



# AMERICAN UNIVERSITY OF BEIRUT



**BULLETIN OF INFORMATION  
1974-1975**

**ANNOUNCEMENTS FOR  
1975-1976**

A. U. B. LIBR.  
Archives & Spec.  
Collections Dept.

# **AMERICAN UNIVERSITY OF BEIRUT**

## **Bulletin of Information, 1974-1975, with announcements for 1975-1976**

(This Bulletin represents a Supplement to the General Catalogue for 1974-1975)

*Address all correspondence regarding admissions to The Registrar,  
American University of Beirut, Beirut, Lebanon.*

## CONTENTS

CALENDAR 1975-76.....	4
BOARD OF TRUSTEES .....	6
UNIVERSITY ADMINISTRATION 1974-75 .....	7
INTRODUCTION .....	10
ACADEMIC SERVICES .....	11
ADMISSIONS.....	12
STUDENT LIFE .....	17
FEES AND EXPENSES.....	19
FACULTY OF ARTS AND SCIENCES.....	25
Faculty List 1974-1975 .....	26
General Information .....	34
Courses.....	39
Institutes, Centers and Special Programs .....	59
FACULTIES OF MEDICAL SCIENCES .....	63
SCHOOL OF MEDICINE .....	65
Faculty List 1974-1975 .....	66
General Information .....	72
Curriculum .....	75
SCHOOL OF PHARMACY.....	77
Faculty List 1974-1975 .....	78
General Information .....	79
Curriculum .....	81
SCHOOL OF NURSING .....	83
Faculty List 1974-1975 .....	84
General Information .....	85
Curricula .....	87
SCHOOL OF PUBLIC HEALTH.....	91
Faculty List 1974-1975 .....	92
General Information .....	94
FACULTY OF ENGINEERING AND ARCHITECTURE .....	97
Faculty List 1974-1975 .....	98
General Information .....	100
Curricula and Courses .....	101

<b>FACULTY OF AGRICULTURAL SCIENCES</b> .....	111
Faculty List 1974-1975 .....	112
General Information .....	114
<b>GRADUATE STUDY</b> .....	119
<b>DIVISION OF EXTENSION AND SPECIAL PROGRAMS</b> .....	125
<b>STUDENTS 1974-1975</b> .....	128

# CALENDAR 1975-1976

## 1 9 7 5

March	31	Mon.		Last day for submitting applications for undergraduate study.
May	2	Fri.		Last day for submitting graduate applications for summer and fall sessions.
June	13	Fri.	9:00 a.m.	Medicine IV and V first semester registration.
June	15	Sun.	8:00 a.m.	Medicine IV and V classes begin.
Aug.	29	Fri.	9:00 a.m.	Medicine III first semester registration.
Sept.	1	Mon.	8:00 a.m.	Medicine III classes begin.
Sept.	12	Fri.	9:00 a.m.	Medicine II first semester registration.
Sept.	15	Mon.	8:00 a.m.	Medicine II first semester classes begin.
** Sept.	16-20			Competency, Placement and Exemption Examinations.
Sept.	22	Mon.	8:00 a.m.	Make-up course examinations of the academic year 1974-1975.
Sept.	22	Mon.	8:15 a.m.	First semester preliminary registration begins.
Sept.	25	Thu.	8:15 a.m.	First semester final registration begins.
Sept.	29	Mon.	5:00 p.m.	First semester preliminary registration ends.
Oct.	1	Wed.	5:00 p.m.	First semester final registration ends.
Oct.	2	Thu.	8:00 a.m.	First semester classes begin.
* Oct.	7, 8	Tue., Wed.		Id al-Fitr, holiday.
** Nov.	10-14			Competency, Placement and Exemption Examinations.
Nov.	22	Sat.		Lebanese National Day, holiday.
° Dec.	3	Wed.		Founder's Day. Not a University holiday.
Dec.	10	Wed.		Last day for submitting graduate applications, for the second semester of the current academic year.
* Dec.	15-16	Mon., Tue.		Al-Adha, holiday.
Dec.	23	Tue.	10:00 p.m.	Christmas vacation begins.

## 1 9 7 6

* Jan.	3	Sat.		Moslem New Year, holiday.
Jan.	4	Sun.	10:00 p.m.	Christmas vacation ends.
** Jan.	5-9			Competency, Placement and Exemption Examinations.
Jan.	6	Tue.		Armenian Christmas. Armenians are allowed excused absences. No examinations or quizzes will be scheduled on this day.
Jan.	9	Fri.	10:00 p.m.	Medicine II first semester classes end.
Jan.	12	Mon.	8:00 a.m.	Medicine II first semester examinations begin.
* Jan.	12	Mon.		Ashoura, holiday.
Jan.	17	Sat.	10:00 p.m.	Medicine II first semester examinations end.
Jan.	22	Thu.	10:00 p.m.	First semester classes end.
Jan.	23	Fri.	8:00 a.m.	First semester reading period begins.
Jan.	26	Mon.	8:00 a.m.	Medicine II second semester classes begin.
Jan.	26-29			Second semester registration for students attending the University during the first semester.
Jan.	26	Mon.	8:15 a.m.	Graduate all Faculties.
Jan.	27	Tue.	8:15 a.m.	Arts and Sciences Seniors, Juniors and X-Rays.
Jan.	28	Wed.	8:15 a.m.	Arts and Sciences Sophomores, Freshmen, Special Orientation Program and Agriculture.
Jan.	29	Thu.	8:15 a.m.	Medicine (except Medicine V), Pharmacy, Nursing, Public Health, Engineering and Architecture.
Jan.	29	Thu.	10:00 p.m.	First semester reading period ends.

Jan.	30	Fri.	8:00 a.m.	First semester examinations begin.
Feb.	5	Thu.	10:00 p.m.	First semester examinations end.
Feb.	9	Mon.		St. Marun's Day. Maronites are allowed excused absences.
Feb.	9	Mon.	8:00 a.m.	Second semester classes begin.
** March	8-12			Competency, Placement and Exemption Examinations.
* March	13	Sat.		Prophet's Birthday, holiday.
March	22	Mon.		Arab League Day, holiday.
April	15	Thu.	10:00 p.m.	Easter Vacation begins.
April	26	Mon.	10:00 p.m.	Easter Vacation ends.
May	1	Sat.		Labor Day, holiday.
May	6	Thu.		Martyr's Day, holiday.
** May	10-14			Competency, Placement and Exemption Examinations.
May	22	Sat.	1:00 p.m.	Medicine II second semester classes end.
May	24	Mon.	8:00 a.m.	Medicine II second semester examinations begin.
May	29	Sat.	1:00 p.m.	Medicine II second semester examinations end.
May	29	Sat.	1:00 p.m.	Second semester classes end.
May	31	Mon.	10:00 p.m.	Medicine III classes end.
May	31	Mon.		Second semester reading period begins.
June	1	Tue.	8:00 a.m.	Medicine III final examinations begin.
June	3	Thu.	8:15 a.m.	Summer session registration for Agricultural Sciences; Engineering and Architecture; Pharmacy, Practical Experience.
June	5	Sat.	1:00 p.m.	Medicine III final examinations end.
June	5	Sat.	1:00 p.m.	Second semester reading period ends.
June	7	Mon.	8:00 a.m.	Second semester examinations begin.
June	13, 14	(Approximately)		Medicine II National Board Part I examination.
June	14	Mon.	10:00 p.m.	Medicine IV and V classes end.
June	15	Tue.	10:00 p.m.	Second semester examinations end.
June	20	Sun.	7:00 p.m.	Baccalaureate Service.
June	21	Mon.	6:30 p.m.	Commencement.
June	21	Mon.	8:00 a.m.	Summer Session begins for Agricultural Sciences; Engineering and Architecture; Pharmacy, Practical Experience.
June	24, 25	Thu., Fri.	8:15 a.m.	Summer Session registration for Arts and Sciences; Medicine Graduate and Special; Pharmacy Graduate and Special; Nursing; Public Health.
June	28	Mon.	8:00 a.m.	Summer Session begins for Arts and Sciences; Medicine Graduate and Special; Pharmacy Graduate and Special; Nursing; Public Health.
** July	19-23			Competency, Placement and Exemption Examinations.
Aug.	16-21			Reading Period and examinations for Arts and Sciences.
Aug.	21	Sat.	1:00 p.m.	Summer Session ends, except for Pharmacy, Practical Experience.
Sept.	11	Sat.	1:00 p.m.	Summer Session ends for Pharmacy, Practical Experience.
** Sept.	13-17			Competency, Placement and Exemption Examinations.
** Nov.	15-19			Competency, Placement and Exemption Examinations.

\* The University, which was known up to November 18, 1920, as the Syrian Protestant College, opened its first class on December 3, 1866. Classes will be held on Founder's Day as it is not a holiday.

\*\* Id al-Fitr, al-Adha, Moslem New Year, Prophet's Birthday, and Ashoura are determined after seeing the moon and because of that the actual dates may not coincide with the dates in this calendar. The holiday will be the first two teaching days of the feast as declared for Id al-Fitr and al-Adha, and the first teaching day for the Prophet's Birthday and Ashoura.

\*\* Exact schedule can be obtained from the Office of Tests and Measurements.

## **BOARD OF TRUSTEES**

Howard W. Page, *Chairman*  
Parker T. Hart, *Vice Chairman*  
Orville G. Bentley  
Harvey Cash  
Alfred C. DeCrane, Jr.  
David S. Dodge  
Mrs. Shirley C. Fisk  
Abdulla Youssef Al-Ghanem  
Najeeb E. Halaby  
Helge Holst  
Alfred H. Howell  
Nicola N. Khuri  
Samuel B. Kirkwood, M.D.  
Donald C. Platten  
Calvin H. Plimpton, M.D.  
James B. Pritchard  
Farid Sa'd  
Mrs. Fuad Es-Said  
Shukri H. Shammas  
William H. Shehadi, M.D.  
Yousuf A. Shirawi  
Mrs. Frank R. Smith  
Hamilton Southworth, M.D.  
Mrs. Philip F. Wagley  
Samuel H. Woolley

### **Trustees Emeriti**

Najib Alamuddin  
George P. Berry, M.D.  
Daniel Bliss  
B.D. Eddie  
Mark F. Ethridge  
Ralph Gwin Follis  
Alexander Frazer  
Mrs. David W. Gaiser  
Alfred H. Hauser  
Philip K. Hitti  
Harold B. Hoskins  
David A. Shepard  
Rudger H. Walker  
John A. Wilson



## UNIVERSITY ADMINISTRATION 1974-1975

### Office of the President

Samuel B. Kirkwood, M.D., D.Sc., (Hon.), LL.D., *President*.  
 Elizabeth S. Troeller, *Administrative Assistant and Secretary to the President*.  
 Joseph E. Gill, M.S., *Manager, Special Construction Project*.

### New York Office

380 Madison Ave., New York, New York 10017

William F. Rice, M.Litt., *Vice President and Secretary of the Corporation*.  
 Mary Bajada, *Secretary of the Board and Assistant Director of N.Y. Office*.  
 William I. Brockman, B.A., *Director of Development*.  
 Rodney F. Julian, M.A., *Development Assistant*.  
 Richard Schaplowsky, B.A., *Director of Communications*.

### Office of the Vice President for Public Relations and Development

George Hakim, M.A., Licencié en Droit, LL.D., *Vice President*.  
 Arthur Whitman, Jr., B.A., *Director of Development and Public Relations*.  
 Nazih Zeidan, M.A., *Assistant Director of Development—Acting Director of Placement Services and Alumni Affairs*.  
 Sadik al-As'ad, B.B.A., *Development List Coordinator*.  
 Zahi Khuri, M.A., *Director of University Publications*.  
 Suha Tuqan, M.A., *Editor, University Publications*.  
 Radwan A. Mawlawi, M.S., *Director of Information*.  
 George Salhab, *Editor, AUB Bulletin*.

### Administration

John E. Gill, Col. USAF (Ret.), *Director of Operations*.

### Business Services

Herbert K. Ruetzel, *Director*.  
 Fahim Haddad, *Administrative Assistant*.  
 Alfred Haik, B.B.A., *Purchasing*.  
 Francis Saqr, *Supply Manager*.  
 Naji Ghusn, *Bookstore*.

### Comptroller's Office

Donald J. Meyer, B.B.A., *Comptroller*.  
 Ernest E. Conklin, B.S., C.P.A., *Deputy Comptroller*.  
 Frederick J. Mallak, B.B.A., *Assistant Comptroller*.  
 Cecil Kirkis, B.A., *Director of the Computer Center*.

### Housing

John Saba, *Director*.

### Internal Audit

Frederick Posteher, B.S., *Internal Auditor*.

### Budgeting

Samir Toubassy, B.B.A., *Director*.

### **Personnel**

George E. Sayegh, B.A., *Director.*  
Joy N. Abu-Jawdeh, B.A., *Assistant Director and Training Officer.*  
Suhail Humsi, M.A., *Benefits Coordinator.*  
Afif Saghiri, S.C.C.Cert., *Chief, Office of Protection.*

### **Physical Plant**

Roger W. Chehire, B.M.E., *Director.*  
Izzat Sema'an, Dipl. Ing. Civil, ESIB, *Chief, Operations and Maintenance.*  
Emile Takla, B.S.C.E., *Chief, Planning and Programming.*  
Richard Mishalani, B.S.C.E., *Chief, Engineering and Construction.*  
Emile Jeha, B.S.M.E., *Medical Center Plant Engineer.*  
Fawzi Saba, M.S.M.E., *Campus Plant Engineer.*  
Ara Balian, B.S.M.E., *Phase III Plant Engineer.*  
Artin Magarian, M.S. (E.E.), *Electrical and Power Engineer.*

### **University Safety Center**

Azmi Imad, M.S., Member A.S.S.E., *Director and University Health Physicist.*

### **University Attorneys**

Siksek, Hanna, Abboud and Associates.  
Raymond Harfouche, M.C.L., *Resident Attorney.*

### **Faculty of Arts and Sciences**

Elie Salem, Ph.D., *Dean.*  
Edmund Shahla, *Executive Officer.*  
Michel Shamma'a, M.A., *Academic Student Advisor.*

### **Faculties of Medical Sciences**

Craig S. Lichtenwalner, M.D., M.P.H., *Dean.*  
Samuel P. Asper, M.D., *Dean of the School of Medicine and Chief of Staff of the University Hospital.*  
Raif E. Nassif, M.D., M.P.H., *Director of the School of Medicine.*  
Adel K. Afifi, M.D., M.S., *Assistant Director of the School of Medicine.*  
Amin F. Haddad, M.S., Ph.C., *Director of the School of Pharmacy.*  
Esther Moyer, M.A., *Director of the School of Nursing.*  
John Edeson, A.R.C.Sc., M.D., *Acting Director of the School of Public Health.*  
David Egee, M.S.H.A., *Director of the University Hospital.*  
Munthir Kuzayli, M.S.H.A., *Assistant Director of the University Hospital.*  
Salam Rayess, M.S.H.A., *Assistant Director of the University Hospital.*  
Nabil Nassar, M.D., *Director of the University Health Service.*

### **Faculty of Engineering and Architecture**

Raymond S. Ghosn, M.S., M.Arch., *Dean.*  
Robert W. Sloane, Ph.D., *Assistant Dean.*

### **Faculty of Agricultural Sciences**

James W. Cowan, Ph.D., *Dean.*  
Joseph Khashadurian, *Superintendent, Agricultural Research and Education Center.*

**Office of the Provost**

Samir K. Thabet, Ph.D., *Provost.*

**Office of the Registrar**

Fuad S. Haddad, Ph.D., *Registrar.*

Emile Rubeiz, B.A., *Associate Registrar.*

Nabeel G. Ashkar, B.B.A., *Assistant Registrar.*

Edward Mazloun, B.A., *Assistant Registrar.*

**University Chapel**

Robert C. Walker, Jr., B.D., M.A., *University Chaplain.*

**University Museum**

Dimitri C. Baramki, Ph.D., *Curator of Museums.*

**Student Affairs**

Robert E. Najemy, M.S.W., *Dean of Students.*

Hind Hoshi Musa, M.A., *Acting Dean of Women.*

Nedko Etinoff, Th.B., *Activities Director.*

Labib Butrus, Ph.D., *Director of Athletics.*

**Counseling**

Levon H. Melikian, Ph.D., *University Counselor.*

**Bursaries and Extension Programs**

Louis P. Cajoleas, Ph.D., *Director.*

Gladys Sabaali, B.B.A., *Assistant Director (Bursaries).*

**Tests and Measurements**

Louis Durr, M.S., *Acting Director.*

George Miller, M.E., *Assistant Director.*

**University Libraries**

Ritchie D. Thomas, M.S.L.S., *University Librarian.*

Nancy C. Assaf, M.A., *Assistant University Librarian, Technical Services.*

Peter C. Kilburn, M.L.S., *Chief Acquisitions Librarian.*

Helen Bikhazi, B.A., A.L.A., *Acquisitions Librarian.*

Nora S. Copeland, M.L.S., *Chief Catalog Librarian.*

Leila V. Fuleihan, M.L.S., *Catalog Librarian.*

Aida Naaman, M.A.L.S., *Engineering Librarian.*

Leila M. Freije, M.L.S., *Chief Serials Librarian.*

Ardag Meghdessian, Dip.Sup.Bibl., *Serials Librarian.*

Robert M. Copeland, M.A., *Assistant University Librarian, Readers' Services.*

Yusuf K. Houry, Ph.D., M.L.S., *Chief Reference Librarian.*

Nawal Naamani, M.A., *Reference Librarian.*

Mildred A. Corsette, B.S., *Chief Documents Librarian.*

Lucy Yusuf, M.L.S., *Chief Circulation Librarian.*

Lilian J. Vitale, M.S., *Science and Agriculture Librarian.*

Leila Hanhan, M.L.S., *Acting Medical Librarian.*

**University Observatory**

Frans Bruin, Ph.D., *Director.*

## **INTRODUCTION**

### **Foreword**

The American University of Beirut (AUB) is a private, non-sectarian institution of higher learning, founded in 1866, which functions under a charter from the State of New York. It is administered by a private autonomous Board of Trustees.

The University has four Faculties: the Faculty of Arts and Sciences; the Faculties of Medical Sciences; the Faculty of Engineering and Architecture; and the Faculty of Agricultural Sciences. Degrees are granted under authority of the Board of Regents of the State University of New York. The institution is co-educational and women are admitted to all schools. The language of instruction is English.

The University presents a program in international education which is unique among the universities of the world. The students, numbering 4823 in the first semester of 1974-1975, come from 72 countries. Over 80% of the students are from the Arab countries of the Middle East and North Africa. 63% of the faculty are from the Middle East, 16% from the United States and Canada, and 21% from other countries. The cosmopolitan campus and classrooms of AUB provide a living laboratory where students of many lands meet during the most formative period in their lives to learn how to work together in a spirit of mutual understanding. The educational philosophy of AUB is similar to that of an American university, but its program is adapted to the particular needs and educational demands of the Middle East.

### **Statement of Policy**

The purpose of the American University of Beirut, as an institution of higher learning, is to share in the education of the youth of the Middle East, in the service of its peoples, and in the advancement of knowledge.

The University emphasizes scholarship which enables students to think for themselves. It stresses high academic standards and high principles of character. It aims to produce men and women who not only are technically competent in their professional fields but who also have breadth of vision, a sense of civic and moral responsibility, and devotion to the fundamental values of human life. In its service to students, the University strives to realize the ideal of its motto: "That they may have life and have it more abundantly."

The University stands for high academic standards. Its diplomas are recognized internationally; and in order that they may continue to be so recognized, they must be based upon satisfactory completion of the full requirements set forth in the University catalogue.

The University has been dedicated since its foundation, and continues to be dedicated, to the cultivation of high ethical, moral, and spiritual values.

The University believes in and encourages freedom of thought and expression. It expects, however, that this freedom be enjoyed in a spirit of integrity and with a full sense of responsibility.

The University believes that every member of its community—students, faculty, staff, administration—has the right to individual self-expression; it has not taken, and will never take, any action to infringe the proper exercise of this right. It must

insist, however, that inherent in this right is an obligation: the obligation of everyone to give his colleagues the same right. Each has the right of peaceful dissent, but no one has the right to prevent those who disagree with him from pursuing their proper activities.

All members of the University—students, faculty, staff, administration—are expected to conduct themselves in accordance with the spirit of this declaration of policy, the regulations of the University, and the Laws of the Republic of Lebanon, whose hospitality gives the institution the privilege of carrying out its educational activities within the framework of academic freedom.

## **ACADEMIC SERVICES**

*The University Library System* consists of the Central Jafet Memorial Library, the Medical Library, the Science and Agriculture Library, the Engineering and Architecture Library and the Farm Library.

*The University Museum*, in Post Hall, brings together distinctively Near Eastern archaeological collections, which are arranged with a view to their educational use for students and scholars in the archaeology of the Near East. The geological collection is displayed in the same building.

*The University Observatory*, founded in 1874, is equipped with a Brashear 12-inch equatorial refractor telescope and a transit instrument. The Observatory has served as a meteorological station since its founding, and publishes its data each month.

*The University Computer Center*, which began operation in 1964, is equipped with a full range of unit record equipment as well as two computer systems; an IBM-370-125 and a Data General Nova 1220 (for hospital patient accounting). The equipment and a trained supporting staff are available for academic, research and administrative data processing.

The IBM-370-125 has 128K of main storage, 4 disk drives (275 million bytes on line), two magnetic tape units (800/1600 bytes per inch, 9 track), 1200 LPM printer, card reader and punch and operates under the DOS/VS Power VS system.

*The Office of Tests and Measurements* is in charge of examinations concerned with entrance, aptitude or placement. Representatives of this Office, in addition to their work of test creation, refinement and administration for AUB, serve as consultants to several educational and commercial institutions in the Middle East in the development and administration of their own testing programs. The Office makes extensive use of the Computer Center.

*The University Hospital*, containing 420 beds, was opened in 1970. More than 100,000 patients per year are cared for in the Hospital and its related Outpatient Clinics and Emergency Room. A medical staff of 150 highly qualified physicians, assisted by 900 professional and auxiliary personnel and aided by the latest scientific equipment, provides a broad spectrum of health care. The Hospital, which is accredited by the Joint Commission on Accreditation of Hospitals in the United States, is the major teaching facility of the Faculty of Medical Sciences.

## **ADMISSIONS — 1975-1976**

The following paragraphs contain a simplified general statement about the regulations of this University governing admission of students to its various Faculties and Schools. A full statement of regulations governing specific diplomas or certificates and conditions of their recognition is found on pages 14-30 of the University Catalogue for 1974-1975 or the special pamphlet on Admissions published by the Registrar's Office for 1974-1975.

Candidates who are interested in entering the University during the academic year 1975-1976 are advised to study the full statement referred to above.

### **I. GENERAL STATEMENT**

The American University of Beirut is a private institution with limited facilities. Its emphasis is on quality education. For these reasons the University is unable to admit every candidate who applies, even though he may have fulfilled the minimum requirements for admission. Certain measures for selecting the most promising students from among the candidates who apply are thus deemed necessary.

Instruction is conducted through the medium of the English language. For this reason, command of the English language, both oral and written, is fundamental to the student's ability to study successfully at the University. Correspondence courses are not offered by the University. Regular attendance at classes, lectures, laboratory sessions and seminars is essential to qualify the student for any degree granted by the University.

The University is co-educational. Men and women are admitted to all its schools on equal basis.

### **II. MAJOR CRITERIA FOR ADMISSION**

Eligibility for admission is based upon the following criteria:

*A. An approved academic record, covering the last three years of the candidate's education prior to his application for admission.*

*B. The results which the candidate attains on the official or semi-official, terminal secondary school examination of his country.*

*C. Evidence of good health as revealed by a physical examination conducted at the University Health Center.*

*D. Evidence of sound moral character provided by the principal of his school.*

Children of the alumni of the University or of members of its staff and faculty are accorded special consideration in selection for admission. By special action of the appropriate committee of each school, a very limited number of promising candidates who do not fulfil all the admission criteria listed above may be selected, as hardship cases.

---

1. In the case of Lebanese students, a tentative decision is made on their eligibility for admission, before the final results of the Baccalaureate Examination, part II are announced.

### III. ADMINISTRATION OF ADMISSION AND SELECTION:

The selection of applicants for admission is the responsibility of the admissions committees of the various Faculties or Schools and the Admissions Section of the Registrar's Office. A special folder is prepared by the Admissions Section which should contain the following documents:

- An application form properly filled out by the candidate.
- A copy of his diploma and/or official certificate.
- A report of the applicant's grades over the last three years prior to his graduation.
- Recommendations from his school principal.
- Results of the University English Entrance Examination or its equivalent.
- Results of any other examination or examinations which the University might require.
- A photocopy of his/her identity card or passport.
- One passport-size picture.

The Admissions Section of the Registrar's Office will supply new students with application blanks upon request. An application for undergraduate study, properly filled out, must be received by March 31st. Applications for graduate work must be received by the Admissions Section of the Registrar's Office not later than May 1, for applicants who desire to begin their studies in October; and not later than December 31 for students who wish to enter during the second semester. All applications must be accompanied by a fee of 25 pounds Lebanese or equivalent currencies. *This fee is not refundable.*

## Requirements for Admission

A. *General Requirements:* The following are in all cases minimum requirements demanded by the University. Their fulfillment by any candidate does not automatically insure his selection and admission. Candidates are finally selected, up to the limits of available space, from the most promising eligible applicants.

### 1. Admission to the Freshman Class and First Year B.S. degree in Nursing.

In general, non-Lebanese applicants who hold the official secondary certificate of their respective countries, are eligible for admission to the Freshman class, provided that they pass the University entrance examination in English or its recognized equivalent.<sup>1</sup>

Subject to conditions specified on pages 21-23 of the University Catalogue for 1974-1975, non-Lebanese applicants who hold semi-official certificates, such as the General Certificate of Education (University of London G.C.E. and Oxford-Cambridge Certificate G.C.E.) are admitted to the Freshman Class or First Year of the B.S. degree in Nursing.

---

1. Information about all entrance examinations to the University may be obtained from the Office of Tests and Measurements, American University of Beirut, Beirut, Lebanon.

## **2. Admission to Sophomore Class, First Year Agriculture, Engineering and Architecture, Public Health, and Second Year of the B.S. Program in Nursing.**

Lebanese candidates are admitted only on the basis of the Lebanese Baccalaureate, part II, or its equivalent as recognized by the Lebanese Government; provided such candidates meet the special entrance requirements specified on pages 24-25 of the current catalogue for 1974-1975, or in the special pamphlet on admissions issued by the Registrar's Office.

Most of the official certificates that are recognized by the Lebanese Government, however, are recognized by the University as qualifying their holders for admission to the Freshman Class. Holders of such certificates may also qualify for admission to the Sophomore Class only after passing the full entrance examination to that Class.

## **3. Admission to Advanced Standing**

Admission to advanced standing is accomplished on the basis of credentials from accredited institutions of higher learning or of recognized junior colleges. Generally speaking each case is considered on its own merits. Holders of such credentials are advised to correspond with the Admissions Section of the Registrar's Office and refer to pages 25-28 of the University Catalogue for 1974-1975 or to the special pamphlet on admissions prepared by the Registrar's Office, for more detailed information on how they can gain admission on the basis of their credentials.

## **4. Admission to the School of Medicine**

To be eligible for admission to the School of Medicine, a student must have completed the required premedical educational program of this University, or its recognized equivalent, as explained on page 28 of the University Catalogue for 1974-1975. In view of the limited places in the School of Medicine of this University, candidates from outside the Middle East are admitted to this school only under exceptional circumstances.

## **5. Admission to Graduate Work**

To be eligible for admission to graduate work, a student must hold a university degree, and must have obtained an acceptable average in his intended field of graduate work. For detailed information, please refer to pages 261-63 of the University Catalogue for 1974-1975.

## **6. Admission to Non-Degree and Other Special Programs**

Information of requirements for such programs, a candidate is advised to correspond with the Director of Extension and Special Programs.

