle East. Heinrich Boll Stiftung. #2 May 2011, Special Issue, pp.119-125.
- **Zurayk, R.** 2011. Food, Farming and Freedom: Sowing the Arab Spring. Just world books, LLC. 250 pp. ISBN-13: 978-1-935982-05-0.
- **Zurayk, R.** and Anderson, B. 2011. Human Geography and Economic Wealth. In: The Atlas of Environmental Change in the Arab World. United Nations Environment Program (In press).
- El Masri, R., **Zurayk, R.**, and Kodsi, E. 2010. Environment for Development and Human Well-Being. In: The Environment Outlook for the Arab Region: Environment for Development and Human Well-being report. pp. 31-55. ISBN 978-92-807-3055-5 (Arabic version).
- **Zurayk, R.** and Talhouk S. 2010. Plants and People: Ethnobotanical Knowledge from Lebanon. AUB IBSAR and Cooperazione Italiana. ISBN 978-9953-9019-9-2.
- **Zurayk, R.** (Editor and Translator) and Hamra Abu Eid (Compiler). 2010. Tales from the Badia: Bedouin Folk Tales from Lebanon. Heirich Boell Foundation. 150 pp. ISBN 978-9-95301-643-6.

Abstracts and Conference Proceedings (Corresponding/Senior author *)

- **Abunnasr, Y*** and Hamin, E. The Green Infrastructure Transect: An Organizational Framework for Mainstreaming Adaptation Planning Policies (Abstract, presentation and short paper). Resilient Cities 2011. Bonn, Germany. June 3-5, (2011).
- **Abunnasr, Y***. A Landscape Approach to the conservation of archaeological sites: A case study in Beirut (Abstract/presentation). World Congress foe Middle Eastern Studies (WOCMES). Barcelona, Spain. July 19-24, (2010).
- **Farajalla, N.S.** Effects of Climate Change on Water Resources in Lebanon (Abstract and presentation). The Regional Meeting for the Catholic Relief Service. Cairo, Egypt. February (2011).
- **Zurayk, R*;** and Tell, T. Pasture and Politics: Landscape Fragmentation, Social Power and Bedouin Livelihoods in Mandatory Trans-Jordan and Contemporary Lebanon (Paper). The International Conference on Great Events and Catastrophes

Impacts and Adaptations in Nomadic Societies. University of Leipzig, Oriental Institute, Germany. November 26, (2010).

Newspaper or Magazine Articles

- **Abunnasr, Y.** Limits to Access: public open space in the city of Beirut. Garten + Landschaft (Written in English and published in German). July issue (2011).

Services

Yaser Abunnasr

AUB

- Member of the ad hoc committee for the LDEM Program Learning Outcome Assessment.
- Member of the ad hoc committee for the revision of the LDEM undergraduate program.
- Member of the ad hoc committee for the development of a Master's program (MLA) at LDEM.
- Student orientation presentation-International College (IC) students – Nov 26, 2010.
- Invited discussant at the “City Debates 2011”, Department of Architecture and Design, AUB, May 12-13, 2011.
- Member of the ad hoc LDEM Web site Committee.

Nadim Farajalla

AUB

- Faculty Director of the Research and Policy Forum on Climate Change and Environment in the Arab World at the Issam Fares Institute for Public Policy and International Affairs (IFI) American University of Beirut.
- Chairperson of the University's Student Affairs Committee.
- Member of the Advisory Committee for the University's Center of Teaching and Learning.
- Member of the FAFS Admissions Committee.
- Member of the FAFS Research Committee.
- Member of the FAFS Student Affairs Committee.
- Liason officer between FAFS and the FAFS Alumni Chapter.

Others

- Lectured to several civic organizations and local clubs on climate change, the environment and water resources.

Salma Talhouk

AUB

- Chairperson, Department of Landscape Design and Ecosystem Management (LDEM),
- Member of FAFS strategic plan committee.
- Member of the Executive Committee of IBSAR (Initiative for Biodiversity Studies in Arid Regions), 2010-present.
- FAFS representative member of the University Learning Outcome Coordination Committee.
- Chair of the ad hoc committee for the revision of the LDEM undergraduate program.
- Chair of the ad hoc committee of the LDEM Program Learning Outcome Assessment.
- Chair of the ad hoc committee for the development of a Master's program (MLA) at LDEM.
- Member of the ad hoc LDEM Website Committee.

Others

- Launch of a National Award for Biodiversity.
- Preparing school extra-curricular nature activity-related guide.

Julie Weltzien

AUB

- Member at the AUB Choral Society.
- Student exchange program Coordinator with the Workshop_atelier / terrain (WAT) of the UNESCO Chair in Landscape and Environmental Design of the University of Montreal (CUPEUM).
- Search committee for director of music at the Fine Arts Department.
- Organized student performance "Human Sprawl".
- Public Performance in Hamra/Beirut with students from LDEM 261: abandoned_alive.

Others

- Design, implementation and coodination of the Department's participation in the Beirut Spring Festival, Garden Show at Beiut Hyppodrome (May 2011).

Rami Zurayk

Others

Invited talks:

- Zurayk, R. 2011. Food as weapon: the struggle for food security in Gaza. Lecture delivered to the Middle East Center, London School of Economic. June 23, 2011.
- Pasture and Politics: Landscape Fragmentation, Social Power and Bedouin Livelihoods in Mandatory Trans-Jordan and Contemporary Lebanon. International Conference on “Great Events and Catastrophes Impacts and Adaptations in Nomadic Societies”. University of Leipzig, Oriental Institute, Germany. November 26, 2010.

Participation in Workshops and Conferences

Yaser Abuunaser

- Attended and facilitated a session at the workshop titled “Beirut Landscape Symposium 2010” organized by LDEM and held at AREC. October 21-22, 2010.
- Attended and facilitated a presentation session during the “City Debates 2011” held at the Architecture Department, AUB. May 11-12, 2011.
- Attended and presented a research paper at the “Resilient Cities 2011” organized by ICLEI in Bonn, Germany. June 3-5, 2011.
- Attended by invitation (TOPOS Magazine) and participated in a discussion panel titled “Freedom, communication and open space” at the International Federation of Landscape Architects (IFLA) symposium held in Zurich, Switzerland. June 26-28, 2011.

Jala Makhzoumi

- Coordinated and organized with the Chairperson of the LDEM Department, Dr. Salma Talhouk, the Beirut Landscape Symposium 2010 which was held in AREC in October 22-23, 2010.