## **7. English Language Examination**

Candidates must demonstrate a level of English proficiency consistent with the demands of a program conducted almost exclusively in the English language. This is ascertained by means of an English language examination conducted by this University or its approved equivalent as explained in the University Catalogue for 1974-1975 or in the special pamphlet on Admissions 1974-1975.



**AUB ENTRANCE EXAMINATION RESULTS**

(Interpretation Guide for 1975-76)

**A. Arts and Sciences**

1. For Entrance to Freshman Arts by full entrance examinations, the scores must be:

ENGLISH	500 or above.
MATHEMATICS	375 or above.
SCIENCES	375 or above.
SOCIAL SCIENCES	450 or above.

The average of the above four examinations must be 450 or above.

ARABIC	500 or above.
--------	---------------

(Scores between 400-499 are required to take Arabic 43)

2. For Entrance to Freshman Arts or Freshman Sciences  
by full entrance examinations:

ENGLISH	500 or above.
MATHEMATICS	375 or above.
SCIENCES	375 or above.
SOCIAL SCIENCES	375 or above.

MSA (Average of Maths, and Sciences) 460 or above.

Average of all four examinations must be 450 or above.

ARABIC	500 or above.
--------	---------------

(Scores between 400-499 are required to take Arabic 43)

3. For Entrance to Classes above Freshman Level:

1. ENGLISH 575 or above.

NOTE: a. Those scoring between 500 and 574 inclusive will, if admitted to Sophomore, be required to take English 134.

b. Those scoring between 500 and 574 inclusive will, if admitted to Graduate work, be required to take English 202.

c. Those entering TEFL (Teaching English as a Foreign Language) must have a score of 600 or above. (Those scoring 550-599 must take English 202).

2. OTHER LANGUAGES at least 500.

3. ALL OTHER SUBJECTS at least 400.

NOTE: a. Students who are required to take any Sophomore subjects to complete necessary requirements do not have to sit for Freshman Science Entrance examination (except for Nursing).

b. Students who have to take the Sophomore history examinations to complete necessary requirements do not have to sit for the Freshman Social Science entrance examination.

**B. Nursing**

1. For entrance to the Degree Program:

- a. ENGLISH First Year 500 or above.  
Second Year 575 or above.

- b. SCIENCE First Year 400 or above.
- 2. For entrance to the Post Basic Nursing: English must be 450 or above.

**C. Public Health**

- 1. For entrance to the Certificate Program:  
ENGLISH 400 or above.
- 2. For entrance to the Diploma Program:  
ENGLISH 500 or above.
- 3. For entrance to the Graduate (MPH):  
ENGLISH 500 or above.
- 4. For entrance to all other Graduate Programs:  
ENGLISH 575 or above.

## **STUDENT LIFE**

### **STATEMENT OF POLICY FOR STUDENTS**

In associating himself with this University, an action which is purely voluntary, the student must accept that by freedom of choice he imposes upon himself the standards, the rules and the conditions established by the legally constituted authority of the University. Thus, any student may withdraw from the University whenever he considers the obligations assumed upon enrollment inconsistent with his expectations. Coexistent with this principle must be the acceptance of the right of the University, upon evidence of the student's inability to abide by its regulations, to insist upon his withdrawal and/or refuse his readmission.

### **OFFICE OF STUDENT AFFAIRS**

Through its Office of Student Affairs, the University directs, guides, and encourages a number of activities and services to complement the academic work of the student and to provide an enriching cultural, physical, social and morally uplifting environment. This is accomplished through student societies, counseling, athletics and recreational services.

### **STUDENT HOUSING**

#### **Residence on Campus**

There are seven modern buildings of the dormitory type, capable of accommodating over 1000 students. The men's dormitories are situated in the southwestern corner of the campus, the women's dormitories in the northeastern corner. The system of accommodation is that of two students sharing a room, with some exceptions (private and triple bed rooms).

On campus accommodations include sheets, blankets, and towels. Linens are changed weekly, rooms are cleaned daily. Toilets and shower rooms serve about 10 persons in each section.

Head residents and student assistants are always available to attend to any irregularities or reasonable needs of occupants.

#### **Compulsory on Campus Living**

The University reserves the right to require that certain levels of students live in University-sponsored residences. Therefore, the University issues the following conditions:

- (1) All University Orientation Program (UOP) students whose parents are not permanent residents of Beirut and its immediate suburbs, are required to live on campus.
- (2) All Freshmen students whose parents are not permanent residents of Beirut and its immediate suburbs, are required to live on campus.
- (3) All Sophomore students who have not been residents of the University dormitories in the previous year, and whose parents are not permanent residents of Beirut and its immediate suburbs, are required to live on campus.

- (4) All other students who are under a sponsorship program or agreement between the University and their parents or guardians, whereby on campus living is compulsory, are required to live on campus.

### **Optional On-Campus Living**

Students who are not required to live on campus but still have the desire, may do so by submitting the proper application forms in time.

### **Arrangements for On-Campus Housing**

All arrangements for living in University-sponsored dormitories are made through the Office of Student Affairs.

*New Students* are sent application forms at the same time that they receive word of provisional acceptance in the University. The application form will give all necessary information.

*Old Students* may make reservations for the following year by completion of the necessary forms at the Office of Student Affairs.

*No student should assume that housing arrangements have been made for him without some action or knowledge on his part.*

### **MEDICAL CARE**

The University Health Service (UHS), at the Gulbenkian Infirmary on campus, provides medical care to members of the University Community at large who hold HIP (Hospital Insurance Plan) memberships. Patients are seen daily at the Health Service by appointment made at the reception desk in advance, either by calling in person or by telephone during the regular hours 8 a.m.-12 noon and 2-5 p.m. A physician is available daily to receive patients on "walk in basis"; these patients must have problems of an *urgent* nature, otherwise they will be given a return appointment for a later time. In case of *emergency* the patient should report directly to the Emergency Unit at the Medical Center or to the nearest emergency service or physician.

### **FINANCIAL AID TO STUDENTS**

#### **University Assistance**

Opportunities for financial assistance to needy and qualified students are available in the form of scholarship grants, scholarship loans, work grants-in-aid, graduate assistantships, student employment and emergency loans. Except for emergency loans all such assistance is available only by application and under certain regulations. A list of University scholarships is found on pages 35-39 of the General Catalogue for 1974-1975.

## FEES AND EXPENSES, 1974-1975\*

The American University of Beirut is a non-profit institution. The tuition fee and other charges which each student pays represent approximately 30% of the full cost of the student's education. The remaining 70% is provided by income from the University Endowment Fund, gifts and grants from foundations and corporations interested in the higher education of the youth of the Middle East, and gifts from alumni and friends of the University throughout the world. Some programs, including the University Orientation Program, are at the full cost of education for bursary/ sponsored students; these fees are established annually by the University and are available in the Bursary Students Office. However, the charge to students is kept at the lowest possible minimum consistent with high quality instruction and adequate facilities and equipment.

*Universities everywhere are facing financial problems because of the rising costs of higher education. THE UNIVERSITY RESERVES THE RIGHT TO CHANGE ANY OR ALL FEES AT ANY TIME WITHOUT PRIOR NOTICE. Such changes will be applicable to students currently registered in the University as well as to new students.*

*Students will not be permitted to enter classes at the beginning of the term until their fees are paid or special arrangements have been made with the University Comptroller.*

*All fees are quoted in Lebanese pounds. U.S.\$1.00 is approximately equivalent to L.Leb.2.20.*

**Entrance Examination Fees.** The fee for each separate examination is L.Leb.15, and this fee is entirely separate from the University Applications Fee of L.Leb.25 which is paid to the Office of the Registrar at the time of application. Examination fees are paid to the Office of Tests and Measurements at the time the candidate arranges to take entrance examinations. Examination fees should be paid not later than one week before the examination date. A penalty fee of L.Leb.10 per examination is required when late examination fees are accepted, but it is not always possible to accept late examination applications.

**Deposit.** A general deposit of L.Leb.100 is required initially of every student enrolling in AUB. This deposit is held until the student graduates or discontinues his course of study, at which time the deposit, less any indebtedness, will be returned.

**Tuition Fees.** The following tables give tuition fees for each semester and for the summer session, by Faculties and Schools. These fees cover tuition, and the formal service and graduation fees. *They do not cover* fees for special services, books, supplies, athletic equipment, bedding, board or room.

**Hospitalization Insurance Fees.** The Hospitalization Insurance Plan fee for students is separate from the tuition fee. All students are required to enroll in the Hospitalization Insurance Plan.\* The fee for 12 months beginning in October is L.Leb.58, for one semester and one summer session beginning in February, L.Leb.43; and for one summer session, L.Leb.29. A married student will have the option of including his spouse and children at additional fees as outlined in the

---

\* A student may be exempted from enrolling if he presents proof of coverage in another plan.

Regulations for the Hospitalization Insurance Plan. The Hospitalization Insurance Plan Fee for Nursing Diploma students is paid by the University.

**Residence Fees.** The residence fee depends upon the type of room the candidate desires. For men students it is normally L.Leb.600 per semester. For women students it is L.Leb.530 or 675 per semester. Nursing Diploma students receive free laundry of uniforms and the privilege of living in University housing during their senior year.

**Food Service Costs.** The cost of food per semester for students using the University's self-service cafeteria and restaurant facilities ranges from L.Leb.500 to L.Leb.800, depending upon the individual student's needs. Nursing Diploma students receive meal tickets for the noon meal.

**Late Registration Fees.** Any student registering during Late Registration will be charged a Late Registration Fee of L.Leb.50.

**Administration Fee.** An administrative fee of L.Leb.500 per year per student is charged to sponsors of bursary students. This fee is based upon the special services rendered to this group of students by the University on behalf of the sponsoring government, agency or corporation.

**Manner of Payment.** All bank checks and money orders should be made payable to the American University of Beirut and sent directly to the Comptroller. Any funds received in excess of previously listed charges for a student will be paid by the University to the student according to instructions received from parents. Spending money and valuables may be deposited with the Comptroller.

**Withdrawals.** In the event a student withdraws to justifiable reasons after his registration, the following refund schedule will be applied, per semester or term:

- Before official beginning of class – 75% of tuition
- During first week of classes – 50% of tuition
- During second week of classes – 25% of tuition

**No refund will be made of residence fees or fees for special services rendered to students.**

**Incidental Expenses.** Our estimate of incidental expenses for books, stationery, supplies and laundry ranges from L.Leb.400 do L.Leb.800 per academic year, depending upon the course for which the student registers. Expenses for travel, clothing and spending money are left for parents to calculate.

---

**FACULTY OF ARTS AND SCIENCES**

---

	Tuition Fees in Lebanese Pounds		
	First Semester	Second Semester	Summer Semester
<b>Undergraduate and Special Students</b>			
13 or more credits per semester	1,250	1,250	---
7 to 12 credits per semester or summer session	1,000	1,000	1,000
6 or less credits per semester or summer session	600	600	600
University Orientation Program	2,100	2,100	1,050
Auditors—per credit hour	70	70	70
<b>Graduate Students</b>			
Per course credit hour <sup>1</sup>	120	120	120
Resident fee for AUB students registered for thesis only <sup>1</sup>	175	175	175
Resident fee for non-AUB students registered for thesis only <sup>2</sup>	735	735	735

---

All fees for each semester and for the summer session are payable on the day of registration.

---

1. The fees for graduate study are for course work only. The rate is the same for undergraduate courses also. No charge is made for thesis work which is taken concurrently with course work. A resident fee of L.Leb.120 per semester or term is charged to AUB graduate students who register as students for the thesis or project only and who continue to utilize the University facilities while completing the thesis or project requirements.
2. The resident fee of L.Leb.735 per semester or term is charged to non-AUB students working at this University on theses at other universities.

---

**FACULTIES OF MEDICAL SCIENCES**


---

	Tuition Fees in Lebanese Pounds		
	First Semester	Second Semester	Summer Semester
<b>School of Medicine</b>			
First Second, Third and Fourth Years	2,180	2,180	—
Fifth Year <sup>1</sup>	60	60	60
			—
<b>School of Pharmacy</b>			
All classes	1,540	1,540	—
Supervision fee for practical experience	85	85	85
<b>School of Public Health</b>			
B.S. Program	1,635	1,635	—
MPH Program	2,180	2,180	—
Part Time—per credit hour	170	170	170
<b>School of Nursing</b>			
Diploma Program: <sup>2</sup> Second and Third Years	100	100	
B.S. Program: all classes <sup>3</sup>	1,320	1,320	
Post Basic Program	1,500	1,500	
<b>Graduate Students</b>			
Per course credit hour <sup>4</sup>	170	170	170
Resident fee for AUB students registered for thesis only	175	175	175
Resident fee for non-AUB students registered for thesis only <sup>5</sup>	1,000	1,000	1,000

---

The registration fee of L.Leb.60 charged to the students of fifth year Medicine must be paid at the end of June. For fourth year Medicine the fees are payable on the day of registration in June and in February, for third year on the day of registration at the end of August and in February, for second year in September and in February, and for first year in October and in February.

---

1. Because fees in the School of Medicine have been collected during the first four years, the students of fifth year will be charged only a registration fee of L.Leb.60.
2. All Nursing Diploma students pledge before admission their obligation to accept one year of employment at the AUB Hospital after graduation. A student living in University housing and receiving board for one year during the first two years is obligated for an additional year of employment at the Hospital.
3. Part-time B.S. in Nursing students may be accepted on a pre-arranged pro-rata basis per semester.
4. The fees for graduate study are for course work only. The rate is the same for undergraduate courses also. No charge is made for thesis work which is taken concurrently with course work. A resident fee of L.Leb.170 per semester or term is charged to AUB graduate students who register as students for the thesis only and who continue to utilize the University's facilities while completing the thesis or project requirements.
5. The resident fee of L.Leb.1000 per semester or term is charged to non-AUB students working at this University on theses at other universities.



---

**FACULTY OF ENGINEERING AND ARCHITECTURE**


---

	Tuition Fees in Lebanese Pounds		
	First Semester	Second Semester	Summer Semester
<b>Undergraduate and Special Students</b>			
13 or more credits per semester	1,325	1,325	
7 to 12 credits per semester or summer session	925	925	925
6 or less credits per semester or summer session	600	600	600
<b>Graduate Students</b>			
Per course credit hour <sup>1</sup>	140	140	140
Resident fee for AUB students registered for thesis only <sup>1</sup>	175	175	175
Resident fee for non-AUB students registered for thesis only <sup>2</sup>	1,000	1,000	1,000

The fees for each semester and for the summer session are payable on the day of registration.

---



---

**FACULTY OF AGRICULTURAL SCIENCES**


---

	Tuition Fees in Lebanese Pounds		
	First Semester	Second Semester	Summer Semester
<b>Undergraduate and Special Students</b>			
13 or more credits per semester	1,500	1,500	
7 to 12 credits per semester	1,050	1,050	1,050
6 or less credits per semester	665	665	665
<b>Graduate Students</b>			
Per course credit hour <sup>1</sup>	160	160	160
Resident fee for AUB students registered for thesis only	175	175	175
Resident fee for non-AUB students registered for thesis only <sup>2</sup>	1,000	1,000	1,000

The fees for each semester and for the summer session are payable on the day of registration

---

1. The fees for graduate study are for course work only. The rate is the same for undergraduate courses also. No charge is made for thesis work which is taken concurrently with course work. A resident fee of L.Leb.175 per semester or term is charged to AUB graduate students who register as students for the thesis only and who continue to utilize the University's facilities while completing the thesis or project requirements.
2. The resident fee of L.Leb.1000 per semester or term is charged to non-AUB students working at this University on theses at other universities.



# **FACULTY OF ARTS AND SCIENCES**

## FACULTY OF ARTS AND SCIENCES

### Faculty List, 1974-75

Elie Salem, Ph.D., *Professor of Political Studies and Public Administration, Dean.*  
 Landry Slade, Ph.D., *Associate Professor of Chemistry, Associate Dean.*  
 Ahmad Chalabi, Ph.D., *Assistant Professor of Mathematics, Assistant to the Dean.*  
 Michel Shamma'a, M.A., *Academic Advisor.*  
 Edmund Shahla, *Executive Officer.*  
 Fuad S. Haddad, Ph.D., *Associate Professor of Education, Registrar.*

### PROFESSORS EMERITI

Frayha, Anis, Ph.D., University of Chicago; *Semitic Studies.*  
 Himadeh, Said, M.A., Columbia University; *Economics.*  
 Jabbur, Jibrail, Ph.D., Princeton University; *Arabic.*  
 Katul, Jibrail, B.A., A.U.B.; *Education.*  
 Kurani, Habib, Ph.D., Columbia University; *Education.*  
 Al-Makdisi, Anis, M.A., A.U.B.; *Arabic.*  
 Mirhij, John, Ph.D., University of California; *Biology.*  
 Scaife, Christopher, M.A., Oxford University; *English.*  
 West, William, Ph.D., Princeton University; *Chemistry.*  
 Yazigi, Kamal, Ph.D., University of Chicago; *Arabic.*  
 Zeine, Zeine, Ph.D., London University; *History and Archaeology.*  
 Ziadeh, Nicola, Ph.D., London University; *History and Archaeology.*

### PROFESSORS

- \* Abbas, Ihsan, Ph.D., University of Cairo; *Arabic.*
- \* Abdul Karim, Aziz, Ph.D., Purdue University; *Chemistry.*
- Baali, Fuad, Ph.D., Louisiana State University; *Sociology and Anthropology.*  
(Visiting).
- \* Babikian, Levon, Ph.D., University of Wisconsin; *Biology.*
- \* Baramki, Dimitri, Ph.D., London University; *History and Archaeology.*  
(Curator of Museums).
- \* Beydoun, Ziad, D.Phil., Oxford University; *Geology.*
- \* Blackstone, Bernard, Litt.D., University of Cambridge; *English.*
- \* Bruin, Frans, Ph.D., University of Amsterdam; *Physics* (Director of Observatory).
- \* Bushrui, Suheil, Ph.D., Southampton University; *English.*
- \* Butros, Joseph, Ph.D., Emory University; *Biology.*
- \* Carswell, John, A.R.C.A., Royal College of Arts, London; *Fine and Performing Arts.*
- \* Cook, Daniel, Ph.D., University of California; *English and Linguistics.*
- Coppock, Joseph, Ph.D., Columbia University; *Economics* (Visiting).
- \* Crow, Ralph, Ph.D., University of Michigan; *Political Studies and Public Administration.*
- \* Diab, Lutfy, Ph.D., University of Oklahoma; *Psychology.*
- \* Diab, Muhammad, D.Sc., Rotterdam School of Economics; *Economics.*

---

\* On Tenure Appointment.

- \* Fakhry, Majid, Ph.D., Edinburgh University; *Philosophy*.
- \* Frick, Arthur, M.S., University of Wisconsin; *Fine and Performing Arts*.
- \* Ghul, Mahmud, Ph.D., University of London; *Arabic*.
- \* Gordon, David, Ph.D., Princeton University; *History and Archaeology*.
- Hanania, Farid, LL.B., Cambridge University; Barrister-at-Law; *Political Studies and Public Administration*.
- \* Hanania, George, Ph.D., Cambridge University; *Chemistry*.
- \* Hawi, Khalil, Ph.D., Cambridge University; *Arabic*.
- \* Heineken, Frederick, Ph.D., University of Amsterdam; *Physics*.
- \* Hijab, Wasfi, Ph.D., University of Florida; *Mathematics*.
- \* Ibish, Yusuf, Ph.D., Harvard University; *Political Studies and Public Administration*.
- \* Issidorides, Costas, Ph.D., University of Iowa; *Chemistry*.
- \* Karam, Antoine, Dr. ès-Lettres, University of Paris; *Arabic*.
- Keith, Gordon, Ph.D., Harvard University; *Business Administration* (Visiting).
- \* Kennedy, Edward, Ph.D., Lehigh University; *Mathematics*.
- \* Khalidi, Walid, B.Litt., Oxford University; *Political Studies and Public Administration*.
- Malik, Charles, Ph.D., Harvard University; LL.D., L.H.D., Phil.Dr. (Freiburg); Sc.D.; *Philosophy* (Distinguished Professor).
- \* Melikian, Levon, Ph.D., Columbia University; *Psychology*.
- \* Mikdashi, Zuhayr, D.Phil., Oxford University; *Business Administration*.
- Mirhij, John, Ph.D., University of California; *Biology*.
- \* Munro, John, Ph.D., Washington University, St. Louis; *English*.
- \* Muwafi, Amin, Ph.D., University of Florida; *Mathematics*.
- \* Najm, Muhammad, Ph.D., Cairo University; *Arabic*.
- Nazer, Musa, Ph.D., Harvard University; *Chemistry* (Visiting).
- Nelson, L. Warren, Ed.D., Columbia University; *Education*.
- \* Prothro, E. Terry, Ph.D., Louisiana State University; *Psychology* (Director, Center for Behavioral Research).
- Al-Salam, Waleed, Ph.D., Duke University; *Mathematics* (Visiting).
- \* Salem, Elie, Ph.D., Johns Hopkins University; *Political Studies and Public Administration*.
- \* Salibi, Kamal, Ph.D., London University; *History and Archaeology*.
- \* Sarkis, Adib, Ph.D., Ohio State University; *Chemistry*.
- Stewart, Albert, Ph.D., Johns Hopkins University; *Cultural Studies* (Visiting).
- \* Thabet, Samir, Ph.D., London University; *Chemistry*.
- \* Ward, William, Ph.D., Brandeis University; *History and Archaeology*.
- \* Yff, Peter, Ph.D., University of Illinois; *Mathematics*.
- \* Zahlan, Antoine, Ph.D., Syracuse University; *Physics*.
- \* Zayid, Mahmud, Ph.D., Yale University; *History and Archaeology*.
- \* Zurayk, Costi, Ph.D., Princeton University; Litt.D., University of Michigan; *History and Archaeology* (Distinguished Professor).

#### ASSOCIATE PROFESSORS

- D'Amico, Jack, Ph.D., State University of New York; *English*.
- \* Arnita, Salvador, M.I.C.C.S., London; *Fine and Performing Arts*.

---

\* On Tenure Appointment.

◦ On Furlough or Leave.

- \* Awad, Elias, Ph.D., University of Washington; *Chemistry*.
- \* Bashshur, Munir, Ph.D., University of Chicago; *Education*.
- \* Batatu, John, Ph.D., Harvard University; *Political Studies and Public Administration*.
- Bitar, Khalil, Ph.D., Yale University; *Physics*.
- Boecker, Eberhard, Ph.D., University of Southampton; *European Languages and Literature*.
- Bratton, Neil, Ph.D., Georgetown University; *English and Linguistics*.
- Burrowes, Robert, Ph.D., Princeton University; *Political Studies and Public Administration* (Visiting).
- \* Cajoleas, Louis, Ph.D., Columbia University; *Education*.
- Cook, Robert, Ph.D., University of California; *Chemistry*.
- \* Deeb, Samir, Ph.D., University of Illinois; *Biology*.
- Eid, Nimr, Ph.D., University of Texas; *Business Administration*.
- Farag, Shawki, Ph.D., University of Illinois; *Business Administration* (Visiting).
- \* Ghattas, Emile, Ph.D., Columbia University; *Business Administration*.
- \* Haddad, Fuad, Ph.D., University of Chicago; *Education*.
- \* Haddadin, Makhluif, Ph.D., University of Colorado; *Chemistry*.
- \* Hamdan, Mohammad, Ph.D., Sydney University; *Mathematics*.
- \* Hanna, Azmi, Ph.D., Erlangen University; *Mathematics*.
- Hayden, Jack, Ph.D., Northwestern University; *Business Administration* (Visiting).
- Heymans, Peter, Ph.D., University of London; *Mathematics*.
- \* Iskandar, Adnan, Ph.D., American University, Washington; *Political Studies and Public Administration*.
- Kafescioglu, Ismail, Ph.D., Case Western Reserve University; *Geology*.
- \* Khalaf, Nadim, Ph.D., Princeton University; *Economics*.
- \* Khalaf, Samir, Ph.D., Princeton University; *Sociology and Anthropology*.
- \* Khuri, Fuad, Ph.D., University of Oregon; *Sociology and Anthropology*.
- Kouymjian, Dickran, Ph.D., Columbia University; *History and Archaeology*.
- Makarim, Sami, Ph.D., University of Michigan; *Arabic*.
- Makdisi, Samir, Ph.D., Columbia University; *Economics*.
- \* Makinson, David, D.Phil., Oxford University; *Philosophy*.
- \* Mavromatis, Harry, Ph.D., Princeton University; *Physics*.
- Mazzaoui, Michel, Ph.D., Princeton University; *History and Archaeology*.
- \* McClain, John, Ph.D., Princeton University; *Physics*.
- \* Mourad, Pierre, Ph.D., University of Paris; *Physics*.
- Naimy, Nadim, Ph.D., Cambridge University; *Arabic*.
- Namek, Yakub, Ph.D., University of Wisconsin; *Education*.
- Nasr, Nafhat, Ph.D., Vanderbilt University; *Political Studies and Public Administration*.
- Nasrallah, Mikhail, Ph.D., Cornell University; *Biology*.
- \* Olmsted, John, Ph.D., University of California; *Chemistry*.
- Pascoe, Enid, Ph.D., McGill University; *Biology*.
- \* Regier, Mary, Ph.D., University of California; *Mathematics*.
- Singh, Bhajan, D.Phil., University of Sussex; *Physics*.
- \* Slade, Landry, Ph.D., University of Virginia; *Chemistry*.
- \* Tarazi, Fuad, Ph.D., Cairo University; *Arabic*.

\* On Tenure Appointment

◦ On Furlough or Leave.

- \* Tayim, Hassan, Ph.D., University of Illinois; *Chemistry*.
- Yaqub, Fawzi, Ph.D., Purdue University; *Mathematics*.
- \* Zarour, George, Ph.D., University of Wisconsin; *Education*.

#### SENIOR LECTURERS

- Antipa, Faizeh, M.A., A.U.B.; *Education*.
- Bashir, Iskandar, D.P.A., Syracuse University; *Political Studies and Public Administration*.
- Dodd, Peter, Ph.D., Harvard University; *Sociology and Anthropology*.
- Fraga, Robert, Ph.D., University of British Columbia; *Mathematics*.
- Goedicke, Thomas, D.Sc., University of North Carolina; *Geology*.
- Harcourt, Hugh, Ph.D., University of Edinburgh; *Cultural Studies*.
- Jafri, Syed, Ph.D., London University; *Shaykh Zayid bin Sultan Chair of Islamic Studies*.
- Khairallah, George, Ph.D., Columbia University; *English and European Languages and Literature*.
- Montegu, John, Ph.D., Harvard University; *Religious Studies*.
- Ryffel, Heinrich, Dr.Phil., Bern University; *Cultural Studies*.
- Taylor, George, Dip. of Teaching, Eastbourne College; *English*.
- Yaktin, Umayma, Ph.D., London University; *Psychology*.

#### ASSISTANT PROFESSORS

- Abdun Nur, Labeeb, Ph.D., University of Connecticut; *Mathematics*.
- Armaly, Edward, Ph.D., Columbia University; *Business Administration*.
- Billeh, Victor, Ph.D., University of Wisconsin; *Education*.
- Brown, Ralph, Ph.D., Columbia University; *Education and Linguistics*.
- Buheiry, Marwan, Ph.D., Princeton University; *Cultural Studies and History and Archaeology*.
- Bulos, Nabil, Ph.D., Syracuse University; *Mathematics*.
- Chalabi, Ahmad, Ph.D., University of Chicago; *Mathematics*.
- Chimienti, John, Ph.D., Yale University; *Psychology*.
- Cook, Jean-Marie, Ph.D., Harvard University; *Cultural Studies*.
- Dajani, Nabil, Ph.D., University of Iowa; *English*.
- DeKook, Roger, Ph.D., University of Wisconsin; *Chemistry*.
- Derenk, Dieter, Dr. Phil., University of Frankfurt; *European Languages and Literature*.
- Dodd, Erica, Ph.D., University of London; *Religious Studies*.
- Edwards, Lawrence, Ph.D., Harvard University; *Chemistry*.
- Fuleihan, Joseph, Ph.D., Iowa State University; *Economics*.
- Geisen, Johannes, Ph.D., Heidelberg University; *European Languages and Literature*.
- Ghandour, Marwan, Ph.D., University of Illinois; *Economics*.
- Ghusayni, Rauf, Ph.D., Stanford University; *Education*.
- Gorry, Thomas, Ph.D., Purdue University; *Psychology*.
- Gunderson, Gil, Ph.D., University of California; *Political Studies and Public Administration*.

---

\* On Tenure Appointment.

◦ On Furlough or Leave.

- Hallab, Mary, Ph.D., Louisiana State University; *English*.
- Hardy, John, Ph.D., University of Washington; *Biology*.
- Hasan, Omar, Ph.D., University of Wisconsin; *Education*.
- Jirmanus, Munir, Ph.D., Tufts University; *Physics*.
- Johnson, Peter, Ph.D., University of Michigan; *Mathematics*.
- Jurdak, Murad, Ph.D., University of Wisconsin; *Education*.
- Kaloustian, Moses, Ph.D., University of Notre Dame; *Chemistry*.
- Karaoglan, Roy, Ph.D., Columbia University; *Economics*.
- Kaylani, Safouh, Ph.D., London University; *Economics*.
- Khayrallah, As'ad, Ph.D., Princeton University; *Arabic*.
- Khalidi, Tarif, Ph.D., University of Chicago; *History and Archaeology*.
- Khuri, Soumaya, Ph.D., Yale University; *Mathematics*.
- Kisirwani, Marun, Ph.D., Indiana University; *Political Studies and Public Administration*.
- Letterie, Jacobus, Ph.D., University of North Carolina; *Political Studies and Public Administration*.
- Livingston, John, Ph.D., Princeton University; *Cultural Studies*.
- Loutfy, Martha, Ph.D., University of California; *Economics*.
- Manassah, Jamal, Ph.D., Columbia University; *Physics*.
- Massaad, Massaad, Dr. es-Sc., University of Lausanne; *Geology*.
- Mohapatra, Ram, Ph.D., University of Jabalpur; *Mathematics*.
- Moracco, John, Ph.D., University of Iowa; *Education*.
- Murphy, Richard, Ph.D., University of Texas; *English and Cultural Studies*.
- Myers, Dale, Ph.D., University of Florida; *Linguistics and Education*.
- Nassar, Christopher, Ph.D., University of Wisconsin; *English*.
- Nassif, Nabil, Ph.D., Harvard University; *Mathematics*.
- Obermeyer, Gerald, Ph.D., Indiana University; *Sociology and Anthropology*.
- Olsen, Gordon, M.A., Columbia University; *Fine and Performing Arts*.
- Oshagan, Vahe, Dr. es. Lettres d'État, University of Paris; *Cultural Studies*.
- Roeling, Lloyd, Ph.D., Rice University; *Mathematics*.
- Saliba, Wahib, Ph.D., Boston University; *Education*.
- Sara, Nathir, Ph.D., University of Illinois; *Education*.
- \* Scott, Richard, M.A., Harvard University; *Philosophy*.
- Seeden, Helga, Ph.D., University of London; *Cultural Studies and History and Archaeology*.
- Seikaly, Samir, Ph.D., University of London; *History and Archaeology*.
- Shaath, Nabeel, Ph.D., University of Pennsylvania; *Business Administration*.
- Shiber, John, Ph.D., Purdue University; *Biology*.
- Shibl, Yusuf, Ph.D., University of California; *Business Administration*.
- Sirhan, Ghazi, Ph.D., North Carolina State University; *Economics*.
- Smith, Michael, Ph.D., University of London; *Biology*.
- Smith, Peter, M.F.A., Pratt Institute; *Fine and Performing Arts*.
- Starr, Paul, Ph.D., University of California; *Sociology and Anthropology*.
- Stevens, Paul, M.A., University of London; *Economics*.
- Upadhyay, Govind, Ph.D., Banaras Hindu University; *Religious Studies*.
- Watson, Gary, Ph.D., Cornell University; *Physics*.
- Zurayk, Ilham, Ph.D., Columbia University; *Physics*.

\* On Tenure Appointment.

◦ On Furlough or Leave.



## LECTURERS

- Abboud, Shehadeh, M.A., A.U.B.; *English*.  
 Aly, Hamdy, Ph.D., University of Illinois; *Business Administration*.  
 Babikian, Yeghia, Ph.D., University of California; *Education*.  
 Bender, Mildred, M.A., A.U.B.; *English*.  
 Crow, Laure, M.A., University of Michigan; *English*.  
 Dabbagh, Salah, Dr. d'État, University of Lyon; *Business Administration*.  
 Decourt, Jean-Claude, Agrégation, University of Lyon; *European Languages and Literature*.  
 Etinoff, Nedko, Th.B., Near East School of Theology; *Fine and Performing Arts*.  
 Fistere, John, B.A., Colgate University; *English*.  
 Hovey, Allen, B.M., Boston University; *Fine and Performing Arts*.  
 Kankashian, Ibrahim, M.A., A.U.B.; *English*.  
 Khuri, Zahi, M.A., A.U.B.; *English*.  
 Kurani, David, B.A., A.U.B.; *Fine and Performing Arts*.  
 Marmura, Aziz, M.B.A., University of Michigan; *Business Administration*.  
 Mawlawi, Radwan, M.S., University of London; *English*.  
 Melikian, Anahid, Ph.D., University of Wisconsin; *English*.  
 Nasrallah, June, B.S., A.U.B.; *Biology*.  
 Saidah, Roger, Diplôme, École du Louvre; *History and Archaeology*.  
 Satamian, Krikor, B.A., A.U.B.; *Fine and Performing Arts*.  
 Scott, Elizabeth, M.A., Columbia University; *English*.  
 Shaheen, Jack, Ph.D., University of Missouri; *English*.  
 Shebaya, Peter, M.A., University of Michigan; *Fine and Performing Arts and Cultural Studies*.  
 Taky Deen, Diana, B.A., A.U.B.; *Fine and Performing Arts*.  
 Walker, Robert, M.A., University of Texas; *Cultural Studies*.

## INSTRUCTORS.

- Accawi, Anwar, B.A., Warren Wilson College; *Linguistics*.  
 Amyuni, Mona, M.A., A.U.B.; *European Languages and Literature*.  
 Alamuddin, Nada, M.A., A.U.B.; *Psychology and Education*.  
 Barr, James, Ed.M., Harvard University; *Education*.  
 Barudi, Ilyas, B.Litt., University of Oxford; *Economics*.  
 Bazzi, Tarif, M.A., A.U.B.; *Arabic*.  
 Bridgwood, Jean, M.A., AUB; *English*.  
 Callan, Hilary, M.A., University of Oxford; *Sociology and Anthropology*.  
 Cortas, Asdghik, M.Sc., University of Maryland; *Mathematics*.  
 Darwish, Orpha, M.S.E., Southern Illinois University; *English*.  
 Diab, Abdul Ghani, M.A., A.U.B.; *Education*.  
 Al-Faqih, Zuhair, M.A., California State University; *English*.  
 Fayad, Diane, B.A., Hunter College; *English*.  
 Fraga, Jean, M.A., A.U.B.; *English*.  
 Francis, Gillian, M.A., Girton College, Cambridge; *Linguistics*.  
 Gaffney, Jane, M.A., American University in Cairo; *English*.  
 Gordon, Ann, M.A., A.U.B.; *English*.  
 Haddad, Mona, M.A., A.U.B.; *Education*.  
 Henderson, Felicity, B.A., University of London; *English*.  
 Hijaz, Norma, M.A., University of Edinburgh; *English*.

Himadeh, Akram, B.A., A.U.B.; *Business Administration*.  
 Hitti, Gloria, M.A., A.U.B.; *Psychology*.  
 Hitti, Raymond, M.B.A., A.U.B.; *Business Administration*.  
 Kassab, Naim Tony, M.A., A.U.B.; *Arabic*.  
 Khairallah, Lubitzia, M.A., A.U.B.; *Cultural Studies*.  
 Khoury, Samirah, M.A., A.U.B.; *Cultural Studies*.  
 Kolandjian, Hratch, M.B.A., Columbia University; *Business Administration*.  
 Lahham, Safiyyah, M.A., A.U.B.; *English*.  
 Lanson, Marion, M.A., A.U.B.; *Linguistics*.  
 Lyons, John, M.A., St. Louis University; *English*.  
 McWilliam, William, B.A., University of London; *English*.  
 Mallak, Kathleen, M.A., A.U.B.; *English*.  
 Malouf, Alice, M.A., A.U.B.; *Psychology*.  
 Moline, Judith, M.A., New York University; *English*.  
 Murphy, Elizabeth, M.A., University of Texas; *English*.  
 Nahapetian, Vahe, M.S., A.U.B.; *Physics*.  
 Nurallah, Mahmud Riyad, M.A., A.U.B.; *English*.  
 Al-Radi, Nuha, Dip. Rawnsly Academy, London; *Fine and Performing Arts*.  
 Raschka, Marilyn, M.A., A.U.B.; *Linguistics*.  
 Reason, Walter, M.A., Boston University; *Linguistics*.  
 Robinson, Christine, B.Ed., Loughborough College of Education; *Linguistics*.  
 Salam, Josephine, M.A., Radcliff College; *English*.  
 Salamack, John B.S., Clarkson College; *English*.  
 Schidiak, Bichara, D.E.S., Université d'Aix; *European Languages and Literature*.  
 Setian, Sosi, M.A., American University in Cairo; *Linguistics*.  
 Siniora, Fuad, M.B.A., A.U.B.; *Business Administration*.  
 Tu'meh, Edmund, M.A., A.U.B.; *Cultural Studies*.  
 Uwaydah, May, M.A., A.U.B.; *English*.  
 Walker, Carol, M.A., Texas Technological University; *English*.  
 Zahawi, Selma, M.A., Columbia University; *Cultural Studies*.

## RESEARCH ASSOCIATES AND ASSISTANTS

Abboud, Mary, Lisc.-es Sc., Lebanese University; *Biology* (Assistant).  
 Aller, Sonia, B.A., Beirut College for Women; *Center for Behavioral Research* (Associate).  
 Aller, Wayne, Ph.D., University of Washington; *Center for Behavioral Research* (Senior Associate).  
 Azzam, Siham, B.A., A.U.B.; *Arabic* (Assistant).  
 Badre, Leila, M.A., A.U.B.; *History and Archaeology* (Senior Assistant).  
 Dennis, Wayne, Ph.D., Clark University; *Center for Behavioral Research* (Visiting Professor).  
 Ellezian, Lena, B.S., A.U.B.; *Biology* (Assistant).  
 Haber, Ricardo, M.S., A.U.B.; *Biology* (Assistant).  
 Heimani, Nameeda, M.A., University of California; *Center for Behavioral Research* (Assistant).  
 Huxley, May, M.A., A.U.B.; *Center for Behavioral Research* (Assistant).  
 Kadi, Wadad, Ph.D., A.U.B.; *Arabic* (Associate).  
 Kennedy, John, Ph.D., University of California; *Center for Behavioral Research* (Associate).

Khuri, Ghada, M.A., A.U.B.; *Education* (Assistant).  
Lakkis, Vanda, M.Sc., University of Ljubljana; *Biology* (Assistant).  
McCabe, Justine, B.A., Emmanuel College; *Center for Behavioral Research*  
(Assistant).  
Murad, Amal, B.S., AUB.; *Biology* (Assistant).  
Noorbakhsh, Mansour, M.S., A.U.B.; *Biology* (Assistant).  
Saad, Lina, B.A., A.U.B.; *Center for Behavioral Research* (Assistant).  
Al-Salam, Nadhla, Ph.D., Duke University; *Mathematics* (Associate).  
Sharabi, Hisham, Ph.D., University of Chicago; *Center for Behavioral Research*  
(Associate).  
Tadros, Helmi, Ph.D., University of Missouri; *Center for Behavioral Research*  
(Associate).

## **General Information**

The Faculty of Arts and Sciences offers a variety of educational programs planned for the needs and interests of individual students. The foundation of the regular programs is a balanced, comprehensive and liberal education that aims both to broaden the awareness of each student and to develop in him intellectual habits that enable him to think for himself. This liberal education emphasizes the importance of a disinterested search for truth as opposed to the blind acceptance of authority, tradition and prejudice; and to this end the student's experience in the classroom is supplemented by participation in the full life of the University community, which may involve him in extracurricular lectures, concerts and plays, student-directed activities and a large number of sports. These experiences, it is believed, will help to create balanced and educated men and women who are prepared for lives of leadership in their own communities.

Each student completes, in addition to this basic liberal education, a program of intensified study in a specialized subject, either as a preparation for professional training or as professional training in its own right.

Both the specialized and liberal programs of the Faculty aim to develop maturity of thought and an appreciative understanding of the value and techniques of research, experiment and analysis; for such an understanding is essential to all independent and creative thought. Whatever their special field, graduates of the Faculty of Arts and Sciences should be able to appreciate the values of both Near Eastern and Western civilizations, and to select with discrimination those aspects which can best contribute to the culture and development of their own countries.

### **ADMISSION**

For complete and detailed information regarding admission to the University, including certificates recognized, see pages 12 to 16 in the section on Admissions under General Information at the beginning of this bulletin.

The specific requirements for admission to the Freshman class are found on page 13, to the Sophomore class on page 14, to Advanced Standing on page 14, and to Graduate Work in the section on Admission in the chapter at the end of this bulletin entitled Graduate Study.

### **CATEGORIES OF STUDENTS**

#### **1. Full-Time Students**

To be considered full-time, a student must carry a minimum load of 12 credits per semester. For Summer Session, see p. 38.

The normal schedule of *Freshman* students each semester is 15 credits plus Physical Education. Freshman students may be permitted by action of the Administrative Committee of the Faculty to take less than the full program; but in this case they will be required to complete the Freshman program, together with any courses they have failed, in the following year.

During the *Sophomore*, *Junior* and *Senior* years, the normal schedule for full-time students each semester is from 12 to 18 credits. The student and his Advisor will decide on the maximum number of credits that can be carried. (The suggested limit

of 18 credits is not absolute, but merely an indication to Advisors of what is a normal load). Students in the Sophomore, Junior and Senior classes carrying more than 12 credits may (with their advisor's permission) reduce their load to 12 credits, provided they do so not later than 10 weeks after the start of the semester (6 weeks in the case of the Summer School). Full-time students who wish to reduce their schedule to less than 12 credits, or who wish to drop a required course, must apply to the Administrative Committee for approval.

## **2. Part-Time and Special Students**

This category includes part-time and unclassified students allowed to work for degrees; holders of degrees but not working for a higher degree; and students who follow special programs of study not leading to degrees from this University. All such students must carry a minimum of six credits per semester; must meet the University admission requirements; and must secure the approval of either the Administrative Committee or the Graduate Committee of the Faculty before admission to part-time or special status.

## **3. Auditors**

Auditors are admitted to certain courses on payment of the special auditor's fee, and on obtaining the permission of the professor in charge of the course and of the Registrar. Auditors must meet the admission requirements of the University, but this requirement may be waived by the Administrative Committee in the case of a mature person who has been working for a number of years. The University does not recognize auditors as students; they may not take examinations, and the Registrar does not keep a record of their courses and thus cannot issue to them any certificates.

## **PROGRAMS OF STUDY**

### **1. Undergraduate Programs**

Students may select one of two academic paths; the first, normally involving four years of study beginning with the Freshman year, is primarily a liberal education. The second is essentially professional or pre-professional training, preparing students for admission to the Faculties of Agricultural Sciences and Engineering and Architecture, and the Schools of Medicine and Public Health. Students enrolled in the pre-professional programs are required to complete basic courses of liberal education as a part of their preparation for the professional schools.

Students entering the Faculty of Arts and Sciences, except those admitted as special students or auditors, must select one of the following programs:

- (a) Bachelor of Arts. Four years.
- (b) Bachelor of Science. Four years.
- (c) Bachelor of Business Administration. Four years.
- (d) Pre-Medical. An interdepartmental program in Biology and Chemistry, preparing students to meet the minimum requirements for admission to the School of Medicine but without guaranteeing acceptance. Three years.
- (e) Pre-Public Health; pre-Engineering and Architecture; pre-Agriculture. One year (the Freshman Science program).
- (f) The University Orientation Program. For students who meet the AUB official admission requirements except in English Language. See special section entitled Institutes, Centers and Special Programs, following listing of Arts and Sciences Departments and their offerings.

## 2. Graduate Study

Full information and general requirements for graduate study are found in the section at the end of this bulletin entitled Graduate Study.

### REGULAR FRESHMAN PROGRAM

The Freshman program, completion of which entitles a student to promotion to Sophomore, consists of 30 credits plus Physical Education. Successful completion of the program demands a grade of 70 or more in at least 12 credits.

On admission to the Freshman class, a student must enroll in either the Arts or the Science program, although exceptional programs are possible if approved by the Administrative Committee. Courses taken in these programs are the following:

#### (1) Freshman Arts

	<i>Semesters</i>	<i>Credit Hours</i>
Arabic 101 and 102	2	6
English 103 and 104; <i>or</i> 105 and 106	2	8
History 101 and 102	2	6
Biology 103 and 104; <i>or</i> Chemistry 101 and 102; <i>or</i> Physics 103 and 204	2	8
One elective	1	3
Physical Education 001 and 002; <i>or</i> 003 and 004*	2	non-credit

Arabic 101 and 102 are required of all students whose native language is Arabic. Non-Arabic speaking students elect in place of Arabic any two courses open to Freshman students; except that Freshman Arts students may elect Mathematics 101 and 102 only if they achieve in the entrance examination in Mathematics the minimum score required for this course, or if they secure the approval of the Department of Mathematics.

#### (2) Freshman Science

	<i>Semesters</i>	<i>Credit Hours</i>
Arabic 101 and 102	2	6
English 103 and 104; <i>or</i> 105 and 106	2	8
Mathematics 101 and 102	2	7
Chemistry 101, 201 and 203; <i>or</i> Physics 101 and 102	2	9-10
Physical Education 001 and 002; <i>or</i> 003 and 004*	2	non-credit

Arabic 101 and 102 are required of all students whose native language is Arabic. Non-Arabic speaking students elect in place of Arabic any two courses open to Freshmen students. If such a student plans to major in Chemistry, he is advised to elect Physics 101 and 102 along with Chemistry 101, 201 and 203.

Chemistry 101, 201 and 203 are required of students planning to major in Biology and Chemistry, or to enter Medicine, Public Health, or Agriculture; Physics 101 and 102 are required of students planning to major in Physics; Chemistry 101, 201 and 203 and Physics 101 and 102 of students planning to enter Engineering and Architecture.

---

\* 001 and 002 *Freshman Athletics for Men*, and 003 and 004 *for Women*. 0 cr; annually. A theory and performance approach toward appreciation and knowledge of athletics, body building and various sports.

## GRADUATION REQUIREMENTS

### **1. Degree of Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration**

The following are the graduation requirements for the degrees of B.A., B.S. and B.B.A.:

- (a) A minimum of eight semesters residence beginning with the Freshman class, or six semesters beginning with the Sophomore class, at recognized institutions of higher learning, provided at least three semesters and 36 credits are completed at AUB. For purposes of this requirement, two summer sessions shall be considered equivalent to one semester;
- (b) A minimum of 120 credits for students who enter as Freshman and 90 credits for students who enter as Sophomores. With the approval of the Curriculum Committee, Departments may establish programs that exceed these minimum credit requirements;
- (c) A minimum of 30 credits in courses numbered 210 or above in the major Department with a cumulative average of 70 or more, plus any additional requirements set by the Department; or the requirements of other types of major programs as described in section 2 following;
- (d) The following courses or their equivalent; English 201, the Library Orientation course\* (these must be taken during the Sophomore year), Arabic 201 or any other Arabic course numbered 221 and above (for Arabic-speaking students only);
- (e) Cultural Studies 201, 202 (normally during the Sophomore year), 203, 204 (normally during the Junior year);
- (f) A minimum of 18 additional credits outside the major Department, exclusive of requirements in (d) above and of the normal Freshman program; (The 18 additional credits outside the major department does not apply to students taking an interdepartmental major and teaching major; see section 2, below)
- (g) A grade of 70 or more in at least 50 credits numbered 200 or above;
- (h) Some Departments further require that their students sit for the Undergraduate Record Examination. Individual Departments can use a comprehensive test for their evaluation of the students. Information concerning departmental policy on this matter may be obtained from the Departments concerned.

### **2. Interdepartmental Majors and Teaching Majors**

Besides the Departmental Major, which consists of a minimum of 30 credits of courses numbered 210 or above in one Department and other departmental requirements, students may also enroll for Interdepartmental Majors or Teaching Majors.

- (a) An Interdepartmental Major consists of a minimum of 24 credits in courses numbered 200 and above in each of two Departments in related fields. A cumulative average of 70 is required for courses taken in each Department.
- (b) A Teaching Major consists of a minimum of 30 credits in courses numbered 210 or above in a Department offering a subject taught in elementary or secondary schools, plus the requirements of the Department of Education for the Teaching Diploma.

---

\* See section "Sophomores" under Department of English, page 46.

For further details concerning individual departmental requirements, see the relevant sections of this bulletin below.

### **3. The Teaching Diploma**

See under Department of Education.

### **4. Graduation with Distinction**

In order to graduate *with distinction* a student must have an average of 85 or higher in his Junior and Senior years and be recommended by his Department for distinction. In order to graduate *with high distinction* a student must have an average of 90 or higher in his Junior and Senior years and must be recommended by his Department for high distinction.

### **5. Directed Study**

All students with averages in their major of 82 or above at the beginning of their Senior year shall be eligible to elect a course of directed study. Students with averages lower than 82 may be admitted to directed study at the discretion of the Department.

Students who elect a course of directed study will choose their Senior courses in consultation with a Faculty member selected by the student with approval of the Department. Among these courses may be a tutorial of from three to six credits directed by the Faculty member. This tutorial may consist of independent research, original creative compositions, or directed reading, and will include the presentation of a report or thesis on the work.

## **ACADEMIC RULES AND REGULATIONS**

For a full statement of academic rules and regulations kindly refer to pages 57-60 of the General Catalogue for 1974-1975.

## **SUMMER SESSION**

**Maximum Load.** The maximum academic load during the summer session is 10 credits.

**Degree Courses.** The degree courses offered during the summer session are identical in standard and content with those offered during the first and second semesters. The purpose of the summer degree courses are as follows:

- (a) To enable students to make up deficiencies which are due to either failures or changes of their major programs;
- (b) To permit able students to accelerate their program of study;
- (c) To permit students, who for financial reasons are required to work while studying, to spread their academic programs over a period of eleven months, instead of the usual nine;
- (d) To permit candidates for degrees who are unable to attend the University for four full academic years to complete part or all of their programs.

**Non-Degree Courses and Summer Orientation Programs.** For these, see the special chapter at the end of this catalogue entitled Division of Extension and Special Programs.



## COURSES

### Numbers Preceding Course Titles

*Non-credit Courses (1-99).* No academic credit for graduation.

*Freshman Courses (100-199).* Ordinarily taken during the Freshman year, and may be counted toward graduation only as part of the Freshman program.

*Introductory Courses (200-209).* May be counted toward graduation whenever taken but cannot be considered as part of the credits in the major field.

*Advanced Undergraduate Courses (210-299).* May be counted as credits in the major field.

*Graduate Courses (300-499).* Many specialized courses numbered 210 through 299 may also give graduate credit if approved by the student's supervisor and the Graduate Committee.

*Odd Numbered Courses.* Normally offered during the first semester.

*Even Numbered Courses.* Normally offered during the second semester.

### Numbers Following Course Titles

*The first number* following the title of a course indicates the number of class hours given each week.

*The second number* indicates the laboratory or practice hours required each week.

*The third number* indicates the number of credit hours applied toward graduation. The credit assigned to each course is stated for the semester. Each hour of laboratory is considered  $\frac{1}{3}$  to  $\frac{1}{2}$  credit hour.

### Time of Course Offering

*Annually.* Courses marked are offered at least once during each academic year. Other courses marked *Alternate Years* and *Each Semester* are given accordingly. When frequency of offering is not indicated, the course is offered at the discretion of the Department.

### Course Descriptions

Detailed course descriptions are available in the individual Departments for persons requiring further information.

### Courses Offered by Other Faculties

Students in Arts and Sciences may also take for credit certain courses, offered in the Faculties of Agricultural Sciences, Engineering and Architecture, and Medical Sciences. A list of these courses is found on page 62 of the general catalogue for 1974-1975.

## Courses

The following list includes only those courses which were actually offered during the academic year 1974-1975. For a list of all the courses offered by the various departments of the Faculty of Arts and Sciences, please refer to pages 63-116 of the General Catalogue.

### DEPARTMENT OF ARABIC AND NEAR EASTERN LANGUAGES

#### UNDERGRADUATE

- 101** and **102** *Readings in Arabic Heritage.* 3.0; 3 cr; annually.
- 201** *Studies in Arabic Languages and Literature.* 3.0; 3 cr; annually.
- 203** and **204** *Introductory Arabic for Foreigners.* 6.0; 6 cr; annually.
- 215** and **216** *Intermediate Arabic for Foreigners.* 6.0; 6 cr; annually.
- 217** and **218** *Introductory Persian.* 3.0; 3 cr; annually.
- 225** and **226** *Advanced Reporting and Translation.* 3.0; 3 cr; alternate years.
- 227** and **228** *Arabic Linguistics.* 3.0; 3 cr; alternate years.
- 231** *Pre-Islamic Arabic Poetry.* 3.0; 3 cr; alternate years.
- 232** *Umayyad Poetry.* 3.0; 3 cr; alternate years.
- 239** *Modern Arabic Prose (The Novel).* 3.0; 3 cr; alternate years.
- 240** *Modern Arabic Prose (The Drama).* 3.0; 3 cr; alternate years.
- 241** and **242** *Literary Criticism.* 3.0; 3 cr; annually.
- 245** and **246** *Background of Modern Arabic Literature.* 3.0; 3 cr; annually.

#### GRADUATE PROGRAM

- 303** and **304** *Advanced Semitics.* 3.0; 3 cr.
- 305** *Graduate Seminar in Comparative Literature.* 3.0; 3 cr.
- 307** *Graduate Seminar in Literary Criticism.* 3.0; 3 cr.
- 309** *Graduate Seminar in Arabic Literary Sources.* 3.0; 3 cr.
- 311** *Graduate Seminar in an Epoch, A Trend, A Character or A Book.* 3.0; 3 cr.
- 313** *Graduate Seminar in Classical Arabic Literature.* 3.0; 3 cr.
- 315** *Graduate Seminar in Modern Arabic Literature.* 3.0; 3 cr.
- 401** *Graduate Tutorial in Arabic Literature or Linguistics.* 3.0; 3 cr.

**DEPARTMENT OF BIOLOGY**

- 103** and **104** *General Biology*. 3.3; 4 cr; annually.
- 201** and **202** *General Biology*. 3.3; 3 cr; annually.
- 207** *Quantitative Biology*. 2.2; 3 cr; annually.
- 210** *Human Biology*. 3.0; 3 cr; annually.
- 211** *Comparative Vertebrate Anatomy*. 2.4; 4 cr; annually.
- 215** *Plant Physiology*. 2.4; 4 cr; annually.
- 216** *Animal Physiology*. 3.3; 4 cr; annually.
- 222** *Cell Biology*. 3.3; 4 cr; annually.
- 225** *Cytology*. 2.3; 3 cr; annually.
- 232** *Development*. 3.3; 4 cr; annually.
- 243** *Genetics*. 3.0; 3 cr; annually.
- 245** *Genetics Laboratory*. 0.4; 2 cr; annually.
- 254** *Evolution*. 3.0; 3 cr; annually.
- 264** *Ecology*. 2.4 4 cr; annually.
- 266** *Introduction to Marine Sciences*. 3.3; 4 cr; annually.
- 271** *Invertebrate Zoology*. 2.4; 4 cr; annually.
- 274** *Microbiology*. 2.6; 5 cr; annually.
- 284** *Microtechnique*. 1.6; 4 cr; alternate years.
- 290** *Special Topics in Biology*. 3.0; 3 cr; annually.
- 291** and **292** *Undergraduate Tutorial*. 3 cr; annually.