Salma Talhouk

- Coordinated and organized with Dr. Jala Makhzoumi the Beirut Landscape Symposium 2010 which was held in AREC in October 22-23, 2010.
- Participated in the National Planning Workshop for the Development of a Project Proposal for a National Reforestation Program in Lebanon, organized by FAO, Lebanon. April 19-20, 2011.
- Participated in the Convention on Biological Diversity (CBD) Workshop for North Africa and Middle East on updating National Biodiversity Strategies and Action Plans (NBSAPs). May 2-7, 2011.

Consultancies

Yaser Abuunaser

- Consultant to the Faculty of Agriculture and Food Sciences (FAFS) on facilities renovation. Consulting included: Design of video conferencing meeting room, room 305, Wing A; Complete re-design of the Dean's office; Re-design of Boys' and Girl's student lounges at AREC; Follow-up on the design of the residence building renovation at AREC.
- Landscape Consultant to the joint venture between Prime Design (Beirut) and Ecofys (Germany). Sustainable landscape Site guidelines and assessment of the public landscape design for the NWD, Solidere.

Salma Talhouk

- Submitted in collaboration with the International Union for Conservation of Nature (IUCN), a Plant guide on Important Plant Areas in Lebanon.

Julie Weltzien

- Najjar and Najjar Architects (Beirut/Vienna): Heights Wellness, Riyadh, Planting Concept and layout.
- Design consultant for diverse projects: Green Studios (Beirut).

Strategic Challenges

During this past year, the restructuring of the undergraduate program has been completed. The major challenges facing the department for the coming year are to secure the approval process of the revised undergraduate program; finalize the new graduate Masters of Landscape Architecture (MLA) program, and recruit four new Faculty lines.

D. Department of Nutrition and Food Sciences

Prepared by: Dr Ammar Olabi, Chairperson

Highlights

During the period of October 1 2010 to September 30 2011, the Nutrition and Food Sciences Department witnessed several changes that contributed to its growth and development. Several actions were taken by the department as follows:

- The NFSC faculty members reviewed and discussed the PhD proposal prepared by the Faculty of Medicine. They agreed that the Nutrition and Food Sciences Department takes part in the program after suggesting some amendments to the proposal so that it

fits better the graduate students from their department, especially in terms of number of credits, prerequisites and courses.

- The NFSC department stood benefit from the visit and expertise of Dr Hotchkiss who came to the department as a URB Scholar and who is a renowned authority in the fields of food science and packaging. Dr Hotchkiss gave three lectures and conducted productive meetings with the faculty members.
- Steps were taken to finalize the application for the Accreditation of the Nutrition & Dietetics Program by the American Dietetic Association. In addition, continuing efforts were completed for the assessment component needed by the accreditation application.
- The status of NFSC 371, Food Engineering was changed from its current graduate catalogue listing as an elective course to a required course for the MS in Food technology program.
- A new full-time instructor was recruited to teach various Nutrition laboratory sections. The successful candidate was Ms. Dima Halabi who holds an M.Sc. and Registered Dietician credentials from McGill University, Canada.
- Dr Kassaify was promoted to Associate Professor effective October 2011.
- The NFSC department renovated one of the Wing B offices (Room 408) and converted it to a room for NFSC graduate assistants.
- An NFSC departmental webpage was launched to cater to the needs of potential and current students as well as potential research collaborators.

Personnel

The NFSC department has fourteen full-time faculty members including four instructors, seven part-time faculty members (Total FTE's: 13.84 based on First Semester data), one research associate and eight research assistants out of which six are appointed on research grants. Fourteen graduate assistants were appointed for the first semester, twenty one for the second semester and five for the summer session. The department has four support staff. The tables below detail the personnel in the Nutrition and Food Sciences department.

Full-time Faculty

Nahla Hwalla	Dean, Professor
Ammar Olabi	Chairperson, Associate Professor
Imad Toufeili	Professor
Omar Obeid	Professor
Mohammad Abiad	Assistant Professor
Hala Ghattas	Assistant Professor
Zeina Kassaify	Assistant Professor
Farah Naja	Assistant Professor
Lara Nasreddine	Assistant Professor, Coordinator of Undergraduate Studies in Nutrition &

	Dietetics
Marie-Claire Chamieh	Instructor
Basma Hamadeh	Instructor
Nadine Mikati	Instructor
Diana Tannous (Fall 2010-11)	Instructor
Sara Kanaan (Spring 2010-11)	Instructor

Part-time Faculty

Jamila Natour	Lecturer
Maya Bassil	Lecturer
Carla Habib	Instructor
Youssef Habbal	Lecturer
Hamza Daroub	Instructor
Sara Ghandour	Instructor
Reem Hamzeh	Instructor

Research Associate

Nada Adra

Research Assistants

Sara Farhat (on grant)
Mira Ghaziri (on grant)
Monia Hamdan
Reem Hamzeh (on grant)
Ghina Kaddour
Melannie Mattar (on grant)
Maya Tabet (on grant)
Zeina Younes (on grant)

Graduate Assistants

Fall 2010-11

Graduate Assistant	Major
Christelle Akl	Nutrition
Nancy Zaitouny	Nutrition
Naghham Tannous	Nutrition
Loulwa Kalash	Food Technology
Celine Ajjour	Food Technology
Nadine Nehme	Food Technology
Hayat Hatab	Food Technology
Christelle Abi Rached	Nutrition
Janay Haidar	Food Technology
Sibelle El Labban	Food Technology
Sarah Adwan	Nutrition
Jeanette Karam	Nutrition

Ruba Hajj Ahmad	Food Technology
Nour Hammami	Nutrition

Spring 2010-11

Graduate Assistant	Major
Loulwa Kalash	Food Technology
Celine Ajjour	Food Technology
Nadine Nehme	Food Technology
Hayat Hatab	Food Technology
Christelle Abi Rached	Nutrition
Janay Haidar	Food Technology
Sibelle El Labban	Food Technology
Sarah Adwan	Nutrition
Jeanette Karam	Nutrition
Ruba Hajj Ahmad	Food Technology
Nour Hammami	Nutrition
Patricia Moghames	Nutrition
Nathalie Joy Malek	Nutrition
Joana Abou Rizk	Nutrition
Jana Hazim	Nutrition
Nivine El Alami	Nutrition
Nivine Bachir	Nutrition
Hiba Nashef	Food Technology
Katherine Jaafar	Food Technology
Jinane Makki	Nutrition
Baria Kishli	Nutrition

Summer 2010-11

Graduate Assistant	Major
Janay Haidar	Food Technology
Nour Hammami	Nutrition
Nivine Bachir	Nutrition
Christelle Abi Rached	Nutrition
Patricia Tabarani	Nutrition

Support Staff

Samson Atamian	Pilot Plant Supervisor
Tania Ghannam	Secretary
Samir Touma	Technician
Arsine Derboghossian	Technician

Teaching

Student Enrollment in Courses

Fall 2010-11

Course	Credits	Enrollment	Instructor
NFSC 220	3	48	C. Murad
NFSC 221	3	47	D. Tannous
NFSC 222	3	56	H. Ghattas
NFSC 240	2	18	MC. Chamieh
NFSC 252	3	24	Y. Habbal
NFSC 261	3	26	J. Natour
NFSC 265	3	40	I. Toufeili
NFSC 267	2	59	B. Hamadeh/H. Daroub
NFSC 274	3	35	O. Obeid
NFSC 277	3	65	Z. Kassaiify
NFSC 282	3	36	Z. Kassaiify
NFSC 283	3	20	H. Ghattas
NFSC 284 A	1	20	D. Tannous
NFSC 287	2	25	M. Abiad
NFSC 288	1	63	A. Olabi/ B. Hamadeh/ H. Daroub/Y. Habbal
NFSC 292	3	59	A. Barhoumi/P. Karam
NFSC 294	1	58	N. Mikati
NFSC 296	1	29	F. Naja, M. Abiad
NFSC 298F	14	20	N. Mikati
NFSC 299	2	41	H. Ghattas/ F. Naja/ I. Toufeili/ O. Obeid/ Z. Kassaiify/ A. Olabi/ M. Abiad
NFSC 301	3	16	S. Hlais
NFSC 307	3	10	F. Naja
NFSC 314	3	19	O. Obeid
NFSC 370	3	18	A. Olabi
NFSC 377	3	17	M. Abiad
NFSC 395	1	6	R. Tannous
NFSC 300 B	2	1	H. Ghattas
NFSC 300 B	2	1	O. Obeid
NFSC 300 C	3	1	O. Obeid
NFSC 300 C	3	1	Z. Kassaiify

Spring 2010-11

Course	Credits	Enrollment	Instructor
NFSC 220	3	50	C. Mourad
NFSC 221	3	37	O. Obeid
NFSC 261	3	37	J. Natour
NFSC 265	3	27	I. Toufeili
NFSC 267	2	37	B. Hamadeh

NFSC 272	2	26	S. Ghandour
NFSC 278	3	26	Z. Kassaify/R. Hamzeh
NFSC 285	3	37	M. Bassil/ S. Kanaan
NFSC 287	2	71	M. Abiad
NFSC 289	1	48	B. Hamadeh/H. Daroub
NFSC 290	3	53	N. Mikati
NFSC 291	3	39	M. Abiad
NFSC 293	3	67	L. Nasreddine
NFSC 295	1	66	MC. Chamieh
NFSC 296	1	59	S. Kanaan, Z. Kassaify, M. Abiad
NFSC 299	2	56	I.Toufeili/ A. Olabi/ Z. Kassaify/ L. Nasreddine/ M. Abiad/ O. Obeid
NFSC 305	3	13	A. Olabi
NFSC 310	3	6	I. Toufeili
NFSC 311	3	9	L. Nasreddine
NFSC 351	3	29	Z. Kassaify
NFSC 315	3	12	O. Obeid
NFSC 395	1	13	A. Olabi
NFSC 284B	1	20	N. Mikati
NFSC 298S	14	20	N. Mikati
NFSC 300A	1	1	Obeid
NFSC 300B	2	2	Nasreddine
NFSC 300B	2	2	Obeid
NFSC 300B	2	1	Olabi
NFSC 300B	2	1	Toufeili
NFSC 300C	3	1	Obeid
NFSC 300C	3	2	Nasreddine
NFSC 300C	3	3	Toufeili

Summer 2010-11

Course	Credits	Enrollment	Instructor
NFSC 221	3	9	O. Obeid
NFSC 261	3	31	I. Toufeili
NFSC 274	3	11	O. Obeid
NFSC 280	1	27	I. Toufeili
NFSC 277	3	11	Z. Kassaify
NFSC 296	1	3	Olabi
NFSC 299	2	2	Kassaify
NFSC 299	2	3	Toufeili
NFSC 395	1	10	Olabi
NFSC 300A	1	1	Olabi
NFSC 300A	1	1	Toufeili
NFSC 300B	2	2	
NFSC 300C	3	4	Olabi

NFSC 300C	3	2	Toufeili
NFSC 399		5	Staff
NFSC 399A		2	Staff
NFSC 399B		4	Staff
NFSC 399D		1	Staff

Completed Theses

A total of eleven theses were completed in 2010-2011 as below:

- Samson Atamian, Ammar Olabi (Advisor). The Characterization of the Physicochemical and Sensory Properties of Full-Fat, Reduced-Fat and Low-Fat Bovine, Caprine and Ovine Concentrated Yoghurt (Labneh). October 2010.
- Dunia El-Bistami, Omar Obeid (Advisor). The Effect of Oleic Acid in Combination with Varied Levels of Fish Oil on the Lipid Profile of Healthy Men. October 2010.
- Stephanie Gaby Rahi, Lara Nasreddine (Advisor). Food Consumption Patterns and Dietary Exposure to Organochlorine and Organophosphorous Pesticide Residues in an Adult Semi-Rural Population in Lebanon. October 2010.
- Berna Rahi, Omar Obeid (Advisor). Effect of Oleic Acid in Combination with Varied Levels of Fish Oil on Glycemic Control in Healthy Men. October 2010.
- Dima Haddadin, Farah Naja (Advisor). The Association between Dysfunctional Eating Behaviors and Body Image Perception Among Overweight and Obese Female University Students in Lebanese. October 2010.
- Maria Rehaime, Zeina Kassaify (Advisor). Quantitative Determination of Pesticides Residues in Selected Lebanese Foods and Risk Characterization for the Consumer. October 2010.
- Chrystel Haikal, Lara Nasreddine (Advisor). The Association between Vitamin D Status, Percent Body Fat and Cardiometabolic Risk Factors in Overweight and Normal Weight Lebanese Female Adolescents. February 2011.
- May Khattab, Omar Obeid (Advisor). Postprandial Glycemic and Insulinemic Responses to Phosphate Manipulated Glucose Load. June 2011.
- Aida Youssef El-Aily, Lara Nasreddine (Advisor). Metabolic Risk Factors in a Sample of Lebanese Male Adolescents. June 2011.
- Hala Khudari, Hala Ghattas (Advisor). Nutritional Assessment of School Children in Rural Lebanon: A Case Study of Aarsal. June 2011.
- Dana Moussa, Farah Naja (Advisor). Nutrition Prevalence and Determinants of Complementary Alternative Medicine Use Among Lebanese Type 2 Diabetic Patients. June 2011.