**M.S. PROGRAM**

- 326** *Endocrinology*. 2.4; 4 cr; alternate years.
- 341** *Molecular Biology of Development*. 2.3; 3 cr; annually.
- 365** *Physical Oceanography*. 2.3; 3 cr; annually.
- 366** *Biological Oceanography*. 2.4; 3 cr; annually.
- 390** *Special Topics*. 3.0; 3 cr; annually.
- 391** and **392** *Tutorial*. 3.0 or 0.6; 3 cr; annually.
- 393** and **394** *Seminar*. 1.0; 1 cr; annually.
- 395** *Advanced Marine Science*. 3.0; 3 cr; annually.

**DEPARTMENT OF BUSINESS ADMINISTRATION**

- 201** *Introduction to Business Administration.* 3.0; 3 cr; annually.
- 210** *Fundamentals of Accounting I.* 4.0; 4 cr; annually.
- 211** *Fundamentals of Accounting II.* 4.0; 4 cr; annually.
- 212** *Cost Accounting and Control.* 3.0; 3 cr; annually.
- 213** *Auditing.* 3.0; 3 cr; annually.
- 220** *Business Law.* 3.0; 3 cr; annually.
- 223** *Money and Capital Markets.* 3.0; 3 cr; annually.
- 224** *Financial Management.* 3.0; 3 cr; annually.
- 227** *Commercial Banking.* 3.0; 3 cr; annually.
- 228** *Insurance.* 3.0; 3 cr; annually.
- 231** *Business Administration.* 3.0; 3 cr; annually.
- 239** *Personnel Administration.* 3.0; 3 cr; annually.
- 241** *Marketing Management.* 3.0; 3 cr; annually.
- 245** *International Marketing.* 3.0; 3 cr; annually.
- 246** *Marketing Research.* 3.0; 3 cr; annually.
- 251** *Managerial Economics.* 3.0; 3 cr; annually.
- 254** *Quantitative Methods I.* 3.0; 3 cr; annually.
- 261** *Seminar in Industrial Development.* 3.0; 3 cr; annually.
- 263** *Senior Tutorial Course.* 3.0; 3 cr; annually.

**M.B.A. PROGRAM**

- 303** *Business Economics.* 3.0; 3 cr.
- 304** *Business Research.* 3.0; 3 cr.
- 307** *Accounting Theory.* 3.0; 3 cr.
- 314** *Marketing Management.* 3.0; 3 cr.
- 315** *Production Planning and Control.* 3.0; 3 cr.
- 316** *Production and Inventory Management.* 3.0; 3 cr.
- 318** *Graduate Seminar in Business Administration.* 3.0; 3 cr.
- 320** *Investment Analysis.* 3.0; 3 cr.
- 321** *International Business Finance.* 3.0; 3 cr.
- 322** *Central Banking and Monetary Policy.* 3.0; 3 cr.
- 325** *Business Policy.* 3.0; 3 cr.

**DEPARTMENT OF CHEMISTRY**

- 101** *General Chemistry*. 3.3; 4 cr; each semester.
- 102** *General Chemistry*. 3.3; 4 cr; annually.
- 201** *Chemical Principles I*. 3.0; 3 cr; each semester.
- 202** *Chemical Principles II*. 3.0; 3 cr; each semester.
- 203** *Introductory Experimental Chemistry*. 1.4; 2 cr; each semester.
- 204** *Introductory Physical Chemistry Laboratory*. 1.4; 2 cr; each semester.
- 206** *Quantitative Analysis*. 3.4; 4 cr; each semester.
- 208** *Brief Survey of Organic Chemistry*. 3.0; 3 cr; each semester.
- 209** *Introductory Organic Laboratory*. 1.4; 2 cr; annually.
- 210** *Organic Laboratory for students of Pre-medicine*. 1.4; 2 cr; annually.
- 211** *Organic Chemistry I*. 3.0; 3 cr; each semester.
- 212** *Organic Chemistry II*. 3.0; 3 cr; each semester.
- 213** *Organic Chemistry Laboratory*. 1.8; 4 cr; annually.
- 217** *Chemical Dynamics*. 3.0; 3 cr; annually.
- 218** *Molecular Structure*. 3.0; 3 cr; annually.
- 219** *Chemical Thermodynamics*. 3.0; 3 cr; each semester.
- 220** *Physical Chemistry Laboratory*. 0.6; 3 cr; each semester.
- 223** *Inorganic Industrial Chemistry*. 3.0; 3 cr; annually.
- 224** *Organic Industrial Chemistry*. 3.0; 3 cr; annually.
- 225** *Organic Structure Determination*. 1.6; 4 cr; each semester.
- 227** *Technical Analysis*. 0.8; 3 cr; each semester.
- 228** *Inorganic Chemistry*. 3.0; 3 cr; annually.
- 229** *Coordination Compounds*. 3.0; 3 cr; annually.

**M.S. AND Ph.D. PROGRAMS**

- 304** *Mechanisms of Inorganic Reactions*. 3.0; 3 cr; annually.
- 311** *Advanced Organic Chemistry*. 3.0; 3 cr; annually.
- 314** *Heterocyclic Chemistry*. 3.0; 3 cr; alternate years.
- 323** *Chemical Kinetics*. 3.0; 3 cr; annually.
- 351** and **352** *Special Topics*. 3 cr.
- 361** and **362** *Tutorial*. Hours to be arranged.

## **CULTURAL STUDIES PROGRAM**

**201** and **202** *Ancient, Medieval and Renaissance Culture*. 3.0; 3 cr; annually.

**203** and **204** *Modern and Contemporary Culture*. 3.0; 3 cr; annually.

## **DEPARTMENT OF ECONOMICS**

**203** *Survey of Economics*. 3.0; 3 cr; annually.

**211** and **212** *Elementary Economic Theory*. 3.0; 3 cr; annually.

**213** *Economic Statistics I*. 3.0; 3 cr; annually.

**214** *Economic Statistics II*. 3.0; 3 cr; annually.

**217** *Intermediate Price Theory I*. 3.0; 3 cr; annually.

**218** *Intermediate Price Theory II*. 3.0; 3 cr; annually.

**221** *History of Economic Doctrines*. 3.0; 3 cr; annually.

**222** *Twentieth Century Economic Thought*. 3.0; 3 cr; annually.

**223** and **224** *Economic Organization of the Arab Middle East*. 3.0; 3 cr; annually.

**226** *Intermediate Public Finance*. 3.0; 3 cr; annually.

**227** *Intermediate Macroeconomics*. 3.0; 3 cr; annually.

**228** *Intermediate Monetary Economics*. 3.0; 3 cr; annually.

**230** *Economic History*. 3.0; 3 cr; annually.

**232** *Socialist Economics*. 3.0; 3 cr; annually.

**235** *Intermediate International Trade Theory*. 3.0; 3 cr; annually.

**236** *Intermediate International Economic Policy*. 3.0; 3 cr; annually.

**237** *Theory of Economic Development*. 3.0; 3 cr; annually.

**239** *Introduction to Mathematical Economics*. 3.0; 3 cr; annually.

**295** *Senior Seminar in Economics*. 3.0; 3 cr.

## **GRADUATE PROGRAM**

**305** *Statistics for Economists*. 3.0; 3 cr; annually.

**306** *Econometrics*. 3.0; 3 cr; annually.

**308** *Urban Economics*. 3.0; 3 cr; annually.

**317** *Price Theory I*. 3 cr; annually.

**327** *Macroeconomics*. 3 cr; annually.

**328** *Monetary Economics*. 3 cr; annually.

**335** *International Trade Theory*. 3 cr; annually.

**336** *International Economic Policy*. 3 cr; annually.

**337** *The Framework of Economic Development*. 3 cr; annually.

## **DEPARTMENT OF EDUCATION**

### **UNDERGRADUATE COURSES**

**211** *The School and the Social Order*. 3.0; 3 cr; annually.

**212** *Dynamics of Classroom Communication*. 1.2; 2 cr; annually.

**213** *Introduction to Educational Administration*. 3.0; 3 cr; annually.

**215** *Learning and Human Development*. 4.0; 4 cr; annually.

**216** *The Philosophical Foundations of Education*. 3.0; 3 cr; annually.

**217** *Measurement and Evaluation for Classroom Teachers*. 3.0; 3 cr; annually.

**218** *Early Childhood Education*. 3.0; 3 cr; annually.

**219** *Education of Exceptional Children*. 2.2; 3 cr; alternate years.

**220** *Instructional Media and Techniques*. 2.2; 3 cr; annually.

**223** *Guidance and Counseling in the Schools*. 3.0; 3 cr; annually.

**227** *Statistics in Education*. 3.0; 3 cr; annually.

### **Methods Courses (Elementary)**

**232** *Teaching of Language Arts and Social Studies in Elementary School*. 2.2; 3 cr; alternate years.

**234** *Teaching of New Math. in Elementary School*. 2.2; 3 cr; alternate years.

**236** *Teaching of Science in Elementary School*. 2.2; 3 cr; alternate years.

### **Methods Courses (Secondary)**

**244** *Teaching of English as a Foreign Language*. 2.2; 3 cr; annually.

**249** and **250** *Teaching of Social Studies*. 2.2; 3 cr; annually.

**253** and **256** *Teaching of Science*. 2.2; 3 cr; annually.

**290** *Senior Tutorial*. 1-3 cr; annually.

### **Graduate Courses**

**301** *Seminar in the History and Philosophy of Education*. 3.0; 3 cr; annually.

**302** *Seminar in the History and Philosophy of Arab Education*. 3.0; 3 cr; annually.

**305** *Foundations of Science Education*. 3.0; 3 cr; alternate years.

**306** *Recent Development in Science Education*. 3.0; 3 cr; alternate years.

**308** *Seminar in Foundations of Elementary Education*. 3.0; 3 cr; annually.

- 309** *Foundations of Mathematics Education.* 3.0; 3 cr; alternate years.
- 310** *Recent Developments in Mathematics Education.* 3.0; 3 cr; alternate years.
- 311** *Seminar in Supervision of Instruction.* 3.0; 3 cr; annually.
- 313** *Seminar in Educational Administration.* 3.0; 3 cr; annually.
- 314** *Comparative Education.* 3.0; 3 cr; alternate years.
- 315** *Psychology of Education (Advanced).* 3.0; 3 cr; annually.
- 316** *Comparative Study of Middle Eastern Education.* 3.0; 3 cr; alternate years.
- 317** *Theory and Methods of Testing.* 3.0; 3 cr; alternate years.
- 320** *Seminar in Human Development.* 3.0; 3 cr; annually.
- 321** *General Research Methodology in Education.* 3.0; 3 cr; annually.
- 323** *Experimental Research in Education.* 3.0; 3 cr; alternate years.
- 324** *Problems of Teaching Reading and Literature.* 3.0; 3 cr; annually.
- 325** *Problems of Teaching Writing and Composition.* 3.0; 3 cr; annually.
- 326** *Theory and Design of Curriculum.* 3.0; 3 cr; annually.
- 328** *Seminar in TEFL.* 2.2; 3 cr; annually.
- 329** *Seminar in Education and Social Change.* 3.0; 3 cr; annually.
- 330** *Practicum in Guidance and Counseling.* 2.4; 4 cr; annually.
- 331** *Field Experience in Guidance and Counseling.* 1.2; 2 cr; annually.
- 332** *Seminar in Educational Planning for Social and Economic Development.* 3.0; 3 cr; annually.
- 390** *Special Topics.* 3.0; 3 cr; annually.

## **DEPARTMENT OF ENGLISH**

- 103** *English Communication Skills.* 3.2; 4 cr; annually.
- 104** *English Communication Skills.* 3.2; 4 cr; annually.

### **Freshmen (Advanced Sequence)**

- 105** *English Communication Skills.* 4.0; 4 cr; first semester.
- 106** *English Communication Skills.* 4.0; 4 cr; second semester.

### **Sophomores**

- 134** *English Communication Skills.* 3.2; 4 cr; annually.
- 201** *Advanced English Communication Skills.* 3.0; 3 cr; annually.

### **Graduates**

- 202** *English Communication Skills for Graduate Students.* 3.0; 3 cr; annually.



## LITERATURE

- 205** and **207** *Survey of English Literature I*. 3.0; 3 cr; annually.
- 207** *Survey of English Literature II*. 3.0; 3 cr; annually.
- 210** *Introduction to English Medieval Literature*. 3.0; 3 cr; alternate years.
- 211** *Elizabethan and Jacobean Drama*. 3.0; 3 cr; annually.
- 212** *Shakespeare I (The Earlier Period)*. 3.0; 3 cr; annually.
- 213** *Shakespeare II (The Later Period)*. 3.0; 3 cr; annually.
- 214** *Poetry and Prose of the English Renaissance*. 3.0; 3 cr; annually.
- 215** *Literature of the Seventeenth Century*. 3.0; 3 cr; annually.
- 216** *Restoration and Eighteenth-Century Literature*. 3.0; 3 cr; annually.
- 217** *The Foundation of the Novel*. 3.0; 3 cr; alternate years.
- 219** *The Romantic Movement*. 3.0; 3 cr; annually.
- 220** *Victorian Literature Excluding the Novel*. 3.0; 3 cr; annually.
- 221** *The Nineteenth Century English Novel*. 3.0; 3 cr; alternate years.
- 222** *English Literature, 1880-1920*. 3.0; 3 cr; annually.
- 223** *Contemporary Literature in English*. 3.0; 3 cr; annually.
- 224** *American Literature to 1900*. 3.0; 3 cr; annually.
- 225** *American Literature from 1900*. 3.0; 3 cr; annually.
- 226** *Literary Criticism*. 3.0; 3 cr; annually.
- 246** *Kahlil Gibran and His Contemporaries*. 3.0; 3 cr; annually.
- 290** *Tutorial*. 3-6 cr; offered on demand.
- 292** *Seminar for English Majors (in Literature)*. 3-6 cr; annually.

## LANGUAGE

- 227** *Introduction to Language*. 3.0; 3 cr; annually.
- 228** *Phonology*. 3.2; 3 cr; annually.
- 231** *Modern English Grammar*. 3.0; 3 cr; annually.
- 294** *Advanced English Grammar*. 3-6 cr; annually.

## MASS COMMUNICATION

- 243** *Introduction to Mass Communications*. 3.0; 3 cr; annually.
- 244** *Radio and Television*. 2.2; 3 cr; annually.
- 247** *Essentials of Communication*. 3.0; 3 cr; annually.
- 249** *Basic News Communication*. 2.2; 3 cr; annually.
- 251** *Seminar in Mass Communications and Modern Society*. 3.0; 3 cr; annually.

- 253** *Interpreting the News.* 3.0; 3 cr; annually.
- 255** *International Communications Systems.* 3.0; 3 cr; annually.
- 256** *Seminar in Mass Media and National Development.* 3.0; 3 cr; annually.
- 257** *Principles of Public Relations.* 3.0; 3 cr; annually.
- 258** *Selected Topics in Mass Communications.* 2-6 cr; annually.
- 260** *Communication Theory and Research.* 3.0; 3 cr; annually.
- 295** *Translation Theory and Practice: Arabic-English, English-Arabic.* 3.0; 3 cr; annually.

#### M.A. PROGRAM

- 301** *Introduction to Bibliography and Methods of Research.* 3.0; 3 cr; annually.
- 302** *Selected Topics in English Literature Before 1800.* 3.0; 3 cr; annually.
- 303** *Selected Topics in English Literature After 1800.* 3.0; 3 cr; annually.
- 304** *Selected Topics in American Literature.* 3.0; 3 cr; annually.
- 305** *Graduate Tutorial in English or American Literature.* 3.0; 3 cr; annually.
- 329** *Studies in Old and Middle English Literature.* 3.0; 3 cr; annually.
- 342** *Theoretical Linguistics.* 3.0; 3 cr; annually.

### DEPARTMENT OF EUROPEAN LANGUAGES AND LITERATURE

#### CLASSICS

- 211** *Introduction to Greek.* 3.0; 3 cr; alternate years.

#### EUROPEAN LITERATURE

- 211** *Classical Mythology and its Use in Later Literature and Art.* 3.0; 3 cr; alternate years.
- 214** *Literary Criticism.* 3.0; 3 cr; annually.
- 301** *Problems of Comparative Literature.* 3.0; 3 cr; annually.
- 303** *Graduate Seminar in European Literature.* 3.0; 3 cr.
- 304** *Graduate Tutorial in European Literature.* 3.0; 3 cr.

#### FRENCH

- 201** and **202** *Elementary French.* 3.1; 3 cr; annually.
- 211** and **212** *Intermediate French.* 3.0; 3 cr; annually.
- 221** and **222** *Advanced French.* 3.0; 3 cr; annually.
- 232** *French Romanticism.* 3.0; 3 cr; alternate years.
- 233** *The French Novel up to the End of the Nineteenth Century.* 3.0; 3 cr; annually.

**235** *French Literature of the Eighteenth Century.* 3.0; 3 cr; alternate years.

**236** *French Literature of the Twentieth Century.* 3.0; 3 cr; annually.

#### GERMAN

**201** and **202** *Elementary German.* 3.1; 3 cr; annually.

**221** and **222** *Advanced German.* 3.0; 3 cr; annually.

### DEPARTMENT OF FINE AND PERFORMING ARTS

#### ART

**211** *Introduction to the Visual Arts.* 3.0; 3 cr; annually.

**214** and **215** *Senior Tutorial.* 0.6; 3 cr; annually.

**221** *Beginning Painting.* 0.6; 3 cr; annually.

**222** *Intermediate Painting.* 0.6; 3 cr; annually.

**223** *Jewelry and Crafts.* 0.6; 3 cr; annually.

**225** *Ceramics.* 0.6; 3 cr; annually.

**227** *Beginning Design.* 0.6; 3 cr; annually.

**228** *Intermediate Design.* 0.6; 3 cr; annually.

**229** *Beginning Drawing.* 0.6; 3 cr; annually.

**230** *Intermediate Drawing.* 0.6; 3 cr; annually.

**231** *History of Western Art.* 3.0; 3 cr; annually.

**232** *History of Western Art.* 3.0; 3 cr; annually.

**233** *Beginning Sculpture.* 0.6; 3 cr; annually.

**234** *Intermediate Sculpture.* 0.6; 3 cr; annually.

**235** *Photography.* 0.6; 3 cr; annually.

**236** *Printmaking.* 0.6; 3 cr; annually.

**238** *Advanced Painting.* 0.6; 3 cr; annually.

**239** *Selected Topics in Art History.* 3.0; 3 cr; annually.

#### MUSIC

**240** *Basic Experiences in Music I.* 3.0; 3 cr; annually.

**241** *Basic Experiences in Music II.* 3.0; 3 cr; annually.

**242** *Components of Music I.* 3.0; 3 cr; annually.

**243** *Components of Music II.* 3.0; 3 cr; annually.

**244** *Man's Musical Heritage I.* 3.0; 3 cr; annually.

**245** *Man's Musical Heritage II.* 3.0; 3 cr; annually.

**246** *Music in the Contemporary World* (20th century Classical, Electronic, Popular, Film & Dance). 3.0; 3 cr; annually.

**247** *Music in the Contemporary Near East* (a study of continuity and change). 3.0; 3 cr; annually.

**248** *The Life and Works of a Composer* (a different composer each year). 3.0; 3 cr; annually.

**251** *Piano Literature and Interpretation II*. 3.0; 3 cr; annually.

**252** *Music Performance Workshop I*. 3.3; 4 cr; annually.

**253** *Music Performance Workshop II*. 3.3; 4 cr; annually.

**254** *Music Performance Workshop III*. 3.3; 4 cr; annually.

**256** *Applied Vocal Music I*. 1.0; 1 cr; annually.

**257** *Applied Vocal Music II*. 1.0; 1 cr; annually.

## THEATER

**264** *Introduction to the Elements of Theater*. 3.0; 3 cr; annually.

**265** *Introduction to the Various Forms of Theatrical Presentation*. 3.0; 3 cr; annually.

**267** *Voice and Speech I*. 2.2; 3 cr; annually.

**269** *Improvisation I*. 1.4; 3 cr; annually.

**271** *Movement and Mime I*. 1.4; 3 cr; annually.

**273** *Stagecraft*. 2.2; 3 cr; annually.

**274** *Stage Design*. 2.2; 3 cr; annually.

**275** *Directing I*. 2.2; 3 cr; annually.

**283** *Tutorial*. 3.0; 3 cr; annually.

## DEPARTMENT OF GEOLOGY

**201** *Physical Geology*. 3.2; 4 cr; each semester.

**202** *Historical Geology*. 3.0; 3 cr; annually.

**207** *Map Interpretation*. 1.4; 3 cr; annually.

**210** *Geomorphology*. 3.0; 3 cr; annually.

**211** *Crystallography and Physical Mineralogy*. 1.4; 3 cr; annually.

**212** *Optical Mineralogy*. 1.4; 3 cr; annually.

**213** *Structural Geology*. 2.2; 3 cr; annually.

**214** *Stratigraphy*. 3.0; 3 cr; annually.

**215** *Invertebrate Paleontology*. 1.4; 3 cr; annually.

**219** *Geologic Field Methods*. 0.6; 2 cr; annually.

- 221** *Petrology*. 2.2; 3 cr; annually.  
**222** *Sedimentary Petrology and Sedimentology*. 1.4; 3 cr; annually.  
**200** *The Earth and human affairs*. 3.0; 3 cr; annually.  
**223** *Geological Oceanography*. 3.0; 3 cr; annually.  
**271** and **272** *Senior Tutorial Course*. 1-3 cr.

#### M.S. PROGRAM

- 303** *Geochemistry*. 3.0; 3 cr.  
**304** *Geophysics*. 3.0; 3 cr.  
**306** *Mineral Deposits*. 2.4; 3 cr.  
**313** *Photogeology*. 1.4; 3 cr.  
**317** *Micropaleontology*. 2.2; 3 cr.  
**318** *Hydrogeology*. 3.0; 3 cr.  
**320** *Graduate Seminar*. 3.0; 3 cr.  
**329** and **330** *Selected Topics in Advanced Geology*. 3.0; 3 cr.

### DEPARTMENT OF HISTORY AND ARCHAEOLOGY

#### HISTORY

- 101** and **102** *Survey of Modern Europe*. 3.0; 3 cr; annually.  
**210** *Introduction to Historical Methodology*. 3.0; 3 cr; alternate years.  
**217** and **218** *History of Rome*. 3.0; 3 cr; alternate years.  
**229** and **230** *History of the Arabs*. 3.0; 3 cr; annually.  
**231** *History of the Near East from 610 to 1071 A.D.* 3.0; 3 cr; alternate years.  
**232** *History of the Near East from 1071 to 1517 A.D.* 3.0; 3 cr; alternate years.  
**235** *History of the Arabs from 750 to 861 A.D.* 3.0; 3 cr; alternate years.  
**236** *History of the Arabs from 861 to 1258 A.D.* 3.0; 3 cr; alternate years.  
**237** *Persia and Turkey to 1800 A.D.* 3.0; 3 cr; annually.  
**238** *Persia and Turkey in the 19th and 20th centuries*. 3.0; 3 cr; annually.  
**239** *History of the Arab East and North Africa, 1517-1798 A.D.* 3.0; 3 cr; alternate years.  
**240** *History of the Arab East 1798 to 1920 A.D.* 3.0; 3 cr; alternate years.  
**246** *History and Culture of the Armenian People to 1064*. 3.0; 3 cr.  
**247** *History and Culture of the Armenian People from 1064 A.D. to Modern Times*. 3.0; 3 cr.  
**252** *The Middle Ages*. 3.0; 3 cr; annually.

- 254** *European History 1618-1815 A.D.* 3.0; 3 cr; annually.
- 255** *Europe 1815-1871 A.D.* 3.0; 3 cr; annually.
- 256** *Europe 1871-1914 A.D.* 3.0; 3 cr; annually.
- 257** *The Contemporary World Since 1917 A.D.* 3.0; 3 cr; annually.
- 259** *Main Currents in United States History.* 3.0; 3 cr.
- 286** *Historical Interpretation.* 3.0; 3 cr; annually.
- 291** and **292** *Senior Seminar in History.* 3.0; 3 cr; annually.
- 303** and **304** *Graduate Seminar in Arab and Near Eastern History.* 3.0; 3 cr.
- 305** and **306** *Graduate Seminar in European History.* 3.0; 3 cr.
- 321** and **322** *Graduate Tutorial in Ancient History.* 3.0; 3 cr.
- 323** and **324** *Graduate Tutorial in Arab and Near Eastern History.* 3.0; 3 cr.
- 327** *Historical Writing.* 3.0; 3 cr; annually.
- 360** *Historiography and Documentation.* 3.0; 3 cr.

#### ARCHAEOLOGY

- 211** and **212** *Methodology.* 3.0; 3 cr.
- 213** *Archaeology of the Near East.* 3.0; 3 cr.
- 214** *Archaeology of the Near East.* 3.0; 3 cr.
- 215** and **216** *Archaeology of the Greek World.* 3.0; 3 cr.
- 303** and **304** *Archaeology of Palestine.* 3.0; 3 cr.
- 307** and **308** *Numismatics of the Near East.* 3.0; 3 cr.

#### DEPARTMENT OF MATHEMATICS

- 101** *Introductory College Mathematics.* 3.0; 3 cr; annually.
- 102** *Calculus and Analytic Geometry I.* 4.0; 4 cr; annually.
- 201** *Calculus and Analytic Geometry II.* 4.0; 4 cr; annually.
- 202** *Calculus and Analytic Geometry III.* 4.0; 4 cr; annually.
- 203** *Basic Mathematics for Social Sciences.* 4.0; 4 cr; annually.
- 205** *Sets and Algebraic Systems.* 3.0; 3 cr; annually.
- 209** *Digital Computer Programming I.* 1.0; 1 cr; annually.
- 213** *Higher Geometry.* 3.0; 3 cr; annually.
- 214** *Introduction to Topology.* 3.0; 3 cr; annually.
- 215** *History of Mathematics.* 3.0; 3 cr.
- 216** *Topics in Topology.* 3.0; 3 cr.

- 220** *Introduction to Linear Algebra.* 3.0; 3 cr; annually.
- 221** *Introduction to Differential Equations.* 3.0; 3 cr; annually.
- 223** *Advanced Calculus I.* 3.0; 3 cr; annually.
- 224** *Advanced Calculus II.* 3.0; 3 cr; annually.
- 227** *Introduction to Complex Variables.* 3.0; 3 cr.
- 241** *Topics in Algebra I.* 3.0; 3 cr; annually.
- 250** *Introduction to Computer Science.* 3.0; 3 cr; annually.
- 251** *Numerical Methods (Computer-oriented).* 3.0; 3 cr; annually.
- 256** *Advanced Topics in Computer Science.* 3.0; 3 cr.
- 261** *Number Theory.* 3.0; 3 cr.
- 271** *Set Theory.* 2.0; 2 cr; annually.
- 295** *Senior Tutorial Course.* 3-6 cr.

#### STATISTICS

- 207** *Elementary Probability and Statistics.* 2.2; 3 cr; annually.
- 233** *Introduction to Probability and Statistics.* 3.0; 3 cr; annually.
- 234** *Statistical Inference I.* 2.2; 3 cr; annually.
- 235** *Statistical Inference II.* 3.0; 3 cr; annually.
- 236** *Elements of Sample Surveys.* 3.0; 3 cr.
- 238** *Probability Theory.* 3.0; 3 cr.

#### GRADUATE PROGRAM

##### MATHEMATICS

- 301** and **302** *Graduate Tutorial Courses.* 1-3 cr.
- 303** *Functions of a Real Variable.* 3.0; 3 cr; annually.
- 305** and **306** *Advanced Topics in Mathematics.* 3.0; 3 cr.
- 314** *Algebraic Topology.* 3.0; 3 cr; annually.
- 341** *Rings and Modules.* 3.0; 3 cr; annually.

##### STATISTICS

- 335** and **336** *Advanced Topics in Statistics.* 3.0; 3 cr.