Research Funding

Internal Grants

University Research Board (URB)

Seven members of the department received URB grants as below:

- Abiad, Mohammad. The Effect of Different Milling Conditions on Thermal Properties of Crystalline Powders.
- Ghattas, Hala. Adiposity and iron status in Lebanese children and adolescents.
- Kassaify, Zeina. Food Safety among food vendors in poor Lebanese neighborhoods: A step towards a healthy marketplace.
- Naja, Farah. The Association between Dysfunctional Eating Behaviors and Body Image Perception and across different BMI Categories in Lebanese Young Adult Females.
- Nasreddine, Lara. Effect of Meal Glycemic Index on PYY, CCK and Ghrelin Postprandial Responses in Healthy Male Subjects.
- Olabi, Ammar. The Effect of Roux-en-Y Gastric Bypass and Sleeve Gastrectomy Surgery on Taste Acuity and Food Preferences in Morbidly Obese Subjects.
- Toufeili, Imad. Determination of some biochemical and antioxidant properties of selected Lebanese honeys.

Local, Regional and International Grants

Eleven members of the department were successful in attracting national and international grants as below:

- Ghattas, Hala. Food and Health in Rural Lebanon: Options to Improve Dietary Diversity, Food Security, Livelihoods and Ecosystem Management. The effect of a school feeding program in Aarsal on nutritional status of children. IDRC/IBSAR.
- Ghattas, Hala. Nutrition in Emergencies.
- Hwalla, Nahla and Ghattas, Hala . Validation of a Lebanese food security assessment tool, WHO.
- Naja, Farah Prevalence and determinants of Complementary and alternative medicine use in Lebanon. A National Study. LNCSR.
- Kassaify, Zeina, Obeid, Omar and Olabi, Ammar. Food and Health in Rural Lebanon: Options to Improve Dietary Diversity, Food Security, Livelihoods and Ecosystem Management. IDRC/IBSAR.
- Hwalla, Nahla and Nasreddine, Lara. Associated Research Unit (ARU) for Undernutrition and Obesity in Lebanon. LNCSR.

- Hwalla, Nahla; Naja, Farah; Nasreddine, Lara and Ghattas, Hala. Healthy Kids Partnership. Nestle Middle East.
- Hwalla, Nahla. Nestle Healthy Kids Global Programme. Nestle Middle East.
- Hwalla, Nahla. Vegetable Seed Trials at AREC. Unifert.
- Olabi, Ammar. Galaxy Milk Shelf Life Study. MARS GCC.
- Olabi, Ammar and Kassaify, Zeina. Qatrah Beverage Product Innovation Competition 2011. Arab Beverage Association.

Publications

Twelve articles were published in international referred journals by the NFSC members as indicated below:

International Refereed Journals (Corresponding/Senior author *)

- Musaiger, A.O. *, Hassan, A.S. and **Obeid, O.** The Paradox of Nutrition-Related Diseases in the Arab Countries: The Need for Action. *Int. J. Environ. Res. Public Health* (2011); 8(9), 3637-3671.
- Alameddine, M., **Naja, F.***, Abdel-Salam, S., Maalouf, S. and Matta, C. Stakeholders' perspectives on the regulation and integration of complementary and alternative medicine products in Lebanon: a qualitative study. *BMC Complement Altern Med.* (2011); Aug 28;11: 71.
- Liu, A.*, Byrne, N.M., Kagawa, M., Ma, G., Poh, B.K., Ismail, M.N., Kijboonchoo, K., **Nasreddine, L.**, Trinidad, T.P. and Hills, A.P. Ethnic differences in the relationship between body mass index and percentage body fat among Asian children from different backgrounds. *British Journal of Nutrition* (2011), 31:1-8.
- Liu, A.*, Byrne, N.M., Ma, G., **Nasreddine, L.**, Trinidad, T.P., Kijboonchoo, K., Ismail, M.N., Kagawa, M., Poh, B.K. and Hills, A.P. Validation of bioelectrical impedance analysis for total body water assessment against the deuterium dilution technique in Asian children. *European Journal of Clinical Nutrition* (2011). doi: 10.1038/ejcn.2011.122.
- Liu, A.*, Byrne, N.M., Kagawa, M., Ma, G., Kijboonchoo, K., **Nasreddine, L.**, Poh, B.K., Ismail, M.N. and Hills, A.P. Ethnic differences in body fat distribution among Asian pre-pubertal children: a cross-sectional multicenter study. *BMC Public Health* (2011), 11: 500.
- Nabhani-Zeidan, M., **Naja, F.** and **Nasreddine, L.***. Dietary Intake and Nutrition Related Knowledge in a Sample of Lebanese Adolescents from Contrasting Socioeconomic Status, *Food and Nutrition Bulletin*, (2011), 32: 75-83.
- **Naja, F.***, **Nasreddine, L.***, Itani, L., Chamieh, M.C., Adra, N., Sibai, A.M. and **Hwalla, N*** Dietary Patterns and their Association with Obesity and Socio-demographic Factors in

a National Sample of Lebanese Adults. *Public Health Nutrition* (2011). (doi:10.1017/S136898001100070X)

- **Naja, F.**, Alameddine, M.*, Abboud, M., Bustami, D. and Al Halaby R. Complementary and alternative medicine use among pediatric patients with leukemia: the case of Lebanon. *Integr Cancer Ther* (2011), Mar; 10(1): 38-46.
- Santos, P.H.S., **Abiad, M.G.***, Carignano, M.A. and Campanella, O.H.. Viscoelastic Properties of Di-Benzylidene Sorbitol (DBS) Physical Gels at High Frequencies. *Rheologica Acta*. (2011). 1-9.
- Zimmermann, M.B., Chassard, C., Rohner, F., N'goran, E.K., Nindjin, C., Dostal, A., Utzinger, J., **Ghattas, H.**, Lacroix, C. and Hurrell, R.F. The effects of iron fortification on the gut microbiota in African children: a randomized controlled trial in Cote d'Ivoire. *Am J Clin Nutr*. (2010) (6):1406-15.
- Zouhairi O, Saleh I, Alwan N, **Toufeili I**, Barbour E, and Harakeh S*. Antimicrobial Resistance of Staphylococcus Species isolated from Lebanese Dairy-Based Products. *Eastern Mediterranean Health Journal*, (2010), 16:1221-1225.
- Wakim, R, Bashour, I*, Nimah, M, Sidahmed, M, and **Toufeili, I**. Selenium Levels in Lebanese Environment. *Journal of Geochemical Exploration*, (2010), 107(2): 94-99.

Technical Reports and Policy Notes

- **Abiad, M.**, Habchi, R., Bashour, I., and Chalak, A. (2011). Recycling Farm Biomass for Biogas Production: A Feasibility Study in Rural Lebanon Climate Change and Environment in the Arab World - Research and Policy Memo no. 7. Beirut, Lebanon: Issam Fares Institute for Public Policy and International Affairs, American University of Beirut.
- **Ghattas, H.** and Sahyoun, N. Food Security of Palestinian Refugees Living in Lebanon. A report submitted to UNRWA: in: Chaaban et al. Socio-Economic Survey of Palestinian Refugees in Lebanon.

Abstracts

- **Naja, F.**, **Nasreddine, L.**, Salem, M., Itani, L. and Azar, S. Association between dietary pattern and risk of type diabetes mellitus in Lebanese adults. 8th IEA/EMR's Scientific Meeting on "Globalization and Public Health in the Eastern Mediterranean Region", 25-27 November 2010, Beirut, Lebanon.
- Younes Z, Haddadin D, **Obeid O**, Tamim H and **Naja F**. The Association between Body Image Perception and Dysfunctional Eating Behaviors across all BMI Categories. Rio International Eating Disorders and Obesity Conference. 19 - 20 Nov 2010. Rio, Brazil.
- Khattab, M., dit EL-Khoury, D, Azar, S., Mattar, M and **Obeid, O**. Effect of phosphorus on the Oral Glucose Tolerance Test. By Abstract presented at: N Nutrition Society Meeting hosted by the Irish Section jointly with the American Society for Nutrition University College Cork. 15-17 June 2011.

- **Ghattas, H.** Challenges in Measuring Food and Nutrition Security, presentation at the Regional conference on "Food Security in the Middle East and North Africa: The Role of Academic and Research Institutions", June 2011.
- **Hwalla N.** Lifestyle Related Determinants of Obesity and NCDs in MENA Countries. May 25-28. Istanbul, Turkey, 2011.
- **Hwalla N.** Association between Body Fat and Metabolic Abnormalities in Lebanese Children and Adolescents. Annual Meeting on Experimental Biology. Washington, DC, April 9–13, 2011.

Chapters in books

- Musaiger, A.O., **Ghattas, H.**, Hassan, A.S., and **Obeid, O.** Public Health in the Arab World, Edited by Samer Jabbour, Rita Giacaman, Marwan Khawaja, Iman Nuwayhid, Published by Cambridge University Press. Hardback | ISBN: 9780521516747 | January 2012. Section III, Chapter 10. Nutrition and food security: The Arab world in transition.

Reports

- Chaaban, J., **Ghattas, H.**, Habib, R., Hanafi, S., Sahyoun, N., Salti, N., Seyfert, K., and Naamani, N. (2010) Socioeconomic survey of Palestinian refugees in Lebanon, Report published by the American University of Beirut (AUB) and the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).

Services

Mohammad Abiad

AUB

- Member of FAFS Library Committee.
- Member of the FAFS Academic and Curriculum Committee.
- Member of the Steering Committee, Center for Food Security and Policy in the Middle East.
- Member of the FAFS Admissions Committee.
- Member of the FAFS Student Affairs Committee.
- Member of the Unified Admissions Committee.
- Member of the University Student Affairs Committee.

Others

- Member of the National Committee for Agricultural Manufacturing and Food Products, Lebanese Ministry of Agriculture.
- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Packaging (NL TC 122).

- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Safety of Food Processing Machinery (NL TC 653).
- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Food additives (NL TC 1008).
- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Food Labeling (NL TC 1011).
- Member of the Lebanese National Standards Institution (LIBNOR), Lebanese Ministry of Industry, Technical Committee on Paper, Board and Pulp, Glass and Metal Containers (NL TC 3010).
- Reviewed abstracts for AAPS (American Association of Pharmaceutical Scientists) Annual Meeting 2011.

Hala Ghattas

AUB

- Member of the FAFS Graduate Studies Committee.
- Member of the FAFS Research Committee.
- Alternate FAFS representative on the Social and Behavioral Sciences Institutional Research Board (IRB).
- Faculty Advisor to the joint FAFS/IFI Program on Food Security and Policy in the Middle East.
- Member of the organizing committee for the Regional conference on "Food Security in the Middle East and North Africa: The Role of Academic and Research Institutions", June 2011.

Others

- Organizer of the Nutrition education booths as part of the University Wellness Committee's Fit-a-thon, November 2010.
- Organizer of women's nutrition education sessions for a Bedouin community in the Bekaa, January 2011.
- Coordinated internships for Nutrition students with the Rafik Hariri Foundation and International Medical Corps, May 2011.
- Part of an IOCC/World Vision/LAECED initiative to organize youth-youth activities for the promotion of Breastfeeding as part of World Breastfeeding Week in collaboration with the University of Balamand and LAU, August 2011.

Nahla Hwalla

Others

- Fellow of International Union for Nutritional Sciences (FIUNS)
- Member of the WHO Expert Advisory Panel on Nutrition
- Member of the American Society for Nutrition
- Member of the Middle East and North African Nutrition Association
- Member of the Federation of Asian Nutrition Societies
- Member of the WHO Nutrition Guidance Expert Advisory Group (NUGAG) Sub group on Diet and Health
- Member of the Columbus Concept Scientific Advisory Board
- American Dietetic Overseas Association Country Representative for Lebanon
- Council member of World Public Health Nutrition Association
- Elected Fellow of International Union for Nutritional Sciences (FIUNS)
- Member of Academic Review Board - Middle East, International Quality Education Foundation (IQEF)
- Editorial board member: Mediterranean Journal of Nutrition and Metabolism
- Editorial board member: International Journal of Food Sciences and Nutrition
- Editorial board member: Annals of Nutrition and Metabolism
- Editorial board member: Health Education Research
- Reviewer of Research Articles:
 - World Health Organization Bulletin
 - Nutrition Research
 - European Journal of Clinical Nutrition
- Reviewer of research articles in Lebanese Science Bulletin

Zeina Kassaify

AUB

- Member of the FAFS Admissions Committee.
- Member of the FAFS Academic and Curriculum Committee.
- Member of the FAFS Graduate Studies Committee.
- Member of the Academic Development Committee.
- Member of the University Graduate Studies Board.
- Member of the University Senate.
- Member of the University Student Faculty Committee.
- Departmental facilitator, Program Learning Outcomes (PLO) Committee for FAFS.
- Member of IBSAR Research Committee.