#### DEPARTMENT OF PHILOSOPHY

##### UNDERGRADUATE PROGRAM

- 201** *Introduction to Philosophy.* 3.0; 3 cr; every semester.
- 211** *Introduction to Logic.* 3.0; 3 cr; annually.

- 213** *History of Ancient and Medieval Philosophy.* 3.0; 3 cr; alternate years.
- 217** *Aesthetics.* 3.0; 3 cr; alternate years.
- 220** *Symbolic Logic.* 3.0; 3 cr; annually.
- 222** *Philosophy of Science.* 3.0; 3 cr; alternate years.
- 231** *Philosophy of Aristotle.* 3.0; 3 cr; alternate years.
- 242** *Classical Empiricist Philosophers.* 3.0; 3 cr; alternate years.
- 245** *Contemporary Philosophical Movements.* 3.0; 3 cr; alternate years.

#### GRADUATE PROGRAM

- 302** *Selected Problems in the Theory of Value.* 3.0; 3 cr; alternate years.
- 315** *Contemporary Philosophy.* 3.0; 3 cr; alternate years.
- 323** and **324** *Special Authors Seminar.* 3.0; 3 cr.

#### DEPARTMENT OF PHYSICS

- 101** *Introductory Physics I.* 4.3; 5 cr; annually.
- 102** *Introductory Physics II.* 4.3; 5 cr; annually.
- 103** *General Physics I.* 3.3; 4 cr; annually.
- 204** *General Physics II.* 3.2; 4 cr; annually.
- 205** *General Physics III.* 3.3; 4 cr; annually.
- 206** *General Physics II.* Laboratory class.
- 210** *Classical Astronomy.* 2.2; 3 cr; annually.
- 211** *Introductory Physics III.* 3.0; 3 cr; annually.
- 212** *Introductory Physics IV.* 3.0; 3 cr; annually.
- 213** *Electricity and Magnetism Laboratory.* 0.3; 1 cr; annually.
- 214** *Modern Physics Laboratory.* 0.3; 1 cr; annually.
- 215** *Thermal Physics.* 3.0; 3 cr; annually.
- 216** *Electronics.* 3.3; 4 cr; annually.
- 217** *Mechanics.* 5.0; 4 cr; annually.
- 218** *Quantum Mechanics.* 3.0; 3 cr; annually.
- 219** *Electromagnetic Theory I.* 3.0; 3 cr; annually.
- 220** *Electromagnetic Theory II.* 3.0; 3 cr; annually.
- 221** *Advanced Laboratory I.* 1.6; 4 cr; annually.
- 222** *Advanced Laboratory II.* 0.6; 3 cr.
- 223** *Atomic and Molecular Physics.* 3.0; 3 cr.



- 224** *Mathematical Methods of Physics.* 3.0 3 cr.  
**225** *Nuclear Physics.* 3.0; 3 cr.  
**228** *Optics.* 3.0; 3 cr.  
**229** *Current Topics in Physics.* 1.0; 1 cr.  
**232** *Experimental Techniques.* 1.0; 1 cr.  
**303** *Thermodynamics and Statistical Mechanics.* 3.0; 3 cr; annually.  
**304** *Solid State Physics.* 3.0; 3 cr; annually.  
**307** *Classical Mechanics.* 3.0; 3 cr; annually.  
**308** *Electrodynamics.* 3.0; 3 cr; annually.  
**309** *Special Theory of Relativity.* 3.0; 3 cr.  
**313** *Quantum Mechanics I.* 3.0; 3 cr; annually.  
**314** *Quantum Mechanics II.* 3.0; 3 cr.  
**332** *Selected Topics.* 3.0; 3 cr.  
**392** *Graduate Tutorial.* 1-3 cr.

## **DEPARTMENT OF POLITICAL STUDIES AND PUBLIC ADMINISTRATION**

### **B.A. PROGRAM**

- 201** *The Nature of Politics and Administration.* 3.0; 3 cr.  
**202** *The Study of Politics and Administration.* 3.0; 3 cr.  
**210** *Survey of Political Philosophy.* 3.0; 3 cr.  
**211** *Survey of Comparative Politics.* 3.0; 3 cr.  
**212** *Survey of Public Administration.* 3.0; 3 cr.  
**213** *Survey of International Politics.* 3.0; 3 cr.  
**217** *History of Western Political Thought II.* 3.0; 3 cr.  
**223** *Jurisprudence.* 3.0; 3 cr.  
**225** *Public International Law.* 3.0; 3 cr.  
**233** *International Organization.* 3.0; 3 cr.  
**236** *Arab-Western Relations.* 3.0; 3 cr.  
**250** *Modern Governments: United Kingdom.* 3.0; 3 cr.  
**251** *Modern Governments: United States of America.* 3.0; 3 cr.  
**252** *Modern Governments: U.S.S.R.* 3.0; 3 cr.  
**253** *Modern Governments of the Middle East.* 3.0; 3 cr.  
**254** *Political Development and Modernization.* 3.0; 3 cr.

- 257** *Comparative Public Administration (Western)*. 3.0; 3 cr.
- 258** *Comparative Public Administration (Middle Eastern)*. 3.0; 3 cr.
- 259** *Public Administration in Lebanon*. 3.0; 3 cr.
- 273** *Public Personnel Administration*. 3.0; 3 cr.
- 275** *Organization and Management*. 3.0; 3 cr.
- 277** *Public Budgeting*. 3.0; 3 cr.
- 291** *Senior Seminar in Political Philosophy*. 3.0; 3 cr.
- 293** *Senior Seminar on Foreign Policy of the Great Powers*. 3.0; 3 cr.
- 295** *Foreign Policies of Non-Middle Eastern Developing Countries*. 3.0; 3 cr.
- 296** *Senior Seminar in Arab Political Processes*. 3.0; 3 cr.
- 297** *Senior Seminar in Administrative Theory*. 3.0; 3 cr.
- 298** *Senior Seminar in Public Bureaucracy*. 3.0; 3 cr.
- 299** *Scope and Methods of Political and Administrative Studies*. 3.0; 3 cr.

#### M.A. PROGRAM

- 300** *Research Design and Techniques*. 3.0; 3 cr.
- 302** *Theories of International Relations*. 3.0; 3 cr.
- 316** *International Politics of the Arab World*. 3.0; 3 cr.
- 317** *Modern European Political Philosophy*. 3.0; 3 cr.
- 326** *International Law and Diplomacy*. 3.0; 3 cr.
- 331** *Problems of the Cold War*. 3.0; 3 cr.
- 333** *Graduate Seminar in International and Regional Organization*. 3.0; 3 cr.
- 350** *Graduate Seminar in Governmental Institutions and Processes*. 3.0; 3 cr.
- 353** *Graduate Seminar in the Modern Governments of the Middle East*. 3.0; 3 cr.
- 354** *Modern Governments of Non-Middle Eastern Developing Countries*. 3.0; 3 cr.
- 358** *Local Government*. 3.0; 3 cr.
- 370** *Problems in Public Personnel Administration*. 3.0; 3 cr.
- 373** *Politics and Administration*. 3.0; 3 cr.
- 374** *Graduate Seminar in Public Administration*. 3.0; 3 cr.
- 375** *Administrative Analysis*. 3.0; 3 cr.
- 377** *Problems in Financial Administration*. 3.0; 3 cr.
- 378** *Political and Administrative Development*. 3.0; 3 cr.
- 392** *Graduate Seminar in Legal Issues*. 3.0; 3 cr.
- 394** *Graduate Seminar in International Relations*. 3.0; 3 cr.
- 397** *Graduate Seminar in Administrative Theory*. 3.0; 3 cr.

**DEPARTMENT OF PSYCHOLOGY**

## UNDERGRADUATE PROGRAM

- 201** *General Psychology*. 3.0; 3 cr; annually.
- 210** *Statistics for Psychological Research*. 3.0; 2 cr; annually.
- 212** *Social Psychology*. 3.0; 3 cr; annually.
- 216** *Abnormal Psychology*. 3.0; 3 cr; annually.
- 217** *Psychology of Perception*. 3.0; 3 cr; annually.
- 218** *Psychology of Learning*. 3.0; 3 cr; annually.
- 219** *Experimental Method*. 2.3; 3 cr; annually.
- 220** *Psychology of Personality*. 3.0; 3 cr; annually.
- 221** *Physiological Psychology*. 3.0; 3 cr; annually.
- 222** *History and Systems of Psychology*. 3.0; 3 cr; annually.
- 225** *Psychology of Development*. 3.0; 3 cr; annually.
- 292** *Undergraduate Seminar in General Psychology*. 3.0; 3 cr; annually.

## GRADUATE PROGRAM

- 301** *Research Design*. 3.0; 3 cr; annually.
- 302** *Contemporary Systems of Psychology*. 3.0; 3 cr; annually.
- 304** *Advanced Social Psychology*. 3.0; 3 cr; alternate years.
- 305** *Clinical Assessment*. 3.0; 3 cr; annually.
- 307** *Seminar in Social Psychology*. 3.0; 3 cr; annually.
- 308** *Seminar in Clinical Psychology*. 3.0; 3 cr; alternate years.
- 309** and **310** *Seminar in General Psychology*. 2.0; 3 cr; annually.

**DEPARTMENT OF RELIGIOUS STUDIES**

## ANCIENT AND CLASSICAL RELIGIONS

- 213** *Introduction to the Religion of the Old Testament*. 3.0; 3 cr; alternate years.
- 214** *Old Testament Prophets*. 3.0; 3 cr; alternate years.
- 215** *Graeco-Roman Religions*. 3.0; 3 cr; annually.
- 216** *Judaism*. 3.0; 3 cr; annually.

## CHRISTIANITY

- 221** *Jesus of Nazareth*. 3.0; 3 cr; alternate years.
- 222** *History of Christianity I: from A.D. 325 to 1453*. 3.0; 3 cr; alternate years.
- 232** *History of the Eastern Orthodox Churches II*. 3.0; 3 cr; annually.
- 237** *Religious Art and Iconography of Eastern Christendom*. 3.0; 3 cr; annually.

## ISLAM

- 241** *The Rise and Development of Islam I.* 3.0; 3 cr; annually.
- 242** *The Rise and Development of Islam II.* 3.0; 3 cr; annually.
- 243** *Islamic Religious Thought.* 3.0; 3 cr; annually.
- 244** *Introduction to the Study of the Qur'an.* 3.0; 3 cr; alternate years.
- 245** *History and Theory of Islamic Law.* 3.0; 3 cr; annually.
- 252** *Firaq and Maqalat (Sects and Doctrines) in Islam.* 3.0; 3 cr; alternate years.
- 253** *Islam in the Modern Period.* 3.0; 3 cr; annually.
- 254** *The Civilization of Islam.* 3.0; 3 cr; alternate years.
- 257** *Religious Art and Architecture of Islam.* 3.0; 3 cr; annually.

## SOUTH AND FAR EASTERN RELIGIONS

- 261** *Hinduism I.* 3.0; 3 cr.
- 262** *Hinduism II.* 3.0; 3 cr.
- 264** *Buddhism.* 3.0; 3 cr.
- 265** *Modern Hindu Thought.* 3.0; 3 cr.
- 267** *Religions of the Far East.* 3.0; 3 cr.

## SEMINARS, TUTORIALS, ETC.

- 295** *Seminar in the History of Religions.* 3.0; 3 cr; annually.
- 303** and **304** *Seminar in Religious Studies.* 3.0; 3 cr.
- 305** and **306** *Tutorial in Religious Studies.* 3.0; 3 cr.

## DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

### SOCIOLOGY

- 201** *Introduction to Sociology.* 3.0; 3 cr; each semester.
- 212** *Urbanization.* 3.0; 3 cr; alternate years.
- 224** *Social Interaction.* 3.0; 3 cr; alternate years.
- 233** *Contemporary Arab Society.* 3.0; 3 cr; annually.
- 240** *Social Stratification.* 3.0; 3 cr; alternate years.
- 250** *Social Disorganization and Deviant Behavior.* 3.0; 3 cr; alternate years.
- 261** *Development of Social Thought.* 3.0; 3 cr; annually.
- 301** *Graduate Seminar.* 3-6 cr; annually.
- 306** *Seminar in Social Research Methods.* 3.0; 3 cr; annually.
- 307** *Advanced Sociological Theory.* 3.0; 3 cr; annually.

**308** *Modernization in the Arab World.* 3.0; 3 cr; alternate years.

**309** *Social Institutions of Middle Eastern Societies.* 3.0; 3 cr; alternate years.

**320** *Special Topics.* 3.0; 3 cr.

#### ANTHROPOLOGY

**210** *Introduction to Anthropology.* 3.0; 3 cr; each semester.

**271** *Social Anthropology.* 3.0; 3 cr; alternate years.

**272** *Cultural Change.* 3.0; 3 cr; alternate years.

**276** *Peasant Society.* 3.0; 3 cr.

**281** *Political Anthropology.* 3.0; 3 cr; alternate years.

**371** and **372** *Seminars in Problems in Middle Eastern Ethnology.* 3.0; 3 cr; annually.

**382** *History of Anthropological Theory.* 3.0; 3 cr; alternate years.

**390** *Special Topics.* 3-6 cr.

## INSTITUTES, CENTERS AND SPECIAL PROGRAMS

---

### **Center for Behavioral Research**

*Director:* Prothro, E.T.

*Visiting Professors:* Aller, W.; Dennis, W.; Sharabi, H.

*Associate Directors:* Diab, L.; Khalaf, S.; Obermeyer, G.

*Associates:* Aller, S.; Kennedy, J.; McCabe, J.; Tadros, H.

The Center encourages, coordinates and sponsors research in the behavioral sciences, with emphasis on the anthropology, psychology and sociology of the Middle East. It also promotes dissemination of research findings through publications, seminars and conferences.

All full-time members of the Department of Psychology and the Department of Sociology and Anthropology are members of the Center. In addition some members of other departments in the Faculty of Arts and Sciences working on problems related to behavioral sciences may be Affiliates of the Center. Scholars not in the University but residing in Lebanon may be appointed Associates in the Center upon recommendation of an appropriate department.

### **Center for English Language Research and Teaching**

*Director:* Cook, D.

*Professors:* Bratton, N.; Brown, R.; Myers, D.

*Instructor:* Raschka, M.

The Center has five main functions:

(1) in cooperation with the Departments of English and Education it sponsors programs leading to the Teaching Diploma and to an M.A. degree in the Teaching of English as a Foreign Language;

- (2) it publishes a quarterly journal on English Language teaching, *TEFL*, which is distributed free of charge to approximately 3500 teachers in 32 countries;
- (3) it maintains a Materials Center comprising an up-to-date collection of textbooks, journals, reports and visual aids which are available for inspection by students, visiting teachers and administrators;
- (4) it offers consultation services and assistance in all aspects of English language teaching and teacher training throughout the Middle East;
- (5) it engages in research in language learning problems and produces materials for specialized English language programs.

### **Economic Research Institute**

*Director:* Sirhan, G.

The Economic Research Institute, which is affiliated to the Department of Economics, was established in 1953 to study problems of the rapidly developing economies of the various countries of the Middle East. The Department of Economics is responsible for teaching, and the Economic Research Institute for research in the field of economics.

The specific aims of the Institute are:

- (1) to provide time and facilities for basic (academic) research;
- (2) to conduct contract research geared to the socio-economic development of the Arab world, at the request and with the support of governments and semi-public bodies;
- (3) to build up, systematize and publish a body of data on the region;
- (4) to provide training in research for outstanding graduate students;
- (5) to promote and publish economic writing by Institute members and outside economists.

### **Graduate Center for Middle Eastern Studies**

*Director:* Ghul, M.

Participating Departments: Arabic and Near Eastern Languages, Economics, Education, History and Archaeology, Philosophy, Psychology, Political Studies and Public Administration, Religious Studies, and Sociology and Anthropology.

The Graduate Center for Middle Eastern Studies offers an interdisciplinary and interdepartmental graduate program providing opportunities for study and research leading to the degree of Master of Arts in the field of Middle Eastern Studies. The program draws on the resources of the various Departments in the Faculty of Arts and Sciences which together offer approximately one hundred semester courses pertaining to Middle Eastern Studies.

All students enrolled in the program are expected to take the core courses or their equivalent, and as many undergraduate or graduate courses as are deemed necessary by the Director to satisfy the requirements of the candidate's particular concentration.

Requirements for admission and details regarding the number of credit hours needed for fulfilling the requirements of the M.A. degree are governed by the regulations

of the chapter at the end of this catalogue entitled Graduate Study. The core courses include a Middle Eastern language (Arabic, Turkish, Persian or any other language necessary for the particular needs of the student) and a course in each of the following areas: Islamic history and civilization, Ottoman history and institutions, nineteenth century modernization movements, and contemporary Middle Eastern society. A thesis showing competence in methodology and in the candidate's area of concentration is required. The written comprehensive examination covering the candidate's major field of study may be taken upon completing all but six of the total credits required for graduation.

### **Science and Mathematics Education Center (SMEC)**

*Director:* Za'rou, G.

*Professors:* Babikian, Y.; Billeh, V.; Hasan, O.; Jurdak, M.; Namek, Y.

*Instructor:* Haddad, M.

*Research Assistant:* Khuri, G.

The Science and Mathematics Education Center, which is a part of the Department of Education, has the following four main functions:

- (1) the training of prospective science and mathematics teachers on both the B.A. and M.A. levels in conjunction with the science and mathematics departments;
- (2) the training of in-service teachers by means of summer institutes, conferences and workshops;
- (3) a consultation service to schools and governments regarding textbooks, curriculum planning, equipment, laboratories and methods of evaluation;
- (4) research and development in the fields of science and mathematics education.

### **University Orientation Program**

*Coordinator:* Abboud, S.

*Lecturer:* Bender, M.

*Instructors:* Darwish, O.; Fayad, D.; Gaffney, J.; Henderson, F.; Hijaz, N.; Lyons, J.; McWilliam, W.; Mallak, K.; Moline, J.; Murphy, E.; Robinson, C.; Salamack, J.

The University Orientation program is a special service program instituted by the Faculty of Arts and Sciences to meet the needs of students who qualify for university entrance except for a deficiency in English language skills. It is primarily for scholarship students whose fees are paid through the Bursary Students' Office, and enrollment is limited. When the quota is not filled by scholarship students, private applicants are selected. A minimum score in the English entrance examination is required.

The program provides twenty hours per week of intensive classroom instruction in grammar, vocabulary, reading and writing plus language laboratory practice for the development of oral fluency and aural comprehension. Social and cultural activities are arranged to afford students an opportunity to practice English skills outside the classroom. Participants are recommended for admission to regular university classes at the end of their first, second or third semester of attendance depending upon their achievement.

The student accepted by the UOP must successfully complete the program before acceptance in a regular University degree program; therefore admission to the UOP should not be considered a guarantee of later acceptance as a degree candidate.





# **FACULTIES OF MEDICAL SCIENCES**

## **FACULTIES OF MEDICAL SCIENCES**

Craig S. Lichtenwalner, M.D., M.P.H.; *Professor of Public Health Practice, Dean.*  
Fuad S. Haddad, Ph.D., *Associate Professor of Education; Registrar.*

The Faculties of Medical Sciences constitute one of the four major academic divisions of the University and include four Schools, which are described in the following chapters:

- School of Medicine, established in 1887;
- School of Pharmacy, established in 1871;
- School of Nursing, established in 1905;
- School of Public Health, established in 1954.

In addition to the Schools, two other administrative units are included: the University Hospital, established in 1905, and the University Health Service.

Each School or unit has a Director or Dean who is responsible to the Dean of the Faculties of Medical Sciences.

# **SCHOOL OF MEDICINE**

## SCHOOL OF MEDICINE

### Faculty List, 1974-1975

Samuel P. Asper, M.D.; *Professor of Medicine, Dean of the School of Medicine, Chief of Hospital Staff.*

Raif E. Nassif, M.D., M.P.H.; *Professor of Clinical Pathology, Director of the School of Medicine.*

Adel K. Afifi, M.D., M.S.; *Professor of Human Morphology, Assistant Director of the School of Medicine.*

Robert Matossian, M.D.; *Associate Professor of Bacteriology, Audiovisual Coordinator.*

Thomas Bridgewood, *Director, Scientific Equipment Center.*

Fuad S. Haddad, Ph.D.; *Associate Professor of Education, Registrar.*

### PROFESSORS EMERITI

Bickers, William, M.D., Medical College of Virginia; *Obstetrics and Gynecology.*

Diab, Alfred, M.D., AUB; *Ophthalmology and Otorhinolaryngology.*

Ghantus, Musa, M.D., AUB; *Human Morphology.*

Kerr, Stanley, Ph.D., University of Pennsylvania; *Biochemistry (Distinguished).*

Sahyoun, Philip, M.D., AUB; *Pathology.*

Shanklin, William, Ph.D., Yale University; D.Sc., Bridgewater College; *Histology and Neuroanatomy.*

Yenikomshian, Hovsep, M.D., AUB; *Internal Medicine.*

### PROFESSORS

\* Afifi, Adel K., M.D., AUB; M.S., University of Iowa; *Human Morphology.*

Asper, Samuel P., M.D., Johns Hopkins University; *Internal Medicine (Endocrinology).*

Bergman, Ronald A., Ph.D., University of Illinois; *Human Morphology.*

Dagher, Ibrahim, M.D., AUB; *Surgery (Thoracic) (Clinical).*

\* Durr, Ibrahim,\*\* Ph.D., Western Reserve University; *Biochemistry.*

\* Farah, Fuad,\*\* M.D., AUB; *Internal Medicine (Dermatology).*

\* Fawaz, George, M.S., AUB; Ph.D., University of Graz; M.D., University of Heidelberg; *Pharmacology and Therapeutics.*

\* Garabedian, Garabed, M.S., AUB; Ph.D., University of Minnesota; *Bacteriology and Virology.*

Haddad, Chafic, M.D., AUB; D.T.M., University of Liverpool; *Internal Medicine (Endocrinology) (Clinical).*

Haddad, Fuad S., M.D., AUB; F.R.C.S., Canada; *Surgery (Neurosurgery) (Clinical).*

\* al-Khalidi, Usama, M.S., AUB; Ph.D., University of Michigan; *Biochemistry.*

\* Khuri, Raja, M.D., AUB; *Physiology.*

\* Kirkwood, Samuel, M.D., Harvard Medical School; D.Sc. (Hon.), Macalester College; LL.D., Amherst College; *Obstetrics.*

\* Kurban, Amal, M.D., AUB; *Internal Medicine (Dermatology).*

Manougian, Antranig, M.D., AUB; D.P.M., University of Edinburgh; *Psychiatry (Clinical).*

\* On Tenure Appointment.

\*\* On Furlough or Leave.

- \* Matta, Camille, M.D., AUB; M.S., University of Iowa; *Ophthalmology*.
- \* McLaren, Donald, M.B., ChB., M.D., University of Edinburgh; D.T.M. & H., Ph.D., University of London; *Clinical Nutrition*.
- \* Melhem, Rafic, M.D., AUB; *Radiology*.
- \* Najjar, Samir, M.D., AUB; *Pediatrics*.
- \* Nassif, Raif E., M.D., AUB; M.P.H., Yale University; *Clinical Pathology*.
- \* Sabra, Fuad, M.D., AUB; *Internal Medicine (Neurology)*.
- \* Shwayri, Edmond, M.D., AUB; *Internal Medicine (Nephrology)*.
- \* Tabbara, Riad, M.D., AUB; *Internal Medicine (Cardiology)*.

#### ASSOCIATE PROFESSORS

- \* Abu Feisal, Khalil, M.D., AUB; *Internal Medicine (Respiratory)*.
- \* Abu Haydar, Najib, M.D., AUB; *Internal Medicine (Endocrinology)*.  
Alami, Samih, Ph.D., M.D., University of Oklahoma *Clinical Pathology*.
- Antypas, Philip, M.D., AUB; *Surgery (Plastic) (Clinical)*.
- \* Azar, Joseph, M.D., AUB; D.T.M. & H., University of London; *Internal Medicine (Infectious Diseases)*.
- Azoury, Bahij, M.D., AUB; D.M.Sc., Columbia University; *Surgery (Urology) (Clinical)*.
- Azoury, Ramez, M.D., AUB; *Obstetrics and Gynecology*.
- Azzam, Samir, M.D., AUB; *Internal Medicine (Hematology) (Clinical)*.
- \* Balikian, Jirair, M.D., AUB; *Radiology*.
- Baraka, Anis, M.D., D.A., University of Cairo; *Anesthesiology*.
- Berberi, Adel, M.D., AUB; *Internal Medicine (Nephrology) and Physiology*.
- Faris, Bishara, M.D., AUB; *Ophthalmology*.
- Firzli, Salim, M.D., AUB; *Pediatrics (Clinical)*.
- \* Fuleihan, Farid, J.D., M.D., AUB; *Internal Medicine (Respiratory)*.
- Ghandur-Mnaymneh, Latifeh, M.D., AUB; *Pathology (Part time)*.
- \* Hajj, Samir, M.D., AUB; *Obstetrics and Gynecology*.
- Hajjar, Jean-Jacques, M.D., AUB; *Physiology*.
- \* Halasa, Adnan, M.D., AUB; M.S., University of Iowa; *Ophthalmology*.
- Ibrahim, Muhammad, M.B., Ch.B., University of Cairo; M.D., Guy's Hospital Medical School, London; *Human Morphology*.
- Idriss, Hassan, M.D., AUB; *Pediatrics (Clinical)*.
- \* Issa, Philip, M.D., Faculté Française de Médecine, Beirut; *Radiology*.
- \* Jabbur, Suhayl, M.D., AUB; Ph.D., University of Washington; *Physiology*.
- Kanaan-Atallah, Naim, M.D., AUB; *Radiology*.
- Khazin, Aida, M.D., AUB; *Pediatrics*.
- Mamo, Jubran, M.D., AUB; *Ophthalmology (Clinical)*.
- \* Matossian, Robert, M.D., AUB; *Bacteriology and Virology*.
- Mishalany, Henry, M.D., AUB; *Surgery (Pediatrics) (Clinical)*.
- Mnaymneh, Walid, M.D., AUB; *Surgery (Orthopedic) (Clinical)*.
- Mroueh, Adnan, M.D., AUB; *Obstetrics and Gynecology*.
- \* Muallem, Musa, M.D., AUB; *Anesthesiology*.
- Mufarrij, Ibrahim, M.D., AUB; *Obstetrics and Gynecology (Clinical)*.
- Nassif, Ramzi, M.D., AUB; *Otorhinolaryngology (Clinical)*.
- Nassif, Sami, M.D., AUB; *Pediatrics (Cardiology) (Clinical)*.

---

\* On Tenure Appointment.

- Nsouli, Afif, M.D., AUB; *Surgery (Orthopedic) (Clinical)*.  
 Obeid, Sami, M.D., AUB; *Surgery (Clinical)*.  
 Rebeiz, Jean, M.D., AUB; *Pathology*.  
 \* Rizk, Ghassan, M.D., AUB; *Radiology*.  
 \* Rubeiz, George, M.D., AUB; *Internal Medicine (Cardiology)*.  
 Salman, Salah, M.D., AUB; *Otorhinolaryngology*.  
 Shamma'a, Munir, M.D., AUB; *Internal Medicine (Gastroenterology) (Clinical)*.  
 \* Simaan, Joseph, M.D., AUB; *Pharmacology and Therapeutics*.  
 \* Slim, Michel, M.D., AUB; *Surgery (Pediatric)*.  
 \* Yacoubian, Hagop, M.D., AUB; *Surgery (Thoracic)*.