Others

- Submitted a report on the microbiological analysis of ice-cream samples provided by OSLO ice cream and cakes. (February 2011).
- Gave 2-days training on the microbiological analysis procedures at the Doura Flour Mills (DFM), Doura, Lebanon, April 4 and 6, 2011.
- Submitted a report on the microbiological analysis of ice-cream samples provided by OSLO ice cream and cakes. (February 2011).
- Gave 2-days training on the microbiological analysis procedures at the Doura Flour Mills (DFM), Doura, Lebanon, April 4 and 6, 2011.
- Reviewer for CNRS.
- Reviewer for the Journal of Science of the Total Environment (STOTEN).
- Reviewer for the WHO Eastern Mediterranean Health Journal.
- Reviewer for the Nutrition and Metabolic Insights.
- Reviewer for University Research Board, American University of Beirut.

Farah Naja

AUB

- Member of the University Wellness committee.
- Member of the FAFS Graduate Studies Committee.
- Member of the FAFS Library Committee.

Others

- Member of the National Nutrition Colloquium Examining Committee.
- Member of the Lebanese Association for Nutrition and Food Sciences.
- Member of Canadian Society for Nutritional Sciences.

Lara Nasreddine

AUB

- Member of the FAFS Academic and Curriculum Committee.
- Member of the FAFS Graduate Studies Committee.
- Member of the FAFS Research Committee.
- Coordinator of the Nutrition and Dietetics Undergraduate Program, AUB.

Others

- Member of the Review Committee appointed by the Ministry of Higher Education for the evaluation of private universities' branches across Lebanon.
- Member of the National Health Committee, Higher Council for Childhood (Ministry of Social Affairs).
- Board Member of the National Nutrition Colloquium Examining Committee
- Member of the National Nutrition Colloquium Examining Committee.
- Preparation of examination questions on various topics in Nutrition and dietetics.
- Examination of students (Oral exams).
- Member of the Lebanese Association for Nutrition and Food Sciences.
- Member of the American Society for Nutrition.
- Member of the Nutrition Society.
- Member of the American Association for the Advancement of Science.
- Professional affiliations
 - Member of the American Society for Nutrition.
 - Member of the Nutrition Society
 - Member of the American Association for the Advancement of Science

Omar Obeid

AUB

- Member of the FAFS Advisory Committee.
- Member of the University IRB committee.
- Member of IBSAR.
- Member of the PhD Task force committee (Biomedical sciences).
- Member of departmental PLO committee.

Others

- Full member at the Nutrition Society, UK.
- Member at the Lebanese Association for Nutrition and Food Science (Executive committee).
- Member of the Advisory Committee for the Arab center of Nutrition.
- Member of the Governmental Colloquium Committee (Dietetic).

- Member of the editorial board: Arab Journal of Food and Nutrition.
- Member of MENANA (Middle East and North Africa Nutrition Association).
- Member of the Nutrition in Emergencies Training Network (NIETN).
- Member of evaluation committee (Ministry of Education).
- Member of the Advisory Committee for the Syrian Diabetic Journal (Diabetic World).
- Reviewer:
 - Eastern Mediterranean Health Journal (EMHJ)
 - Journal of Biological Sciences
 - Journal Ecology of Food and Nutrition
 - Journal of Saudi Society for Food and Nutrition
 - Journal of Applied Physiology
 - Biological Trace Element Research
 - Journal of Saudi Society for Food and Nutrition
 - Public Health Nutrition
 - Food and Function
 - Journal of the Saudi Society for Food & Nutrition
- Evaluated several IRB projects.

Ammar Olabi

AUB

- Chairperson of NFSC Department.
- Member of the FAFS Administrative Committee.
- Member of the FAFS Academic Curriculum Committee.
- FAFS Representative on the Second Tenure Task Force.
- FAFS Representative on the Capital Budget Committee.
- Member of the FAFS Commencement Committee.
- Member of the University Food Services Committee.
- Member of the Food Security and Policy in the Middle East Program.
- Member of IBSAR (Nature Conservation Center for Sustainable Futures).

Others

- Reviewer for the Journal of Food Science.
- Reviewer for the Journal of Dairy Science.

- Member of the Institute of Food Technologists (Sensory and Quality Assurance divisions).
- Member of the American Dairy Science Association.
- Member of the Committee for milk and milk products at the Ministry of Agriculture .
- Member of the Agro Industry Committee at the Ministry of Agriculture.
- Member of the National Codex Alimentarius Committee.

Imad Toufeili

AUB

- Member of the FAFS Advisory Committee.
- Member of the FAFS Admissions Committee.
- Member of the FAFS Graduate Studies Committee.
- Member of the FAFS Commencement Committee.
- Member of the University Commencement Committee.
- Coordinator of Graduate Studies.

Participation in Workshops and Conferences

Mohammad Abiad

- Attended the ENPI – CBCMED Technical Seminar and Partner Search Forum organized by ENPI CBC Med the Joint Managing Authority and the Branch Office in Aqaba. Bristol Hotel, Beirut, Lebanon. June 2011.
- Attended a seminar on Water and Waste Water Treatment. Organized by EMCO in Biel, Beirut, Lebanon. June 2011.
- Attended the Regional Conference of Food Security in the Middle East and North Africa. American University of Beirut, Beirut, Lebanon. June 2011.
- Attended and presented a paper at ENPI – CBCMED Technical Seminar and Partner Search Forum organized by ENPI CBC Med the Joint Managing Authority and the Liaison Office in Valencia, Spain, May 2011.
- Attended the Save Food Congress organized by Messe Düsseldorf in cooperation with the Food and Agriculture Organization (FAO) of the United Nations, Düsseldorf, Germany. May 2011.
- Attended the Workshop on Food Quality and Safety in the Lebanese Industry organized by the Lebanese Ministry of Agriculture in collaboration with the Order of Engineers and Architects, Beirut, Lebanon. April 2011.

- Attended the Symposium on Consumer Protection and Food Safety held at FAFS in collaboration with the Lebanese Ministry of Economics – Consumer Protection. March 2011.
- Attended and presented a Seminar on Food Safety and Packaging: The Hazards, Recalls, and New Strategies. Organized by the Institute of Packaging Professionals (IoPP) at PACK EXPO International, McCormick Place, Chicago, IL, USA. October 2010.