#### ASSISTANT PROFESSORS

- Abu Haydar, Fadlo, M.D., AUB; *Internal Medicine (Gastroenterology) (Clinical)*.  
 Abu Jamra, Fawzi, M.D., AUB; *Surgery (Plastic) (Clinical)*.  
 Allam, Charles, M.D., Faculté Française de Médecine, Beirut; *Clinical Pathology*.  
 Antun, Fuad, M.D., AUB; D.P.M., Ph.D., University of Edinburgh; *Internal Medicine (Psychiatry)*.  
 Asfour, Raja, M.D., AUB; M.S., Columbia University; *Pediatrics (Clinical)*.  
 Ayyoub, Charles, M.B., M.S., University of Adelaide; D.C.H., Royal College of Physicians, London; M.R.C.P., Edinburgh; *Pediatrics*.  
 Awdeh, Zuhayr, Ph.D., University of London; *Nutrition*.  
 Baghdassarian, Sahag, M.D., AUB; *Ophthalmology*.  
 Barakat, Bassam, M.D., AUB; *Obstetrics and Gynecology*.  
 Bitar, John, M.D., AUB; *Pediatrics (Clinical)*.  
 Bridi, George, M.D., AUB; *Internal Medicine (Nephrology) (Clinical)*.  
 Brihi, Emile, M.D., AUB; *Radiology*.  
 Bulos, Suhayl, M.D., AUB; F.R.C.S., Edinburgh; *Surgery (Orthopedic) (Clinical)*.  
 Cortas, Nadim, M.D., AUB; *Pharmacology and Therapeutics*.  
 Dabbous, Ibrahim, M.D., AUB; *Pediatrics (Clinical)*.  
 Dagher, Rifaat, M.D., AUB; *Surgery (Clinical)*.  
 Der Kaloustian, Vasken, M.D., AUB; *Pediatrics*.  
 Faris, Amin, M.D., AUB; *Internal Medicine (Neurology) (Clinical)*.  
 Frayha, Fuad, M.D., AUB; *Surgery*.  
 Frayha, Rida, M.D., AUB; *Internal Medicine (Rheumatology)*.  
 Geha, Raif, M.D., AUB; *Pediatrics*.  
 Ghandur, Mustafa, M.D., AUB; *Pediatrics (Clinical)*.  
 Haddad, Nadra (Abu Feisal), M.D., AUB; *Pediatrics (Clinical)*.  
 Harik, Sami, M.D., AUB; *Internal Medicine (Neurology)*.  
 Hasan, Faysal, M.D., AUB; *Internal Medicine (Respiratory)*.  
 Hemadeh, Kamal, M.D., AUB; *Surgery (Urology) (Clinical)*.  
 Hubaytar, Rafik, M.D., AUB; *Internal Medicine (Respiratory) (Clinical)*.  
 Illiya, Fawzi, M.D., AUB; *Obstetrics and Gynecology (Clinical)*.  
 Iskandar, George, M.D., AUB; *Obstetrics and Gynecology (Clinical)*.  
 Jubran, Fuad, M.D., AUB; *Internal Medicine (Cardiology) (Clinical)*.  
 Kabakian, Hrayr, M.D., AUB; *Radiology*.  
 Kaid Bey, Sami, M.D., AUB; *Internal Medicine (Cardiology) (Clinical)*.

---

\* On Tenure Appointment.

- Kanawati, Abdallah, M.D., University of Damascus; Dip. in Nutrition, University of London; *Nutrition*.
- Karam, Farid, M.D., AUB; *Otorhinolaryngology (Clinical)*.
- Karam, Karam, M.D., AUB; *Obstetrics and Gynecology*.
- Khalifeh, Riad, M.D., AUB; M.S., University of Iowa; *Internal Medicine (Neurology) (Clinical)*.
- Khawwam, Edward, M.D., Faculté Française de Médecine, Beirut; *Ophthalmology (Clinical)*.
- Khodr, Gabriel, M.D., AUB; *Obstetrics and Gynecology*.
- Khodr, Teresa, Ph.D., University of Hawai *Obstetrics and Gynecology*.
- Malak, Johnnie, M.D., AUB; *Internal Medicine (Dermatology) (Clinical)*.
- Malakian, Artin, Ph.D., University of North Carolina; *Bacteriology and Virology*.
- Moadie, Jean, M.D., AUB; *Internal Medicine (Allergy) (Clinical)*.
- Mukheiber, Nabil, M.D., AUB; *Internal Medicine (Nephrology) (Clinical)*.
- Nahas, William, M.D., AUB; *Obstetrics and Gynecology (Clinical)*.
- Nasr, Michel, M.D., University of Geneva; *Physiology (half time)*.
- Nasr, Munir, M.D., AUB; *Obstetrics and Gynecology*.
- Nasrallah, Salah, M.D., AUB; *Internal Medicine (Gastroenterology)*.
- Nassar, Sami, M.D., AUB; *Surgery (Neurosurgery) (Clinical)*.
- Nassar, Victor, M.D., AUB; *Pathology*.
- Nuwayri-Salti, Nuha, M.D., AUB; *Human Morphology*.
- Nuwayhid, Nizar, M.D., AUB; *Otorhinolaryngology (Clinical)*.
- Puzantian, Vahe, M.D., AUB; D.P.M., University of Edinburgh; *Psychiatry (Clinical)*.
- Rahme, Edmond, M.D., AUB; *Internal Medicine (Neurology) (Clinical)*.
- Rayyis, Suad, M.D., AUB; *Internal Medicine (Endocrinology) (Clinical)*.
- Riad, Wadad, M.D., Ain Shams University; *Pathology*.
- Saab, Mohammed Ali, M.D., AUB; *Anesthesiology*.
- Sahakian, John, M.D., Faculté Française de Médecine, Beirut; *Obstetrics and Gynecology (Clinical)*.
- Salamun, Samir, M.D., AUB; *Ophthalmology (Clinical)*.
- Salem, Antun, M.D., AUB; *Internal Medicine (Gastroenterology) (Clinical)*.
- Salem, Philip, M.D., AUB; *Internal Medicine (Oncology)*.
- Salti, Ibrahim, M.D., AUB; Ph.D., University of Toronto; *Internal Medicine (Endocrinology)*.
- Sanjad, Sami, M.D., AUB; *Pediatrics*.
- Shediac, Caesar, M.D., AUB; *Internal Medicine (Endocrinology) (Clinical)*.
- Shehadeh, Najib, M.D., AUB; *Internal Medicine (Dermatology) (Clinical)*.
- Shehadeh, Samir, M.D., AUB; *Surgery (Plastic) (Clinical)*.
- Sinno, Anwar, M.D., AUB; *Pediatrics (Neurology)*.
- Srouji, Illias, M.D., AUB; *Pediatrics*.
- Suidan, Fayez, M.D., AUB; *Obstetrics and Gynecology (Clinical)*.
- Tomb, Janine, M.D., Faculté Française de Médecine, Beirut; *Pathology (half time)*.
- Touma, Amin, M.D., AUB; *Internal Medicine (Cardiology) (Clinical)*.
- Uthman, Suhayl, M.D., AUB; *Internal Medicine (Gastroenterology) (Clinical)*.
- Uwaydah, Marwan, M.D., AUB; *Internal Medicine (Clinical)*.
- Wahbeh, Nabila, M.D., AUB; *Pediatrics (Hematology) (Clinical)*.
- Wakid, Nabil, M.S., AUB; Ph.D., Cambridge University; *Biochemistry*.
- Yashruti, Abdel Latif, M.D., AUB; *Surgery and Human Morphology (Clinical)*.
- Yenikomshian, Stepan, M.D., AUB; *Internal Medicine (Cardiology) (Clinical)*.

## SENIOR LECTURERS

Kana'an, Khattar, M.D., AUB; *Anesthesiology*.  
Khouri, Farid, M.D., AUB; *Clinical Pathology*.  
Nabbut, Nasim, Ph.D., University of Texas; *Bacteriology and Virology*.

## LECTURERS

Adams, Raymond, M.D., Duke University; *Internal Medicine (Neurology)*.  
Ariss-Timani, Majd, M.D., Faculté Française de Médecine, Beirut; *Pediatrics*.  
Arslanian, Erika, M.D., University of Erevan, Armenia; *Anesthesiology*.  
Jabir, Raif, M.D., AUB; *Internal Medicine (Endocrinology)*.  
Moghrabi, Rafic, M.D., Faculté de Médecine, Bordeaux; *Anesthesiology*.  
Nasr, Fuad, M.D., Faculté de Médecine, Montpellier; *Internal Medicine (Rheumatology)*.  
Nasr, Michel, M.D., University of Geneva; *Internal Medicine (Cardiology)*.  
Nassar, Nabil, M.D., AUB; M.P.H., Johns Hopkins University; *Internal Medicine*.  
Nucho, Charles, M.D., AUB; *Internal Medicine*.  
Sawaya, Jabir, M.D., AUB; *Internal Medicine (Cardiology)*.  
Thaddeus, Jacob, M.D., AUB; *Industrial Medicine*.

## INSTRUCTORS

Barakat, Amin, M.D., AUB; *Pediatrics (Clinical)*.  
Barakat, Nabil, B.D.S., University of Cairo; M.S. Loyola University, Chicago;  
*Surgery and Otorhinolaryngology (Clinical)*.  
Bikhazi, Kamal, M.D., AUB; *Human Morphology and Surgery (Clinical)*.  
Chakhtoura, Antoine, M.D., Faculté Française de Médecine, Beirut; *Psychiatry (Clinical)*.  
Hasan, Naaman, Ph.D., AUB; *Biochemistry*.  
Juljulian, Harutioun, M.D., University of Padua; *Internal Medicine (Dermatology) (Clinical)*.  
Manougian, Elizabeth, M.S., AUB; *Pharmacology and Therapeutics*.  
Musallim, Salim, M.D., AUB; *Pediatrics (Clinical)*.  
Nahra, Khalil, M.D., AUB; *Surgery (Clinical)*.  
Najjar, Faysal, M.D., AUB; *Surgery (Clinical)*.  
Zaidan, Michel, M.D., Faculté de Médecine, Montpellier; *Psychiatry (Clinical)*.

## RESEARCH ASSOCIATES

Agulian, Samuel, M.S., AUB; *Physiology*.  
Fawaz, Eva, M.S., AUB; *Pharmacology and Therapeutics*.  
Tomeh, George, M.S.E.E., University of Washington; *Electronics*.

## RESEARCH ASSISTANTS

Abu Samra, Shafeeka, B.A., Beirut College for Women; *Nutrition*.  
Abu Samra, Fadia, B.A., Beirut College for Women; *Obstetrics and Gynecology*.  
al-Ahmar, Hana, M.A., AUB; *Internal Medicine (Dermatology)*.  
Akil, Randa, B.S., AUB; *Internal Medicine*.  
Ariss-Jabr, Sana, B.S., Beirut College for Women; *Internal Medicine*.  
Assaf, Maha, B.S., University of London; *Radiology*.



Awwad, Samia, B.S., AUB; *Physiology*.  
 Bahuth, Nadia, B.S., AUB; *Human Morphology (Senior Research Assistant)*.  
 Barakat, Mona, B.S., AUB; *Pediatrics*.  
 Bikhazi, Ghassan, M.S., AUB; *Biochemistry*.  
 Chelebian, Antranig, *Physiology*.  
 Dilanian, Armineh, B.S., AUB; *Internal Medicine*.  
 Dollie, Freda, B.S., University of South Africa; *Internal Medicine (Psychiatry)*.  
 Hallal, Rowayda, M.S., AUB; *Pediatrics*.  
 Hanna, Sami, B.S., AUB; *Otorhinolaryngology*.  
 Hovhanessian, Ara, M.S., AUB; *Nutrition*.  
 Jabbur, Karim, B.A., AUB; *Pharmacology and Therapeutics (Senior Research assistant)*.  
 Jbara, Haifa, B.S., Beirut College for Women; *Biochemistry*.  
 Kissoyan, Berj, B.S., AUB; *Physiology*.  
 Masry, May, B.A., Beirut University College; *Otorhinolaryngology*.  
 McPhail, Juhaina, M.D., Faculté Française de Médecine, Beirut; *Obstetrics and Gynecology (Senior Research Assistant)*.  
 Meneshian, Gilbert, B.S., AUB; *Surgery*.  
 Minassian (Zakian), Beatrice, B.S., AUB; *Bacteriology and Virology*.  
 Mire-Salman, Joanne, M.S., AUB; *Human Morphology (Senior Research Assistant)*.  
 Mukaddam, Suhayla, B.S., AUB; *Internal Medicine*.  
 Nassar, Najwa, B.S., Beirut College for Women; *Clinical Pathology*.  
 Nasser, Salam, Licence, Lebanese University, *Obstetrics and Gynecology*.  
 Saadeh, Faysal, M.S., AUB; *Pathology (Senior Research Assistant)*.  
 Sahli, Itaf, B.S., AUB; *Clinical Pathology (Senior Research Assistant)*.  
 Salameh, Virginia, B.S., Beirut University College; *Pediatrics*.  
 Sutaytiyyah, Feryal, M.S., AUB; *Internal Medicine*.  
 Tchalian-Read, Marie, B.S., AUB; *Nutrition*.  
 Tejirian, Asdghig, B.S., AUB; *Pharmacology and Therapeutics (Senior Research Assistant)*.  
 Tenekjian, Krikor, B.S., AUB; *Internal Medicine (Dermatology) (Senior Research Assistant)*.

## ASSOCIATES

Abbas, Abdul Hay, M.D., Damascus University; *Otorhinolaryngology*.  
 Abu-Jaudeh, Ceasar, M.D., AUB; F.A.C.S.; *Otorhinolaryngology*.  
 Abu Zahr, Labib, M.D., AUB; *Surgery*.  
 Attallah, Basil, M.D., AUB; *Internal Medicine*.  
 Atiyeh, Maurice, M.D., AUB; *Internal Medicine*.  
 Bakdash, Hisham, M.D., University of Damascus; *Surgery (Neurosurgery)*.  
 Chatty, Eyad, M.D., University of Damascus; *Human Morphology*.  
 Constantinides, Peter, M.B., B.Ch., Alexandria; F.R.C.P., Canada; *Internal Medicine*.  
 Haddad, Fuad, M.D., University of Istanbul; *Anesthesiology*.  
 Haddad, Paul, M.D., Faculté Française de Médecine, Beirut; *Pediatrics*.  
 Hajj, Muhsin, M.D., AUB; *Internal Medicine (Cardiology)*.  
 Harboyan, Garbis, M.D., AUB; *Otorhinolaryngology*.  
 Haydar, Amer, M.D., AUB; *Internal Medicine (Psychiatry)*.  
 Jarudi, Nabil, M.D., AUB; *Ophthalmology*.

Masri, Abdul Fattah, M.D., AUB; *Internal Medicine*.

Moghabghab, Daad, M.D., Faculté Française de Médecine, Beirut; *Anesthesiology*.

Noujaim, Sami, M.D., Faculté Française de Médecine, Beirut; *Surgery*.

Pasha, Najdat Ibrahim, M.D., AUB; *Surgery (Plastic)*.

Rubeiz, Michel, M.D., AUB; *Surgery (Plastic)*.

Saad, Atif, M.D., AUB; *Internal Medicine (Gastroenterology)*.

Saade, Butros, M.D., Faculté Française de Médecine, Beirut; *Physical Medicine and Rehabilitation*.

Sayegh, Roger, M.D., AUB; *Ophthalmology*.

Shibaklu, Zuheir, M.D., AUB; *Internal Medicine (Dermatology)*.

Shu'ayb, Wehbeh, M.D., AUB; *Surgery (Thoracic)*.

Tamari, Joseph, D.Ch.D., Faculté de Médecine, Beirut; D.S.D., North-western University; *Human Morphology*.

Wilde, Henry, M.D., Freiburg; *Internal Medicine*.

## General Information

The School of Medicine is a member of the Association of American Medical Colleges and is subject to the regulations of the Board of Regents of the State of New York where the University is incorporated.

The entrance requirements and the program leading to the degree of Doctor of Medicine are similar to those of standard medical schools in the United States except that the course of study has been extended from four years to five years to conform with Lebanese law. The fifth year, which consists of practical work in the University Hospital and other affiliated hospitals, is an internship.

Graduates are qualified for the licensing examination in Lebanon upon completion of the fifth year student internship.

The School of Medicine endeavors to provide opportunities for its undergraduate students to develop individual initiative, creative ability and professional leadership through participation in extra-curricular seminars, discussion groups, research projects and student organizations. A number of the students themselves have made valuable contributions along this line as officers of the Medical Students' Society. Although the primary function of the School is to give students a basic training in medicine, the School also offers specialist training on a selective and limited basis. This program, inaugurated in 1945, consists of either a three or a four year residency in the University Hospital involving training in a medical specialty.

A program of postgraduate medical education provides several short refresher courses in the medical specialties each year to physicians in the area. These courses are conducted jointly by members of the Faculty and prominent specialists from America and Europe. In addition the Medical Faculty and Alumni sponsor each year a Middle East Medical Assembly in which 35 to 40 prominent physicians from America and Europe participate. Between 400 and 500 physicians attend these sessions.

The physical plant of the School of Medicine includes the University Hospital which houses the academic offices and research laboratories of the Departments of Anesthesiology, Bacteriology and Virology, Clinical Pathology, Internal Medicine, Obstetrics and Gynecology, Ophthalmology, Otorhinolaryngology, Pathology,

Pediatrics, Radiology, Surgery and the Nutrition Research Program; the Basic Sciences Building which houses the Departments of Biochemistry, Human Morphology, Pharmacology and Therapeutics and Physiology with their teaching and research laboratories and classrooms; the Medical Library and the Post Graduate Education Building.

Clinical teaching is carried out in the Out-patient Department located in the University Hospital with a capacity of 420 beds, and the affiliated hospitals which include the Lebanon Hospital for Mental and Nervous Disorders, and the Makasid General Hospital.

### ADMISSION

The School of Medicine was established to give properly qualified candidates from the Near East the opportunity for sound education in both the art and science of Medicine. Normally, admission is limited to those students who have completed their premedical requirements at AUB. An applicant from outside AUB who holds at least the Bachelor degree and who has completed the premedical requirements may be accepted on the basis of outstanding academic performance. In addition, applicants from the United States of America must have acceptable Medical College Admission Test (MCAT) scores.

Enrollment in the first year is limited to 64 students who are chosen for personal attributes as well as academic qualifications.

### GRADUATION REQUIREMENTS

To be eligible for the degree of Doctor of Medicine a student must satisfactorily complete the curriculum of the School of Medicine and must be recommended by the Clinical Committee. The degree may be granted with distinction to students who attain a grade of "excellent" in at least 50% of credits with a grade of "pass" in no more than 20% of credits in the first four years, and a grade of "excellent" in at least one course in the fifth year.

To be eligible for the degree of Bachelor of Science granted by the Faculty of Arts and Sciences a student must attain a minimum grade of "pass" in all courses in the first year of the School of Medicine and must be recommended by the Preclinical Committee. This degree does not necessarily entitle students to promotion in the School of Medicine.

To be eligible for the degree of Bachelor of Science with distinction a student must attain a grade of "excellent" in at least 30% of credits with a grade of "pass" in no more than 25% of credits in first year medicine, and must have attained an average of 85 or more in the junior year in the Faculty of Arts and Sciences.

To be eligible for the degree of Bachelor of Science with high distinction a student must attain a grade of "excellent" in at least 75% of credits in first year medicine and must have attained an average of 85 or more in the junior year in the Faculty of Arts and Sciences.

## ACADEMIC RULES AND REGULATIONS

### **Promotions and Deficiencies**

Student performance is evaluated as Excellent (E), Good (G), Pass (P) or Fail (F).<sup>\*</sup> The evaluation of the student in each subject is based upon his total performance and not solely upon the results of examinations.

The performance of each student in the first and second years is evaluated by the Preclinical Committee, and in the third, fourth and fifth years by the Clinical Committee. These committees decide on promotions or failures; their action is final. In their assessment of students, the committees give due consideration to a general evaluation of fitness for a career in medicine; only those who in the opinion of the committees give promise of being a credit to themselves, the School, and the Profession will be advanced.

To be promoted a student must attain a grade of pass or better in all courses and must be recommended by the committee concerned.

A student in first or second year who fails 25% or more of credits in that year may be asked to repeat the year or withdraw from the School. A student who fails less than 25% of credits may be asked to do remedial work and pass reexaminations, or repeat the year, or leave the School.

A student in third, fourth or fifth year who fails any course may be asked to do remedial work and pass reexamination, or repeat the year, or leave the School.

A student repeating a year who fails any course or does not attain a grade of good or better in 50% of credits will be asked to withdraw from the School.

Regular attendance is required at lectures, laboratories, clerkships and other assigned duties. No credit is given for work not performed. Students absent on account of illness or other valid reason are requested to confer with chairmen of the departments concerned. Prolonged or repeated absences are reviewed by the committee concerned which decides on appropriate action.

Each student must have a speaking knowledge of Arabic before entering the third year. This requirement may be waived by special vote of the Clinical Committee.

### **Dean's Honor List**

To be placed on the Dean's Honor List the student must be full-time and must not be repeating the year. The Dean's Honor List is limited to the first 15% of the class.

## GRADUATE STUDY

Full information and general requirements for graduate study are found in the chapter at the end of this catalogue entitled Graduate Study.

---

<sup>\*</sup> A course that is weighted at 3 or more semester credits is considered major (see Curriculum).

## Curriculum

	No. of Weeks	Lec. and Rec. Hours	Lab. Hours	Total Hours	Semester Credit Hours
<b>First Year*</b>					
Biochemistry 211 Basic Biochemistry	16	48	64	112	5
Human Morphology 207 Gross Anatomy	16	27	192	219	7
Human Morphology 209 Basic Histology	16	34	48	82	3
Interdepartmental 200 Homeostasis	4	47	70	117	5
Interdepartmental 202 Cardiovascular System	2	22	31	53	2
Interdepartmental 204 Metabolism	4	42	75	117	5
Interdepartmental 206-207 Social and Preventive Medicine	32	34	46	80	4
Interdepartmental 208 Nervous System	5	86	54	140	6
Physiology 210 General Physiology and Introductory Biophysics	16	32	24	56	3
<i>Total</i>				<u>976</u>	<u>40</u>
<b>Second Year*</b>					
Bacteriology 227 Bacteriology and Virology	10	50	90	140	6
Interdepartmental 221-222 Introduction	19	98	196	294	12
Internal Medicine 227 Psychopathology	16	16	32	48	2
Pathology 229 General Pathology	14	72	133	205	9
Pharmacology 228 Pharmacology and Toxicology	16	96	96	192	9
Public Health EB 225 Medical Statistics	16	16	32	48	2
Public Health EB 226 Epidemiology	16	16	32	48	2
Public Health TH 225 Medical Parasitology and Mycology	6	30	54	84	3
<i>Total</i>				<u>1,059</u>	<u>45</u>
<b>Third Year*</b>					
Clinical Conferences		36	180	—	180
Internal Medicine 246 Clinical Clerkship		16	120	640	760
Internal Medicine 248 Medical Ethics		1	4	—	4
Internal Medicine 250 Forensic Medicine		3	12	—	12
Internal Medicine 225 Psychiatry		6	25	—	25
Obstetrics and Gynecology 257 Clinical Clerkship		9	—	360	360
Ophthalmology 247 Introduction to Ophthalmology		3	12	—	12
Otorhinolaryngology 247 Lectures on Otorhinolaryngology		4	16	—	16
Pediatrics 246 Clinical Clerkship		9	35	360	395
Public Health EB 267 Clerkship in Preventive Medicine and Public Health		2	—	80	80
Surgery 240 Introduction to Clinical Surgery		32	32	—	32
<i>Total</i>					<u>1,876</u>

\* For courses given in other Schools, see under School concerned.

	No. of Weeks	Lec. and Rec. Hours	Lab. or Clin. Clerkships Hours	Total Hours
<b>Fourth Year*</b>				
Anesthesiology 266 and 267 Clinical Seminar and Clinical Clerkship	3	11	120	131
Clinical Conferences	44	220	—	220
Internal Medicine 265 Psychiatry Clinical Clerkship	4	—	160	180
Internal Medicine 266 Clinical Clerkship	12	—	480	480
Ophthalmology 267 Clinical Clerkship and Seminar	3	—	120	120
Otorhinolaryngology 267 Clinical Clerkship	3	—	120	120
Pediatrics 267 Clinical Clerkship	8	—	320	320
Surgery 267 Clinical Clerkship	12	—	480	480
<i>Total</i>				2,031

**Fifth Year\***

The student is given the option to choose one of the following:

## 1. Straight Internship

Internal Medicine 288, Pediatrics 288, Obstetrics and Gynecology 288 <i>or</i> Surgery 288	48	2,880
Clinical Conferences		300
<i>Total</i>		3,180

## 2. Mixed Internship

Internal Medicine 287 <i>or</i> Pediatrics 287	13	780
Surgery 287	9	540
Obstetrics and Gynecology 287	8	480
Elective in any department	18	1,080
Clinical Conferences		300
<i>Total</i>		3,180

\* For courses given in other Schools, see under School concerned.

**SCHOOL OF PHARMACY**

## SCHOOL OF PHARMACY

### Faculty List, 1974-1975 <sup>1</sup>

Craig S. Lichtenwalner, M.D., M.P.H.; *Professor of Public Health Practice, Dean of the Faculties of Medical Sciences.*

Amin F. Haddad, Ph.D., M.S.; *Professor of Pharmacy, Director of the School of Pharmacy.*

Fuad S. Haddad, Ph.D.; *Associate Professor of Education, Registrar.*

#### PROFESSORS

\* Abou-Chaar, Charles, Ph.D., University of Washington; *Pharmacognosy.*

\* Haddad, Amin, M.S., Philadelphia College of Pharmacy and Science; *Pharmacy.*

#### ASSOCIATE PROFESSORS

Abul-Hajj, Yusuf, Ph.D., University of Wisconsin; *Pharmacy (Visiting).*

Banna, Nabil, Ph.D., University of Illinois; *Pharmacodynamics and Toxicology.*

\* Dajani, Rashid, Ph.D., Wayne State University; *Pharmacy and Pharmaceutical Chemistry.*

\* Vorperian, Edward, Ph.D., Ohio State University; *Pharmaceutical Chemistry.*

#### ASSISTANT PROFESSORS

Bikhazi, Anwar, Ph.D., University of Michigan; *Pharmacy.*

Dakkuri, Adnan, Ph.D., University of Illinois; *Pharmacy.*

Karamanukian, Levon, M.S., AUB; *Pharmacognosy.*

#### LECTURER

Kebabjian, Kevork, M.B.A., AUB; *Pharmacy Administration.*

#### INSTRUCTOR

Apkarian, Yeranouhi, M.S., AUB; *Pharmacy.*

#### ASSISTANT INSTRUCTOR

Nassar, Tamer, *Human Morphology.*

#### RESEARCH ASSISTANTS

Akil, Randa, B.S. in Pharmacy, AUB.

Shamlan, Sonia, B.S. in Pharmacy, AUB.

Mardinian, Sonik, B.S. in Pharmacy, AUB.

---

\* On Tenure Appointment.

1. List does not include names of faculty members of other University departments teaching pharmacy students. These are included under Faculties or Schools concerned.



## General Information

### Objective

In planning its curriculum, the School of Pharmacy, established in 1871, aims at giving the student a thorough professional training as well as a basic scientific education, which will develop in him the ability to practice his profession in accordance with the highest possible standards and the generally accepted code of ethics, and to assume the responsibilities of citizenship befitting a professional man. Through student-teacher contacts, in class and laboratory, and through student-directed extracurricular activities, the student is given the opportunity to develop and demonstrate the eagerness for learning, the spirit of cooperation with his fellow men, integrity, devotion to duty, unselfishness in service and other moral traits essential in a citizen who is to serve his community.

### Students' Activities

In addition to participating in general University activities, students of the School of Pharmacy have their own professional society, the Pharmacy Students Society, and participate in the publication of *Campus*, the University yearbook.

### Degrees Awarded

The School of Pharmacy offers two programs of study. The four year program, leading to the degree of Bachelor of Science in Pharmacy, is taken following the completion of the Freshman Science class of the Faculty of Arts and Sciences of this University or an equivalent program. In addition to the academic program, students complete during the summer vacations nine months of practical experience in an approved pharmacy. The second program, leading to the Master of Science degree, is offered to qualified candidates who are holders of pharmacy degrees from recognized institutions.

The School of Pharmacy is subject to the regulations of the Board of Regents of the State of New York where the University is incorporated. Graduates of the School are also qualified for licensure in the Middle and Near Eastern countries.