Hala Ghattas

- Attended a training workshop for Institutional Review Board members conducted by the Human Research Protection Program (HRPP) 25-27 October 2010.
- Presented a talk at the Regional conference on "Food Security in the Middle East and North Africa: The Role of Academic and Research Institutions", June 2011.

Nahla Hwalla

- Presented a lecture on “Complementary feeding patterns in different regions” at the Complementary Feeding and NCDs Development WHO Workshop. Brindisi, Italy, June 15-17, 2011.
- Presented at the 18th European Congress on Obesity a paper entitled: “Lifestyle Related Determinants of Obesity and NCDs in MENA Countries”. Istanbul, Turkey May 25–28, 2011.
- Attended the Experimental Biology 2011 Annual Meeting and presented a paper entitled: “Association between Body Fat and Metabolic Abnormalities in Lebanese Children and Adolescents”. Washington, DC, April 9–13, 2011.
- Presented a lecture on “The prevalence of Obesity in Lebanon” at the First Regional Nutrition Conference: Nutrition Challenges in the East Mediterranean Region. Doha, Qatar, March 28-29, 2011.
- Participated in the Second meeting of the WHO Nutrition Guidance Expert Advisory Group (NUGAG) Sub-group on Diet and Health, to provide advice to WHO in updating Nutrition Guidelines. Geneva, March 14 – 17, 2011.
- Presented a lecture on “Childhood obesity in the MENA region” at the Meeting of the Scientific Committee of the international conference on: “Early Life Nutrition in North Africa and the Middle East (MENA) region”. Morocco, Rabbat, January 28-February 2, 2011.
- Invited to present a lecture at the MENA Diabetes Leadership Forum. Dubai, December 2010.
- Invited to attend the Board of Commission on Accreditation for Dietetics Education (CADE) and the CADE Workshop. Boston, USA, November 3-6, 2010.
- Invited to attend the WHO Meeting on 'A Prioritized Research Agenda for Prevention and Control of Non-communicable Diseases, to provide advice to WHO. Geneva, October 20-21, 2010.

Zeina Kassaify

- Presented two seminars at the Wellness Program Event, American University of Beirut, Beirut, Lebanon, December 8 and 9, 2010.
- Presented as a talk at the Arab Beverages Conference ABC 2010, Beirut, Lebanon, October 27 and 28, 2010.

- Presented at the International Conference on Research Trends in Food Safety and Security at the Lebanese American University, Beirut, Lebanon, May 3-5, 2011.
- Gave 3 presentations: Salmonella spp in the meat chain; Listeria monocytogenes in the meat chain; and an overview on the main agricultural and food production of the Mediterranean area with focus on Lebanon at the University of Sassari, Sassari, Italy. February 2, 8 and 9, 2011.
- Presented as a talk in the Symposium on: “Consumer Protection and Food safety” at the FAFS, March 15th, 2011.
- One day course on basic food microbiology to the Lebanese Army safety inspectors. Republican Guards offices, September 5, 2011.
- Supervised 5 days of training on the microbiological analysis procedures at Tanmia Bekaa, Lebanon, August, 2011.
- Gave a seminar on Water and Waste Water Treatment. Organized by EMCO in Biel, Beirut, Lebanon. June 1, 2011.
- Attended a workshop on Food Quality and Safety in Lebanese Industry. Organized by the Ministry of Agriculture in Syndicate of Engineers, Beirut, Lebanon. April 20, 2011.

Farah Naja

- Attended and presented a paper at the Rio International Eating Disorders and Obesity conference 2010. Rio de Janeiro, Brazil. November 19th & 20th, 2010.
- Attended and presented a paper at the "The VIIIth Eastern Mediterranean Regional Scientific Meeting". 25-27 of November 2010.
- Attended and presented a lecture at the Scientific Conference on “Basics of Balanced and Sensible Nutrition”, Organized by OLDWAYS, LANFS and FAFS on April 21, 2011.

Lara Nasreddine

- Attended the CADE Accreditation workshop, Commission on Accreditation for Dietetics Education (CADE), November 5-6 , 2010, Boston, USA.
- Attended the Scientific Writing and Publishing Epidemiological Research Meeting at the Lebanese Epidemiological Association, November 25, 2010, Beirut, Lebanon.
- Attended and presented a lecture at the Scientific Conference on “Basics of Balanced and Sensible Nutrition”, Organized by OLDWAYS, LANFS and FAFS/AUB, 21 April 2011, Beirut, Lebanon.
- Guest speaker on Obesity/Diet/Nutrition for the Graduate course entitled "Epidemiology of Communicable and Non-Communicable Diseases" offered at the Faculty of Health Sciences. March 18, 2011.

- “Essentials of Research Study Design & Analysis” Seminar Series (Clinical Research Institute, in collaboration with the Faculty of Health Sciences).
- Attended the “Research Made Easy: Design & Statistics” Symposium, Clinical Research Institute, held at the Faculty of Medicine, March 26 2011.
- Attended the 18th European Congress on Obesity (ECO 2011), 25-28 May 2011, Istanbul, Turkey.
- Attended the IAEA Technical Meeting on ‘New developments in nuclear techniques in nutrition’ and Consultants’ Meeting on ‘Quality assurance in stable isotope techniques in nutrition’ held at IAEA Headquarters, 26-28 September 2011, Vienna, Austria.

Omar Obeid

- Invited by the FHS to present seminar entitled: Does low energy cause obesity? April 27, 2011.
- Invited by LANFS and Oldways to present a lecture entitled: Hydration physiology at their conference April 21, 2011, Beirut Lebanon.
- Invited as plenary speaker to present a lecture on: Maternal Nutrition at the 4th Arabic Conference of Nutrition organized by the Arab Center for nutrition and Jordanian University. April 5-7, 2011, Amman, Jordan.
- Invited by Sultan Qaboos University as key note speaker at their conference 1st International Medical & Educational Conference for Parents. 13-15th March 2011 Muscat. Oman.
- Invited as plenary speaker to present a lecture on the topic of "Lebanese and Global Experiences in Dietetic Training and Organizing" at the 11th Iranian Nutrition Congress (INC), “Nutrition from cell to society”. Nov 1-4, 2010 in Shiraz. Iran.
- Invited as plenary speaker to present a lecture on the topic of "Lebanese and Global Experiences in Dietetic Training and Organizing" at the 11th Iranian Nutrition Congress (INC), “Nutrition from cell to society”. Nov 1-4, 2010 in Shiraz. Iran.
- Invited by the: Lebanese Osteoporosis Society to present a lecture entitled: Physical Activity, Nutrition and Bone Health at their Musculoskeletal Diseases and Fragility Fractures Congress, Nov 27-28; 2010.