### ADMISSION

For the academic year 1975-1976 no applications for admission to first year pharmacy will be considered. For graduate work, however, the School will consider the applications of qualified candidates who wish to study for the Master of Science degree.

Further information may be obtained by writing to the Director of the School of Pharmacy.

For complete and detailed information regarding admission to the University, including certificates recognized, see pages 12 to 16 in the section on Admissions at the beginning of the catalogue.

Lebanese students are required to submit the Lebanese baccalaureate, Part II, or its equivalent before admission to the School of Pharmacy.

Specific requirements for admission to Graduate Work are found in the section on Admission in the chapter at the end of this catalogue entitled Graduate Study.

Students exempted from courses successfully completed before admission must take substitute courses from a list of approved electives available at the Director's Office. Such students cannot take less than 15 credit hours per semester.

## GRADUATION REQUIREMENTS

To be eligible for the degree of Bachelor of Science in Pharmacy, a student must: complete satisfactorily the basic curriculum of the School of Pharmacy with a minimum of 138 semester credit hours over and above the completion of 30 semester credit hours in the Freshman Science class of the Faculty of Arts and Sciences (for which see page 36), or an equivalent program; attain an average considered satisfactory by the School, and complete nine months of practical experience in an approved pharmacy. (See section below on Practical Experience.) The degree is granted with *distinction* to students who complete the program with an average of 85 or above, who incur no academic delinquencies, who complete at least three years in residence at the School of Pharmacy of this University and who are recommended by the Faculty of the School.

(For requirements for the degree of Master of Science in Pharmacy, see section below on Graduate Study.)

## REGISTRATION

Students of the second, and third years take practical experience (see below, Practical Experience) during the summer and are registered on a 12 months basis which includes one month of vacation. The first nine months of this period (October to June) constitute the academic part of the course during which they take the curriculum outlined below. During the remaining three months (July to September) students complete the required period of practical experience (12 weeks) for that year.

Students of the fourth year are registered as students in the School of Pharmacy for the duration of the academic year only (October to June) during which they take the academic curriculum outlined below.

## ACADEMIC RULES AND REGULATIONS

For a full statement of academic rules and regulations governing attendance examinations, grades and promotion, failures and deficiencies, please refer to pages 150-151 of the general catalogue for 1974-1975.

## PRACTICAL EXPERIENCE

In addition to completing the academic requirements, students must also complete, before graduation, nine months (36 weeks of 30 hours each) of practical experience in an approved pharmacy.

A list of pharmacies in Lebanon approved for practical experience is available from the Director of the School of Pharmacy.

The practical experience is completed during the summer vacations. No exceptions will be permitted except by prior approval of the Faculty. Before June 1 each student must submit to the Director a special certificate form supplied by the School and completed as required, indicating the name and address of the pharmacy in which he has been accepted to practice during the summer of the current year.

No change of pharmacy will be allowed except by special authorization of the Director.

During their practical experience students must keep a record of their work according to the instructions given by the School. The record books and certificates of completed practice must be submitted to the Director of the School at the time of registration and will be subject to the approval of the appropriate Committee. Students who do not present certificates of practice and books at the time of registration will not be given credit for practical experience taken during that period.

Students taking practical experience during the summer may make up academic failures of deficiencies by taking courses during the summer session up to a maximum of 5 credit hours, provided prior approval of the Director is obtained and provided they are able to complete a minimum of 30 hours of practical experience each week.

## GRADUATE STUDY

The M.S. in Pharmacy is a professional and scientific qualification, and therefore involves both the acquisition of a number of skills and the development of an explicit and disciplined awareness of a number of scholarly and critical problems. The M.S. program provides an opportunity for thought, wide reading and experimental research, so that the student may devote himself to the study of his choice selected from the four major areas of specialization, namely, pharmacy, pharmaceutical chemistry, pharmacognosy and pharmacodynamics. The program of each student, planned by his advisor and supervisory Committee, must include a minimum number of course credits and a thesis. General requirements for graduate study are found in the chapter at the end of this catalogue entitled Graduate Study.

## Curriculum

	Lect. and Rec. Hours per Week		Laboratory Hours per Week		Semester Credit Hours
	Sem. I <sup>3</sup>	Sem. II <sup>3</sup>	Sem. I	Sem. II <sup>3</sup>	
<b>First Year</b>					
Biology 201 General Biology <sup>4</sup>	3	—	3	—	4
Biology 202 General Biology <sup>4</sup>	—	3	—	3	4
Chemistry 201 Chemical Principles I <sup>4</sup>	3	—	—	—	3
Chemistry 202 Chemical Principles II <sup>4</sup>	—	3	—	—	3
Chemistry 203 Introductory Experimental Chemistry	1	—	4	—	2
Chemistry 206 Quantitative Analysis	—	2	—	4	4
Pharmacy 205 Pharmacy Orientation I	1	—	—	—	1
Pharmacy 206 Pharmacy Orientation II	—	1	—	—	1
Pharmacy 207 Introduction to Physical Pharmacy	3	—	—	—	3
Physics 103 General Physics I <sup>4</sup>	3	—	3	—	4
Physics 204 General Physics II <sup>4</sup>	—	3	—	3	4
<i>Total</i>	14	12	10	10	33

**Second Year**

Chemistry 211 Organic Chemistry I <sup>4</sup>	3	—	—	—	3
Chemistry 212 Organic Chemistry II <sup>4</sup>	—	3	—	—	3
Chemistry 213 Organic Chemistry Lab. <sup>4</sup>	—	1	—	8	4
Pharm. Chem. 225 Inorg. Pharm. Chem.	—	2	—	—	2
Pharm. Chem. 227 Pharm. Analysis I	3	—	6	—	6
Pharmacy 225 Processes & Preparations	3	—	4	—	5
Pharmacy 227 Physical Pharmacy I	4	—	—	—	4
Pharmacy 228 Physical Pharmacy II	—	3	—	3	4
Pharmacy 230 Pharm. Administration	—	3	—	—	3
<i>Total</i>	<u>13</u>	<u>12</u>	<u>10</u>	<u>11</u>	<u>34</u>

**Third Year <sup>1</sup>**

Bacteriology 248 Medical Microbiology	—	3	—	4	5
Biochemistry 211 Basic Biochemistry	3	—	4	—	5
Pharm. Chem. 248 Pharmaceutical Analysis II	—	3	—	4	5
Pharmacognosy 245 Pharmacognosy I	3	—	7	—	6
Pharmacognosy 246 Pharmacognosy II	—	3	—	4	5
Pharmacy 242 Biopharmaceutics	—	3	—	—	3
Physiology 246 Anatomy-Physiology	5	—	5	—	7
<i>Total</i>	<u>11</u>	<u>12</u>	<u>16</u>	<u>12</u>	<u>36</u>

**Fourth Year <sup>1</sup>**

Biochemistry 248 Biochemistry of Body Fluids and Tissues	—	1	—	3	2
Pharm. Chem. 261 Organic Medicinal and Pharm. Chem. I	2	—	—	—	2
Pharm. Chem. 262 Organic Medicinal and Pharm. Chem. II	—	2	—	—	2
Pharm. Chem. 270 Chemotherapy	—	3	—	—	3
Pharmacognosy 248 Pesticides	1	—	—	—	1
Pharm. and Tox. 267 Pharmacodynamics	3	—	3	—	4
Pharm. and Tox. 268 Pharmacodynamics and Toxicology	—	3	—	—	3
Pharmacy 270 Biological Products	3	—	—	—	3
Pharmacy 271 Dispensing Pharmacy I	4	—	4	—	5
Pharmacy 272 Dispensing Pharmacy II	—	4	—	4	6
Pub. Health HSA 310 Public Health and Emergency Medical Care	2	—	—	—	2
Pub. Health TH 204 Parasitology	—	3	—	2	4
<i>Total</i>	<u>15</u>	<u>16</u>	<u>7</u>	<u>9</u>	<u>37</u>

1. For courses given in other Faculties or Schools, see under Faculties or Schools concerned.
2. Students of first, second and third years must also complete during the summer 12 weeks of practical experience in an approved pharmacy. (See section on Practical Experience, p. 151.)
3. Sixteen weeks constitute one semester.
4. An elective is chosen instead if the student has taken the course or its equivalent previously and has been exempted from it by the advisor. A list of approved electives is available at the Director's Office.

# **SCHOOL OF NURSING**

## SCHOOL OF NURSING

### Faculty List, 1974-1975

Craig S. Lichtenwalner, M.D., M.P.H.; *Professor of Public Health Practice, Dean of the Faculties of Medical Sciences.*

Esther L. Moyer, B.S.N.E., M.A.; *Associate Professor of Nursing, Director of the School of Nursing.*

Fuad S. Haddad, Ph.D.; *Associate Professor of Education, Registrar.*

#### ASSOCIATE PROFESSORS

Khalaf, Wadad, M.S.N.E., Boston University; *Medical-Surgical Nursing.*

Moyer, Esther, B.S.N.E., M.A., Columbia University; *Nursing.*

\* Shaya, Wadad, M.S.N.E., Syracuse University; *Nursing.*

#### ASSISTANT PROFESSORS

Illuminati, Ruth, M.S. in Nursing with a major in Psychiatric Nursing, University of Pennsylvania; *Mental Health and Psychiatric Nursing.*

Kassem, Ekbal, M.S. in Medical-Surgical Nursing, Catholic University of America, Washington D.C.; *Medical-Surgical Nursing.*

Sy, Magdalena, M.S. in Nursing, Case-Western Reserve University; *Medical-Surgical Nursing.*

\*\* Thomas, Grace, M.S. in Medical-Surgical Nursing and Nursing Education, University of California; *Medical-Surgical Nursing.*

Yamine, Lorena, B.S., University of Kansas; *Maternal-Child Nursing and in charge of Continuing Education Programs and Visual Education Project.*

#### INSTRUCTORS

Arevian, Mary Bakalian, B.S. in Nursing, AUB; *Maternal-Child Nursing.*

Balian, Sossi, B.S. in Nursing, AUB; *Maternal-Child Nursing.*

Deeb, Hera Zanoayan, M.A. in Educational Psychology, University of Arizona; *Continuing Education Programs.*

\*\* Makarem, Salwa, M.S. in Nursing, Boston University School of Nursing; *Medical-Surgical Nursing.*

Panjarjian, Anahid, M.A. in Education, AUB; *Continuing Education Programs.*

Sahakian, Rosalie, B.S. in Nursing, AUB; *Medical-Surgical Nursing.*

Salameh, Nihad Hashim, M.S. in Nursing, Indiana University; *Medical-Surgical Nursing.*

Shnorhokian, Arpi, B.S. in Nursing, AUB; *Medical-Surgical Nursing.*

Sweatman, Betty, B.S. in Nursing, University of Western Ontario; *Medical-Surgical Nursing.*

Swiss, Khanum Geadah, B.S. in Nursing, AUB; *Mental Health and Psychiatric Nursing.*

---

\* On Tenure Appointment.

\*\* On Leave.

**ASSISTANT INSTRUCTORS**

- \*\* Abu-Saad, Huda, B.S. in Nursing, AUB; *Maternal-Child Nursing*.  
 Al-Asad, Maha, B.S. in Nursing, AUB; *Maternal-Child Nursing*.  
 Beyhoum, Falak, B.A., AUB; *Recruitment Counselor*.  
 Bu-Raad, Nuhad, B.S. in Nursing, AUB; *Medical-Surgical Nursing*.  
 \*\* Farhoud, Leila, B.S. in Nursing, AUB; *Fundamentals of Nursing*.  
 Sarkis, Mary, B.S. in Nursing, AUB; *Medical-Surgical Nursing*.

**AD-HOC LECTURERS — PART-TIME**

- Mugerditchian, Helen, M.S., AUB; *Nutrition*.  
 Zakharia, Ramiz, M.S., AUB; *Physics*.

**General Information**

The School of Nursing was founded in 1906 with the establishment of a Nursing Diploma Program which will be discontinued with graduation of its last class June 1976. Currently the School offers a four year program leading to the Bachelor of Science in Nursing degree; a one year post-basic program in Administration and Teaching of Nursing and continuing education programs (conferences, seminars, workshops and short courses) to meet needs of local and regional graduate nurses. Planned for offering Fall 1976 are a Certificate Program in Clinical Nursing and Diploma Program in Administration or Teaching of Nursing. A Master of Science in Nursing degree program is tentatively planned for Fall 1976.

Further information on the organizational structure of the School as one of the four Schools in the Faculties of Medical Sciences, its philosophy, accreditations facilities and student life will be found in the University General Catalogue for 1974-1975. Information on fees appears in the section devoted to tuition, housing and other University fees in the appropriate section of the current publication (pp. - ). A fee list (available from the School on request) provides information on purchase of uniforms, books and other supplies.

Nursing students are members of the Nursing Students' Society, the professional organisation for nursing students.

**ADMISSION**

Complete information on certificates recognized for admission will be found in the section on Admissions at the beginning of this Catalogue and the 1974-1975 Catalogue .

**1. Diploma Program in Nursing**

Students graduating June 1976 comprise the last class in this program. All students enrolled have completed twelve years of secondary education and, if Lebanese, hold the Lebanese Brevet or other Baccalaureate Certificate. Non-Lebanese hold equivalent government certificates of their own country.

---

\*\* On Leave.

## **2. Bachelor of Science in Nursing Program**

In addition to holding certificates specified for admission, all applicants take the entrance examination and students prepared in philosophy take the examinations specified for students seeking entrance to a science program.

The program consists of three academic years and two summer sessions for students holding the Lebanese Baccalaureate Part II in Experimental Science. Students prepared in philosophy will require program extension. Normally non-Lebanese enter as first year students and complete four academic years and three summer sessions.

Graduates in diploma programs in nursing enter the Bachelor of Science in Nursing program by matriculating in the same manner as other students. The graduate nurse may take written and practical examinations on selected nursing or nutrition courses offered in the Bachelor of Science in Nursing program and, if successful, will be granted exemption credit. Further information on these examinations will be furnished on request by writing to the Director of the school.

Objectives of this program will be found in the General Catalogue 1974-1975.

## **3. Post-Basic Program in Administration and Teaching of Nursing**

This program is designed for graduates of diploma programs in nursing who desire preparation for positions in supervision, junior level of teaching or administration of a hospital nursing service. Clinical nursing content and the related supervised practice are offered in medical-surgical nursing, or maternal-child nursing or mental health and psychiatric nursing.

Students are admitted in October to this program of two academic semesters and one summer session.

Graduation from an approved three year program in nursing, licensure in own country and one year of successful staff nurse experience are required for admission to this program together with a minimal score of 450 on the University English entrance examination. Students living in distant countries are urged to take the TOEFL (Test of English as a Foreign Language) examination between November and May prior to intended October admission. Information on TOEFL will be sent on request.

## **ACADEMIC RULES AND REGULATIONS**

Information regarding course load, class attendance, grades, promotion, probation and graduation requirements are listed on pages 161-164 of the General Catalogue 1974-1975.



## Curricula

### BACHELOR OF SCIENCE IN NURSING PROGRAM

#### First Year

	Lect. Hours per Week	Lab. <sup>1</sup> Hours per Week	Semester Credit Hours
<i>First Semester</i>			
Arab. 101 Readings in Arabic Heritage <sup>2</sup>	3	0	3
Chem. 101 General Chemistry	3	3	4
Engl. 103 (105) English Communication Skills	3	2	4
Math. 101 Introductory College Mathematics	3	0	3
Phys. Educ. 001 (or 003) Freshman Athletics	0	2	0
			14
<i>Second Semester</i>			
Arab. 101 Readings in Arabic Heritage	3	0	3
Engl. 104 (106) English Communication Skills	3	2	4
Chem. 102 General Chemistry	3	3	4
Math. 102 Calculus and Analytic Geometry I	4	0	4
Phys. Educ. 002 (or 004) Freshman Athletics	0	2	0
			0
			15
<i>Summer Session</i>			
Electives, Humanities	6	0	6

#### Second Year

##### First Semester

Chem. 208 Brief Survey of Organic Chemistry <sup>3</sup>	3	0	3
Chem. 209 Organic Chemistry	1	4	2
Cult. St. 201 Ancient, Medieval and Renaissance Culture	3	0	3
Engl. 201 Advanced English Communication Skills	3	0	3
Elective, Humanities	3	0	3
Library Orientation	1	0	0
Psych. 201 General Psychology <sup>4</sup>	3	0	3
			17

##### Second Semester

Biol. 201 General Biology	3	3	4
Cult. St. 202 Ancient, Medieval and Renaissance Culture	3	0	3
Ed. 215 Learning and Human Development	3	0	3
Phys. 202-206 General Physics II	3	2	4
Pub. Health EB 204 Introductory Biostatistics	1	2	2
			16

1. Weekly, per semester, one nursing laboratory hour credit is the equivalent of 3 clock hours.

2. Non-Arabic speaking students study Arab. 203-204, 12 credit hours, and eliminate first year electives.

3. Holders of Baccalaureate in Philosophy take pre requisite Chem. 201-203 or Chem. 101-102 depending upon chemistry placement examination score.

4. Holders of Baccalaureate in Philosophy take pre-requisite Physics 103 and postpone Psychology 201 and elective.

*Summer Session*

Nurs. 200 Introduction to Nursing as a Profession	2	0	2
Nutr. 200 Nutrition	2	2	3
Soc. 201 Introduction to Sociology or Anthro. 210 Introduction to Anthropology	3	0	3
			<u>8</u>

**Third Year***First Semester*

Bact. 237 Microbiology for Nursing	2	2	3
Nurs. 300 Nursing Care of Adults I	5	6	7
Physl. 246 Anatomy and Physiology	5	5	7
			<u>17</u>

*Second Semester*

Ed. 212 Dynamics of Classroom Communication <i>or</i> Psych. 212 Social Psychology <i>or</i> Soc. 223 Social Interaction	1 (3 (3	2 0 0	2 3) 3)
Nurs. 301 Nursing Care of Adults II	5	15	10
Psych. 225 Psychology of Development	3	0	3
Pub. Health EB 208 Epidemiology	1	2	<u>2</u>
			17-18

*Summer Session*

Nurs. 302 Mental Health and Psychiatric Nurs. Care	3	9	6
--	---	---	---

**Fourth Year***First Semester*

Nurs. 400 Maternal-Child Nursing I	4	9	7
Elective, Humanities	3	0	3
Pub. Health CHP 215 Community Health Nursing	3	10	<u>8</u>
			18

*Second Semester*

Nurs. 401 Maternal-Child Nursing II	3	12	7
Nurs. 403 Nursing Seminar	3	0	3
Nurs. 405 Advanced Nursing	3	12	<u>7</u>
			17

---

5. Holders of the Lebanese Baccalaureate in Philosophy defer Sociology and take Physics 202 or other second year science course pre-requisite for Phys. 246.

## POST BASIC PROGRAM IN ADMINISTRATION AND TEACHING OF NURSING

**Core Courses in all Programs**

Arab. 117-118 Conversational medically oriented Arabic for non-Arabic speaking students	1	0	0
Nurs. 001-002 Basic Sciences I and II	3	2	4
Nurs. 045 Foundations and Trends in Nursing (Spring Semester)	3	0	3
Nurs. 054 Nursing Service Administration I	3	0	3
Nurs. 054 Nursing Service Administration I	1	2	2
Nurs. 055 Nursing Service Administration II	2	14	6
Nurs. 066 Curriculum Development (Summer Session)	3	0	3
Nurs. 075 Principles and Methods of Teaching (Spring)	4	4	6

**Administration and Teaching of Medical-Surgical Nursing***Fall Semester*

Nurs. 005 Medical-Surgical Nursing	4	14	8
Pub. Health CHP 203 Social and Psychological Foundations of Public Health	3	0	3

*Summer Session*

Nurs. 011 Teaching of Medical-Surgical Nursing <i>or</i>	3	7	5
Nurs. 012 Administration of Medical-Surgical Nursing	2	10	4

**Administration and Teaching of Maternal-Child Nursing***Fall Semester*

Nurs. 025 Maternal-Child Nursing	4	14	8
Public Health CHP 203 Social and Psychological Foundations of Public Health	3	0	3
Public Health CHP 205 Growth and Development	1	2	2

*Summer Session*

Nurs. 031 Teaching of Maternal-Child Nursing <i>or</i>	3	7	5
Nurs. 032 Administration of Maternal-Child Nursing	1	14	5

**Administration and Teaching of Mental Health  
and Psychiatric Nursing***Fall Semester*

Nurs. 035 Mental Health and Psychiatric Nursing	3	14	7
Psych. 203 Psychology of Adjustment (Audit)	3	0	3

*Spring Semester*

Psych. 216 Abnormal Psychology (Audit)	3	0	3
--	---	---	---

*Summer Session*

Nurs. 041 Teaching of Mental Health and Psychiatric Nursing	3	7	5
<i>or</i>			
Nurs. 042 Administration of Mental Health and Psychiatric Nursing	1	10	4

**Courses and Courses Descriptions**

These will be found on pp. 169-173 in Catalogue 1974-75

# **SCHOOL OF PUBLIC HEALTH**

## SCHOOL OF PUBLIC HEALTH

### Faculty List 1974-1975

Craig S. Lichtenwalner, M.D., M.P.H.; *Professor of Public Health Practice, Dean of the Faculties of Medical Sciences.*

John F.B. Edeson, A.R.C.Sc., B.Sc., M.B., Ch.B., M.D., D.P.H.; *Professor of Tropical Health, Acting Director of the School of Public Health.*

Fuad S. Haddad, Ph.D., *Associate Professor of Education, Registrar.*

### PROFESSORS

- \* Azar, Joseph, M.D., AUB; D.T.M. & H., London School of Hygiene and Tropical Medicine; *Infectious Diseases and Epidemiology.*
- \* Churchill, Charles, Ph.D., New York University; *Public Health Statistics.*
- \* Edeson, John, A.R.C.Sc., B.Sc., University of London; M.B., Ch.B., M.D., University of Sheffield; D.P.H., University of Liverpool; *Tropical Health.*
- \* Harfouche, Jamal, M.D., AUB; M.S. in Hyg., Dr.P.H., Harvard University; *Maternal and Child Health.*
- \* Lichtenwalner, Craig, M.D., Long Island College of Medicine; M.P.H., Harvard University; *Public Health Practice.*
- \* Stephen, Lorne, D.V.M., University of Toronto; D.A.P. & E., London School of Hygiene and Tropical Medicine; F.R.C.V.S., London; *Tropical Health and Protozoology.\*\**
- \* Sweatman, Gordon, Ph.D., McGill University; *Parasitology and Tropical Health.*

### ASSOCIATE PROFESSORS

- \* Abou-Daoud, Kamal, M.D., AUB; D.T.M. & H., London School of Hygiene and Tropical Medicine; M.S. in Hyg., Harvard University; *Epidemiology.*
- \* Acra, Aftim, Ph.D., AUB; M.P.H., University of North Carolina; *Sanitary Chemistry.*
- Haddad, Nadim, M.D., AUB; M.P.H., Harvard University; *Health Services Administration.*
- Najemy, Robert, M.S.W., Boston College; *Medical Social Work.*

### ASSISTANT PROFESSORS

- Abi-Yaghi, Marie José, M.D., Faculté Française de Médecine, Beirut; D.P.H., AUB; *Child Health.*
- Armenian, Haroutune, M.D., AUB; M.P.H., Dr.P.H., Johns Hopkins University; *Epidemiology.*
- Frayha, George, Ph.D., University of Massachusetts; *Parazitology and Tropical Health.*
- Hunt, Rita, M.S., University of California; *Public Health Nursing.*
- Ibrahim, Jack, M.P.H., University of California; *Environmental Health.*
- Khoury, Yvonne, M.S.H.A., Northwestern University; *Hospital Administration.*
- Kronfol, Nabil, M.D., AUB; M.P.H., Harvard University; *Health Services Administration.*
- Shamma, Aida Cotran, M.P.H., University of North Carolina; *Health Education.*

---

\* On Tenure Appointment.

\*\* Resigned 30 November 1974.

Zurayk, Huda, B.A., AUB; M.A., Harvard University; Ph.D., Johns Hopkins University; *Public Health Statistics*.

## LECTURERS

- Atallah, Basil, M.D., AUB; *Community Health Practice*.  
 Dajany, Said, M.D., D.P.H., AUB; *Public Health Administration*.  
 Egee, David, M.S.H.A., Columbia University; *Hospital Administration*.  
 Hasna, Shawki, B.A., D.P.H., AUB; *Public Health Education*.  
 Hayek, Elias, M.D., Faculté Française de Médecine, Beirut; M.P.H., Harvard University; *Public Health Administration*.  
 Karam, George, M.A., University of Notre-Dame; Ed.D., Boston University; *Health Services Administration*.  
 Kuzayli, Munthir, B.S. (Pharm.), AUB; M.S. (Pharm.), University of Wisconsin; M.H.A., Virginia Commonwealth University; *Hospital Administration*.  
 Muzayyin, Muhammad, M.D., AUB; M.P.H., Harvard University; *Public Health Administration*.  
 O'Brien, Nancy, Dip. Nursing, Selly Oak Hospital, Birmingham; Certificate in Midwifery Part I & II, Midwifery Tutor's Dip., Birmingham Maternity Hospital; *Midwifery* (Visiting).  
 Rayes, Salam, B.A., AUB; M.A., George Washington University; *Hospital Administration*.  
 Roy, Delwin, B.S., M.S.A., University of California; Ph.D., Purdue University; *Health Services Administration* (Visiting).  
 Sharif, Muhammad, M.B., B.S., University of Bombay; F.R.C.S.; *Public Health Administration*.  
 Yaktin, Umayma, Ph.D., University of London; *Mental Health* (Senior).

## INSTRUCTORS

- Azouri, Laure, M.S., University of North Carolina; *Public Health Nursing*.  
 Azzi, Donata, Nursing Dip., AUB; *Public Health Nursing*.  
 Durguerian, Seta, B.S., M.A., AUB; *Health Services Administration*.  
 Koussa, Mtanios, B.A., AUB; M.T. (A.S.C.P.), School of Medical Technology, Washington; *Tropical Health*.  
 Milki, Raif, B.S., AUB; D.E.S.T., Technology University, Delft; *Environmental Health*.  
 Muawwad, Eva, B.S., M.P.H., AUB; *Health Services Administration*.  
 al-Sharif, Hani, B.S., M.P.H., AUB; *Health Services Administration*.  
 Watfa, Nabil, M.S., London School of Hygiene and Tropical Medicine; *Occupational Hygiene*.

## ASSISTANT INSTRUCTORS

- Assaf, George, B.A., AUB; *Health Services Administration*.  
 Nadir, Nabil, B.S., AUB; *Health Services Administration*.  
 Zeidan, Mary, Nursing Dip., AUB; B.A., Beirut College for Women; *Public Health Nursing*.

## RESEARCH ASSISTANTS

Deeb, Mary, B.A., AUB; *Health Services Administration*.  
Goenjian, Hasmig, M.A., AUB; *Epidemiology and Biostatistics*.  
Ibrahim, Samira, M.S., AUB; *Environmental Health*.  
Lorfin, Irene, M.A., AUB; *Public Health Statistics* (Senior Research Assistant).  
Samara, Elham, M.A., AUB; *Community Health Practice*.  
Shadid, Hiam, B.A., Beirut College for Women; *Community Health Practice*.  
Tabri, Muna, B.A., AUB; *Community Health Practice*.  
Tannous, Paul, B.Sc., AUB; *Tropical Health*.  
Turk, Ousama, B.E., AUB; *Environmental Health*.

## General Information

The School of Public Health was established in 1954 to provide technical and leadership training to persons required to staff ministries of health and public health service in newly emergent countries of the Middle East and Africa. The School now concentrates its efforts and resources largely upon programs of leadership training for medical officers of health and other key members of the public health team, and also upon the development of research facilities necessary to train scientists in bio-medical disciplines basic to the modern practice of public health.

The School of Public Health, which is one of the four Schools of the Faculties of Medical Sciences, consists of five departments and the administrative office of the Director. The School also serves as a Department of Preventive Medicine for the School of Medicine.