Ammar Olabi

- Chaired a session on “Recent Developments in the Beverages Industry on the Technical and Food Levels” Arab Beverage Conference, October 28, 2010, Chamber of Commerce, Beirut.
- Presented the Qatrah Beverage Product Innovation Competition 2010 at the Gala Dinner Hosted by the Association of Lebanese Industrialists and the Regional Office of the Arab Federation of Food Industries in Lebanon.

- Attended a Workshop on Food Quality and Safety in the Lebanese Industry. Organized by the Lebanese Ministry of Agriculture in collaboration with the Order of Engineers and Architects, Beirut, Lebanon. April 2011.
- Attended a Symposium on Consumer Protection and Food Safety. Organized by the Faculty of Agricultural and Food Sciences, American University of Beirut in collaboration with the Lebanese Ministry of Economics – Consumer Protection. Beirut, Lebanon. March 2011.

Imad Toufeili

- Attended and presented a paper at the 9th Pangborn Sensory Science Symposium, September 4-8, Toronto, Canada.

Consultancies

Mohammad Abiad

- Consulting on US Food and Drug Administration (FDA) compliance for low-acid and acidified canned food. Develop heat penetration profiles and required processing conditions for several products. Sonaco s.a.r.l. – Al-Rabih – Ghefrine, Byblos, Lebanon 2011.
- 3-day workshop and capacity building in implementation of laboratory procedures to understand the effect of different ingredients and processing conditions and parameters on the quality of jams, jellies, marmalades, dairy production, bread making, blanched vegetables and emulsion stabilization for the Lebanese European Agro-Food VTE project, Kab Elias, Lebanon. 2011.
- Consulting on Capacity building in design and implementation of experimental procedures. The main objectives were to design, develop and implement agro-food laboratory scale production procedures to facilitate the understanding of the various roles of key ingredients/parameters in food processing for the Lebanese European Agro-Food Vocational Training and Employment Project. Kab-Elias, Beqaa, Lebanon 2011.
- Consulting on various projects regarding proper packaging material selection and package design. The Lebanese Packaging Center (Liban Pack) Beirut, Lebanon 2010-2011
- Consulting on the Market Access and Compliance for Lebanese Export (MACLE) project regarding packaging, package design and proper material selection for Lebanese products to be able to comply with international regulations and standards and to improve quality as to compete and have access to international markets for the United Nations Industrial Development Organization (UNIDO) – MACLE Project Beirut, Lebanon 2010-2011
- Developed guidelines rules and procedures for the Beverage Innovations and Development Competition for the nonalcoholic beverages industry in the other Arab countries (Qatrah Annual Competition) and served on the judging panel. Qatrah Beverage Innovations and Development Competition. Arab Beverage Association, Beirut, Lebanon 2010-2011.

Zeina Kassaify

- Gave 2-days training on the microbiological analysis procedures at the Doura Flour Mills (DFM), Doura, Lebanon, April 4 and 6, 2011.
- Prepared a report after the microbiological analysis of several potato starch samples from BACH sal. December 2010.
- Finalizing the In-House Food safety Standards for the Lebanese Army (December 2010).

Lara Nasreddine

- Infant and Maternal Nutrition in Rural Lebanon, August 2011, Issam Fares Institute and IFAD.

Omar Obeid

- Consultant for World Health organization (EMRO) in collaboration with Qatar University to present a plenary lecture at the First regional conference of Nutrition: Nutrition Challenges in Eastern Mediterranean region. March 28-29, 211 Doha, Qatar.
- Invited by the Center for International Health and Development (CIHD) (University College London) to evaluate the running of the Nutrition in Emergency training courses and to discuss the collaboration between CIHD and AUB in order to continue running the Nutrition in Emergency training course at AUB (24-26 September 2011).

Ammar Olabi

- Developed guidelines rules and procedures for the Beverage Innovations and Development Competition for the nonalcoholic beverages industry in the other Arab countries (Qatrah Annual Competition) and served on the judging panel. Qatrah Beverage Product Innovation Competition 2011.

Media appearances

Zeina Kassaify

- An Interview about the safety consumer rights on the program “Akhbar l Saba7” Future TV, March 17, 2011.
- An article about the food safety situation in Lebanon in the “AL Rawabet” September 2011, issue 121, pages 28 and 29.
- An interview about the Safety of vegetables on the program “ALIVE” MTV, September 10, 2011.
- Two episodes about Food safety in Lebanon on the program “Kalam l Ness” LBCI. July 14 and July 21, 2011.

- An Interview about the safety consumer rights on the program “Akhbar l Saba7” Future TV, March 17, 2011.

Lara Nasreddine

- Interview with the Al-Safir newspaper: Pesticide residues in the Lebanese diet (publication date 19/10/2010, number 11721).
- Interview with Voice of Lebanon radio station: pesticide residues in the Lebanese diet (October 2010).
- Interview with Al-Nour radio station: pesticide residues in the Lebanese diet (October 2010).
- Press release; Office of Communication, AUB: “AUB study finds that most vegetables and fruits are relatively pesticide free”
(http://www.lebanonfiles.com/news_desc.php?id=208041)
(<http://www.aub.edu.lb/news/archive/preview.php?id=114021>) 29/12/2010.
- Interview with Daily Star which was published as an article entitled Article, Daily Star: “Study: Pesticides in local foods way below hazardous levels”.30/12/2010.
- Interview with Al-Fajr radio station: pesticide residues in the Lebanese diet (30 December 2010).
- Interview with the Al-Safir newspaper: Obesity and its dietary determinants (Friday 22 April, 2011)

Ammar Olabi

- Gave a short television interview about canned foods for the Lebanese Broadcasting Corporation (LBC) Night News (June 10, 2011).

Certificates

Nasreddine Lara

- Certificate of Attendance, Human Research Protection Program Seminar (HRPP), January 10, 2011 (awarded 1.5 Continuing Education HRPP Credits)

Omar Obeid

- Huron training (IRB) 25-28 October 2010

Ammar Olabi

- Arab Beverage Association, Certificate of Recognition, Arab Beverage Conference, October 27-28, 2010.

Strategic Challenges

Students Internships for Food Science & Management Undergraduate Students

The department has taken action to hire a consultant to streamline the process of placement and follow up of the FSMT Junior summer Internship.

Outreach

The department is streamlining the process of providing analytical services for the food industry. Potential services and their prices will be posted on the new NFSC website and will be communicated to potential users.

Program review

The department will be conducting the process of academic review for the Food Science & Management Program and the Food Technology and Nutrition Graduate Programs over the 2011-12 academic year.