Applicants for admission to the School of Public Health must be proficient in the English language. An English examination will be administered to all students before admission, preferably in their own country. Exceptions may be made in the case of those students who have completed their basic work in English. Applicants who have reached the age of 40 years will be admitted only by special permission of the Director, on the recommendation of the Admissions Committee.

Programs available at the School of Public Health include:

### a. Master of Public Health

Admission is limited to persons holding a graduate degree from an acceptable institution in a discipline relevant to public health, or a Bachelor's degree from an acceptable institution, with substantial knowledge in a discipline relevant to public health through either study or experience or a combination of both.

Programs which do not require a period of residency training normally last for one academic year. In exceptional circumstances students may complete the program in two academic years on a part-time basis. During the first semester core courses are taken in Human Ecology and Health, Principals of Epidemiology, Biostatistics, Vital and Health Statistics, Health Services Administration, Culture, Social Organization and Health and Environment Health. In the second semester students elect an area of concentration in such subjects as Maternal and Child Health, Disease Control, Nutrition, Health Services Administration, Hospital Administration, Health Statistics, Public Health Nursing, Environmental Health and Health Education.

To be eligible for graduation in the M.P.H. program, a student must have passed all courses with minimum grades of 70, must have a weighted average of at least 75 at the end of the program and have a total of at least 30 credit hours.



### **b. Bachelor of Science in Public Health (Environmental Health)**

To be eligible for admission to the program leading to the degree of Bachelor of Science in Public Health (Environmental Health), candidates must have completed satisfactorily the Freshman Science program in the Faculty of Arts and Sciences, or an equivalent program, with a grade of 70 or more in at least 12 credit hours and an average of 70 or more in Chemistry or Mathematics, and must be accepted by the School of Public Health.

Lebanese students must present the Lebanese Baccalaureate Part II (Experimental Science or Mathematics) or its equivalent, and should be considered by the Registrar to be eligible for admission to Sophomore (Science) class.

Courses taken before the student is admitted to the B.S. program may be credited at the discretion of the Department of Environmental Health. This program lasts three years after Freshman Science and provides a broad education in basic sciences together with a fundamental knowledge of environmental health and its administration. This program is intended to prepare students for professional careers in environmental health. Students take field training during the summer session of the second year.

To be eligible for the B.S. degree, a student must have completed satisfactorily the prescribed program of study in the School with a minimum of 100 semester credit hours plus the Freshman Science credits or equivalent, must have attained a cumulative general average of 70 and must have completed satisfactorily the assigned period of summer field training.

### **c. Diploma in Public Health Nursing**

To be eligible for admission, a candidate must have completed a course of study in an approved school of nursing or in a combined nurse-midwife/home visitor school, to either of which an admission requirement is the completion of secondary school, or an equivalent matriculation, and must have had experience of at least one year in the field of nursing or public health or a related field. This program is designed for graduate nurses who will serve as public health nurses and who will provide generalized public health nursing services to individuals, families and the community within the framework of the general public health program.

To be eligible for graduation in the Public Health Nursing program leading to a Diploma, a student must have passed all courses with a weighted average of 70, with credit hours totaling 30 for the two semesters, and must have completed satisfactorily the assigned period of summer field training.

### **d. Diploma in Post Basic Program in Midwifery**

To be eligible for admission, a candidate must have completed a course of study in an approved school of midwifery, be recognized as a midwife in her own country, and must have had a minimum of one year's experience in midwifery or an acceptable associated area. This program is designed for graduates of approved schools of midwifery who wish to prepare for positions in supervision, teaching or administration in a midwifery service.

To be eligible for graduation in the Post Basic Midwifery program leading to a Diploma, a student must have passed all courses with a weighted average of 70, with credit hours totaling 30 for the two semesters, and must have completed satisfactorily the assigned period of summer field training.

**e. Certificate in Basic Laboratory Technique**

To be eligible for admission, a candidate must have completed secondary school (11th or 12th grade) or matriculation at the secondary level and must have an adequate background in chemistry and mathematics. In general, this should consist of at least one year's course in each subject in secondary school. Applicants whose background has been entirely in arts and/or social sciences will not be accepted.

This program has been designed to meet the great need for laboratory workers in public health and clinical laboratories in the countries served by this School of Public Health. The curriculum is specialized and is geared almost entirely to laboratory training.

To be eligible for the Certificate in Basic Laboratory Technique, a student must have passed all courses with a weighted average of 60, with credit hours totaling 30 for the two semesters, and must have completed satisfactorily the assigned period of summer field training.

In addition, the Department of Epidemiology and Biostatistics will offer in 1975 a two-year program leading to a M.S. in Epidemiology. The Department of Tropical Health offers a M.S. program in Parasitology during which courses in Biology of Protozoa, Biology of Parasitic Helminths, Biomedical Research Methods and Medical and Veterinary Entomology are taken. These two programs are regulated by the Graduate Committee of the Faculties of Medical Sciences.

Recommendation for graduation of any student is made by vote of the Faculty of the School. Diploma students may be awarded the diploma with distinction if they bear an excellent character and pass with a weighted average of 85 or more. In addition the B.S. degree may be granted with distinction, but only to students who have completed a minimum of two academic years of residence at the school. Graduate and certificate students are not considered for graduation with distinction.

**FACULTY OF ENGINEERING  
AND ARCHITECTURE**

## FACULTY OF ENGINEERING AND ARCHITECTURE

### Faculty List 1974-1975

Raymond S. Ghosn, M.S., M.Arch.; *Professor of Architecture, Dean.*

Robert W. Sloane, Ph.D.; *Professor of Engineering Sciences, Assistant Dean.*

Fuad Haddad, Ph.D.; *Associate Professor of Education, Registrar.*

#### PROFESSORS EMERITI

Weidner, C. Ken, F.A.S.C.E., M.A.S.M.E., S.M.I.E.E.E.; *Emeritus Dean.*

Hope, Edward S., M.S., Massachusetts Institute of Technology; Ed.D., Columbia University; *Emeritus Professor of Civil Engineering.*

Yeramian, Khosrof K., B.A. (Civil Eng'g), AUB; B.Sc., Lafayette College; *Emeritus Professor of Architectural Engineering.*

#### PROFESSORS

\* Deeb, Sulayman, Ph.D., University of Birmingham; M.I. Mech.E.; *Mechanical Engineering.*

\* Ghosn, Raymond, M.S., M.Arch., Massachusetts Institute of Technology; *Architecture.*

Gillie, Francis, Blaise, C.B., M.A., University of Cambridge; *Town and Regional Planning (Visiting).*

\* Hanania, Jack, Ph.D., University of Leeds; M.I.E.E.; *Electrical Engineering.*

\* Iliya, Raja, Ph.D., University of Texas; *Civil Engineering.*

\* Kano, Kanaan, D.Eng., Yale University; *Electrical Engineering.*

Malouf, Khalil, Ph.D., University of London; *Civil Engineering (Associate of the Faculty).*

Manasseh, Nicolas, M.E., University of California; *Civil Engineering, Professor in charge of Post-degree Programs (Honorary -- Part-time).*

Nasser, Jack, Ingénieur Docteur, Université de Paris; *Civil Engineering (Part-time).*

\* Sakkal, Fateh, Ph.D., University of Manchester; M.I. Mech.E.; *Mechanical Engineering.*

\* Sloane, Robert W., Ph.D., University of Glasgow; F.I.E.E.; *Engineering Sciences.*

Stump, Harold, B.Arch., University of California; *Architecture (Visiting).*

#### ASSOCIATE PROFESSORS

Abboud-Klink, Sami, Ph.D., Rensselaer Polytechnic Institute; *Civil Engineering.*

\* Abdul-Baki, Assad, Ph.D., Oklahoma State University; *Civil Engineering.*

Abi-Rached, George, B.Sc., Fuad I University, Cairo; *Mechanical Engineering (Part-time).*

\* Avedissian, Yeghishe, Ph.D., Purdue University; *Civil Engineering.*

Ayoub, George, Ph.D., University of London; *Civil Engineering.*

\* Azoury, Pierre, Ph.D., University of London; *Mechanical Engineering.*

Clumpner, Joseph A., Ph.D., Yale University; *Mechanical Engineering.*

\* Contavelis, George, M.Arch., University of Texas; *Architecture.*

---

\* On Tenure Appointment.

- \* Inglessis, Constantine, M.S., Colorado State University; *Civil Engineering*.
- \* Jouzy, Neddy, Ph.D., Purdue University; *Civil Engineering*.
- Khoury, Shahwan, Ph.D., Carnegie Institute of Technology; *Electrical Engineering*.
- El-Khuri, Samir, M.S., Lehigh University; *Civil Engineering* (Associate of the Faculty).
- \* Kuran, Albert, M.E., Yale University; *Mechanical Engineering*.
- \* Madany, Henry,\*\* Ph.D., Queen's University, Belfast; M.I.E.E.; *Electrical Engineering*.
- \* Makhlouf, Hanna, Ph.D., Carnegie Institute of Technology; *Civil Engineering*.
- Mukaddam, Mohammad, Ph.D., University of California; *Civil Engineering*.
- \* Ragette, Friedrich R., Dr.Tech.Sc., Technische Hochschule, Vienna; *Architecture*.
- \* Regier, Frank A., Ph.D., Yale University; *Electrical Engineering*.
- Sabah, Nassir, Ph.D., State University of New York; *Electrical Engineering*.
- Salam, Assem, B.A. Arch., University of Cambridge; *Architecture* (Part-time).
- \* Searle, Terence R., Ph.D., University of Salford; *Civil Engineering*.
- Sfeir, Abdallah, Ph.D., University of California; *Mechanical Engineering*.

#### SENIOR LECTURERS

- Alami, Zuheir,\*\* Ph.D., University of Texas; *Civil Engineering*.
- Papazian, Hratch, Ph.D., Ohio State University; *Civil Engineering*.

#### ASSISTANT PROFESSORS

- Haddad, Emile, Ph.D., Georgia Institute of Technology; *Electrical Engineering*.
- Hadidian, John, M.A. (Arch.), University of London; *Architecture*.
- Hamam, Iskandar, Ph.D., University of Manchester; *Electrical Engineering*.
- Khairallah, Samir, B.A. Arch., University of California; *Architecture* (Part-time).
- McGlothlin, Gerald E., Ph.D., Arizona State University; *Electrical Engineering*.
- Raphael, Michel, Ph.D., Texas A. & M.; *Mechanical Engineering*.
- Seeger, John A., Ph.D., Ohio State University; *Electrical Engineering*.
- Shammas, Nazih, Ph.D., University of Michigan; *Civil Engineering*.

#### LECTURERS

- Barhumi, Muhamed, B.E., AUB; *Electrical Engineering* (Part-time).
- Choucair, Joseph, Ph.D., University of Nottingham; *Urban Design* (Part-time).
- Jones, Donald G., F.R.I.C.S.; *Specifications and Quantity Surveying* (Part-time).
- Al-Khalil, Ali, Ph.D., American University, Washington, D.C.; *Cultural Development* (Part-time).
- Khouri, Khalil, Dip. d'Architecture, Académie Libanaise des Beaux-Arts; *Architectural Presentation* (Part-time).
- Kirkwood, Grace H., M.A. in Landscape Architecture, Smith Co. ; *Landscape Design* (Honorary Lecturer – Part-time).
- Moussalli, Simon-Pierre, B.Arch.Eng., AUB; Dip. d'Urbanisme, University of Paris; *Urban Design* (Part-time).
- Naoulu, Muhammad, D.Ing., University of Paris; *Electrical Engineering* (Part-time).

---

\* On Tenure Appointment.  
 \* On Furlough or Leave.

## INSTRUCTORS

- Doumet, George, M.S., Massachusetts Institute of Technology; *Chemical Engineering* (Part-time).
- Hawa, Nur, Dip., College of Aeronautical Engineering, London; M.I. Prod.E.; *Mechanical Engineering*.
- Haydar, Khaldun, B.E., AUB; B.Sc.Ph.E., Delft; *Photogrammetry* (Part-time).
- Khoury, Toni, B.A. Arch., Pratt Institute; *Architecture* (Part-time).
- Kul-Sahagian, Raweh, B.E., AUB; *Electrical Engineering*.
- Taky, Omar, M.Arch., Massachusetts Institute of Technology; *Housing* (Part-time).
- Yeramian, Viken, M.Arch., University of California; *Architecture* (Part-time).

## ASSISTANT INSTRUCTOR

- Khalaf, Robert, Dip. Topographie Générale, Mouthany Commercial and Technical Institute, Beirut; *Mechanical Engineering*.

## General Information

The objective of the Faculty of Engineering and Architecture is to graduate well-qualified engineers and architects who have received a modern engineering or architectural education of the highest standard, and who at the same time have particular knowledge of and training in the needs and problems of the Middle East. In addition to these technical qualifications every effort is made to present and instill the ideals of honesty, personal integrity and service to mankind. Degrees in Engineering are granted only after the student publicly subscribes to the ideals of the profession as set forth in its oath and canons of ethics.

The Faculty reserves the right to make such changes in the curriculum, course contents and regulations as it may deem appropriate and without prior notice.

## ACADEMIC RULES AND REGULATIONS

For a full statement regarding regulations governing grades, promotions and failures, please refer to pages 202-203 of the General Catalogue for 1974-1975.

## Undergraduate Programs

The Faculty of Engineering and Architecture offers programs of study leading to the degree of Bachelor of Engineering (B.E.) with Majors in Civil Engineering, Electrical Engineering or Mechanical Engineering, and the degree of Bachelor of Architecture (B.Arch.).

The curriculum for the degree of Bachelor of Engineering is divided into 11 terms (8 16-week semesters and 3 9-week summer terms), totalling 155 weeks. This is equivalent to 5 academic years, but is completed in 4 calendar years. For the degree of Bachelor of Architecture, the curriculum occupies 14 terms (10 16-week semesters and 4 9-week summer terms). This total of 196 weeks is equivalent to 6 academic years, but is completed in 5 calendar years because the summers are used.

There is a short break after each term and a one-month vacation between Summer and Fall Terms.

Classes are designated by their year of graduation.

In order to develop the total personality of the Engineering and Architecture student, the Faculty provides for a wide variety of extra-curricular activities, participation in which is greatly encouraged. Also, students in Terms I and II are required to take part in a physical development program and, within the curriculum, there is a sequence of courses designed to broaden the student's cultural interests.

## GRADUATE PROGRAMS

Programs are offered leading to the degree of Master of Engineering (M.E.) with majors in Civil, Electrical, Mechanical and Environmental Engineering and to the degree of Master of Urban Planning (M.U.P.) with majors in Urban Planning and Urban Design, Urban Planning and Economics and Urban Planning and Sociology.

### ADMISSION

Admission is by selection of the most promising eligible applicants.

To be eligible for admission to First Year of the Faculty of Engineering and Architecture a student must have completed the pre-professional educational requirements of his country and must have completed the Freshman Science program, including chemistry, mathematics and physics, in the Faculty of Arts and Sciences of this University or a program recognized as equivalent.

Detailed requirements for admission *directly* to First Year Engineering and Architecture are found on pages 25 to 27 of the 1974-75 Catalogue

To be accepted, a candidate must satisfy the Faculty of Engineering and Architecture on personal as well as academic grounds.

### GRADUATION REQUIREMENTS

To be eligible for graduation with the degree of Bachelor of Engineering or the degree of Bachelor of Architecture a student must have passed all the courses assigned, must have satisfied promotion requirements throughout the program and the same requirements for the final 2 terms, including the removal of any probation, and must have satisfied the Faculty as to the adequacy of his professional development. Architecture students must also have a grade of at least 70 in Architectural Design VIII in the final term.

Students who have completed the Fall and Spring terms of the last two years with a general average of 85 or above may be recommended by the Faculty for graduation *with distinction*, but are not necessarily so recommended.

### CURRICULUM FOR THE DEGREE OF BACHELOR OF ARCHITECTURE

#### *Term I (Fall)*

A 011 Perception and Communication I	2
A 012 Architectural Communication I	4
A 013 Basic Design I	4
ET 011 Shops I (Wood & Metal Bench Work)	1
Math 201 Calculus and Analytic Geometry II	4
AS 012 History of Architecture and Engineering Works I	3
	<hr/>

*Term II (Spring)*

A 021 Perception and Communication II	2
A 022 Architectural Communication II	4
A 023 Basic Design II	5
A 024 Methodology I	2
ET 031 Shops II (Metals Technology)	2
AS 022 History of Architecture and Engineering Works II	3
	<u>18</u>

*Term III (Summer)*

CEA 037 Geodetic Studies	5
A 036 Building Construction I	2
Elective (Painting, Photography or Introduction to the Arts)	3
	<u>10</u>

*Term IV (Fall)*

A 041 Perception and Communication III	2
A 042 Architectural Communication III	2
A 045 Architectural Design I	6
A 048 Architectural Science I (Structural Mechanics)	3
AS 011 Man's Cultural Evolution I	3
A 044 Methodology II	2
	<u>18</u>

*Term V (Spring)*

A 052 Architectural Communication IV	2
A 055 Architectural Design II	6
A 056 Building Construction II	3
A 058 Architectural Science II (Building Structures)	3
AS 021 Man's Cultural Evolution II	3
ET 041 Shops III	1
	<u>18</u>

*Term VI (Summer)*

A 056 Regional Architecture	6
Math 209 Computer Programing	1
AS 061 Music Appreciation	2
	<u>9</u>

*Term VII (Fall)*

A 074 Methodology III (Landscaping)	2
A 075 Architectural Design III	6
A 076 Building Construction III	2
A 078 Architectural Science III (Applied Structures)	3
Soc 201, Introduction to Sociology	3
	<u>16</u>



*Term VIII (Spring)*

A 084 Methodology IV (Furniture)	2
A 085 Architectural Design IV	7
CEA 086 Environmental Control I (Sanitary and Water)	2
A 086 Systems Building	2
AS 089 History of Art	3
	<u>16</u>

*Term IX (Summer)*

A 096 Execution Drawings	10
--------------------------	----

*Term X (Fall)*

A 105 Architectural Design V (Landscape Arch. & Interior Arch.)	7
A 107 Environmental Control II (HEVAC)	3
A 108 Architectural Science IV (Applied Structures)	3
A 109 Evolution of Modern Architecture	<u>3</u>
	16

*Term XI (Spring)*

A 114 Methodology V (Evolution of Town Planning Principles and Practice)	3
A 115 Architectural Design VI	7
A 117 Environmental Control III (Acoustics)	1
A 118 Architectural Science V (Space Structures)	2
AS 084 Engineering Economy	<u>3</u>
	16

*Term XII (Summer)*

Approved Professional Practice

*Term XII, (Fall)*

A 134 Methodology VI (Introduction to Town Planning)	3
A 135 Architectural Design VII	8
A 137 Environmental Control IV (Electrical Illumination)	3
A 130 Research for Final Project	<u>2</u>
	16

*Term XIV (Spring)*

A 144 Methodology VII (Architectural Professional Practice)	2
A 145 Architectural Design VIII	10
A 146 Specifications and Quantity Surveying	<u>3</u>
	15

DEPARTMENT OF CIVIL, ELECTRICAL AND MECHANICAL ENGINEERING

**Common First Year**

*Term I (Fall)*

AS 011 Man's Cultural Evolution I	3	
CE 011 Statics	3	
Math. 201 Calculus and Analytic Geometry II	4	
	<u>10</u>	

*and group A*

ME 011 Engineering Drawing	3	
Physics 211 Introductory Physics III	3	
	<u>6</u>	
		<u>16</u>

*or group B*

Chemistry 201 Chemical Principles I	3	
Chemistry 203 Introductory Experimental Chemistry	2	
Math. 209 Digital Computer Programming I	1	
ET 011 Shop I	1	
	<u>7</u>	
		<u>17</u>

*Term II (Spring)*

AS 021 Man's Cultural Evolution II	3	
Math. 202 Calculus and Analytic Geometry III	4	
ME 021 Dynamics	3	
	<u>10</u>	

*and group B*

	7	
		<u>17</u>

*or group A*

	6	
		<u>16</u>

CURRICULUM FOR THE DEGREE OF BACHELOR OF ENGINEERING; MAJOR, CIVIL ENGINEERING

For *Terms I and II*, see Common First Year above.

*Term III (Summer)*

CE 037 Geodetic Studies	3
EE 037 Electrical Engineering	3
CE 038 Photogrammetry	<u>3</u>
	9

*Term IV (Fall)*

CE 041 Mechanics of Materials	3
CE 043 Science of Materials	3
AS 045 Mathematics III	4
ET 031 Shop II	2
ME 043 Thermodynamics I	3
Elective	<u>3</u>
	18

*Term V (Spring)*

CE 051 Structures I	3
CE 054 Engineering Geology	3
CE 055 Fluid Mechanics	4
AS 055 Mathematics IV	4
Elective	<u>3</u>
	17

*Term VI (Summer)*

CE 065 Applied Fluid Mechanics	3
CE 067 Transportation I	3
AS 061 Music Appreciation	2
	8

*Term VII (Fall)*

CE 071 Structures II	3
CE 073 Concrete I	4
CE 075 Hydrology	3
CE 076 Sanitary Engineering I	4
Elective	<u>3</u>
	17

*Term VIII (Spring)*

CE 083 Concrete II	4
CE 084 Soil Mechanics	3
CE 086 Sanitary Engineering II	4
CE 087 Transportation II	4
AS 084 Engineering Economy	<u>3</u>
	18

*Term IX (Summer)*

Approved Experience

*Term X (Fall)*

CE 104 Soil Mechanics and Foundations	3
CE 105 Hydraulic Structures	3
CE 107 Pavement Design	3
CE 631 Prestressed Concrete	3
CE 119 Specifications and Quantity Surveying	<u>3</u>
	15

*Term XI (Spring)*

CE 112 Steel	3
Elective	3
Elective	3
Elective	3
Elective	<u>3</u>
	15

Electives of Term XI:

CE 101 Structures III	3
CE 113 Bridges	3
CE 663 Waterworks and Sewageworks Design	3
CE 117 Traffic Engineering	3
A 056 Building Construction	3
A 114 History of Urban Forms and Planning	<u>3</u>
	15

**CURRICULUM FOR THE DEGREE OF BACHELOR OF ENGINEERING; MAJOR ELECTRICAL ENGINEERING**

For *Terms I and II*, see Common First Year

*Term III (Summer)*

CE 033 Science of Materials	2
EE 031 Electric Circuits I	3
ET 031 Shop II	2
Physics 212 Introductory Physics IV	<u>3</u>
	10

*Term IV (Fall)*

AS 045 Mathematics	4
EE 041 Electric Circuits II	3
EE 042 Electronics I	4
ME 043 Thermodynamics I	3
Elective	<u>3</u>
	17

*Term V (Spring)*

AS 055 Mathematics IV	4
EE 052 Electronics II	4
EE 052 Magnetic Circuits and Machines	3
ME 054 Fluid Mechanics I	3
Elective	3
	<u>17</u>

*Term VI (Summer)*

AS 061 Music Appreciation	2
EE 061 Electrical Measurements	2
EE 064 Engineering Analysis	2
ME 063 Heat Power	3
	<u>9</u>

*Term VII (Fall)*

AS 084 Engineering Economy	3
EE 071 Filters and Transmission Lines	3
EE 072 Electronics III	4
EE 073 Energy Conversion I	4
EE 074 Field Theory I	3
	<u>17</u>

*Term VIII (Spring)*

EE 081 Pulse Circuits and Techniques	3
EE 082 Electronics IV	3
EE 083 Energy Conversion II	4
EE 084 Field Theory II	3
ET 081 Shop III	1
Elective	3
	<u>17</u>

*Term IX (Summer)*

Industrial Training

*Term X (Fall)*

EE 102 Feedback Controls	4
EE 101 Microwaves	3
EE 103 Power Transmission I	3
EE 106 Project	4
Technical Elective:	3
EE 108 Pulse Systems <i>or</i>	
EE 109 Digital Systems	17

*Term XI (Spring)*

AS 114 Engineering Management	3
EE 115 Power Transmission II	3
EE 116 Project	4
EE 117 Communication Systems	3
Technical Elective:	3
EE 118 Electrical Distribution <i>or</i> Approved Math Course	<u>3</u>
	16

CURRICULUM FOR THE DEGREE OF BACHELOR OF ENGINEERING; MAJOR,  
MECHANICAL ENGINEERING

For *Terms I and II*, see Common First Year

*Term III (Summer)*

CE 043 Science of Materials	3
ME 030 Introduction to Mechanical Engineering	2
Physics 212 Introductory Physics IV	<u>3</u>
	8

*Term IV (Fall)*

CE 041 Mechanics of Materials	3
AS 045 Mathematics III	4
EE 049 Electric Circuits	2
ET 031 Shop II	2
ME 043 Thermodynamics I	3
Elective	<u>3</u>
	17

*Term V (Spring)*

AS 055 Mathematics IV	4
EE 053 Magnetic Circuits and Machines	3
ME 053 Thermodynamics II	3
ME 054 Fluid Mechanics I	3
ET 051 Shop III	2
Elective	<u>3</u>
	18

*Term VI (Summer)*

AS 061 Music Appreciation	2
EE 061 Electrical Measurements	2
ME 064 Engineering Analysis	2
ME 062 Mechanisms	<u>3</u>
	9

*Term VII (Fall)*

ME 071 Machine Drawing	2
ME 072 Dynamics of Machines	3
ME 074 Fluid Mechanics II	4
ME 073 Heat Power I	4
Elective	3
	<u>16</u>

## Electives of Term VII:

AS 084 Engineering Economy

ChE 077 Chemical Engineering I

Note: If ChE 077 elected, AS 084 must be taken as one of two electives in Term X.

*Term VIII (Spring)*

ME 082 Engineering Vibrations	4
ME 084 Mechanical Design I	4
ME 086 Heat Transfer I	4
ME 087 Metallurgy	4
Elective	3
	<u>19</u>

## Electives of Term VIII:

Elective

ChE 087 Chemical Engineering II

Note: If ChE 087 elected, an AS course must be taken as one of two electives in Term XI.

*Term IX (Summer)*

Approved Experience

*Term X (Fall)*

EE 104 Electronics	3
ME 103 Heat Power II	4
ME 105 Mechanical Design II	4
Elective	3
Elective	3
	<u>17</u>

## Electives of Term X:

ChE 107 Chemical Engineering III

ME 108 Heating, Air Conditioning and Refrigeration I

ME 109 Industrial Processes

110 – ENGINEERING & ARCHITECTURE

*Term XI (Spring)*

ME 115 Feedback Controls	4
ME 119 Industrial Plant Design	3
Elective	3
Elective	3
Elective	3
	16

Electives of Term XI:

- ChE Chemical Engineering IV
- ME 118 Heating, Air Conditioning and Refrigeration II
- A Graduate Course in the Department
- An approved course in another Department



**FACULTY OF  
AGRICULTURAL SCIENCES**

## FACULTY OF AGRICULTURAL SCIENCES

### Faculty List 1974-1975

James W. Cowan, Ph.D.; *Professor of Nutrition, Dean.*

Fuad S. Haddad, Ph.D.; *Associate Professor of Education, Registrar.*

#### PROFESSORS

- \* Asmar, Joseph, D.V.M., École Vétérinaire de Lyon; Ph.D., University of California; *Veterinary Medicine.*
- Berger, Kermit, Ph.D., University of Wisconsin; *Soils.*
- \* Bray, Donald, Ph.D., Oregon State University; *Plant Breeding and Genetics.*
- \* Cowan, James, Ph.D., Pennsylvania State University; *Nutrition.*
- \* Henderson, Harry, Ph.D., University of Minnesota; *Agricultural Engineering.*
- \*\* Khalidy, Ramzi, Ph.D., University of California; *Subtropical Horticulture.*
- Macksoud, Salim, D.E., University of California; *Irrigation (Part-time).*
- Shaw, Alfred, Ph.D., Pennsylvania State University; *Food Technology.*
- \* Talhouk, Abdul Munim, Dr.rer. nat., University of Munich; *Economic Entomology.*

#### ASSOCIATE PROFESSORS

- \* Abu-Shakra, Salah, Ph.D., Oregon State University; *Seed Technology.*
- Anderson, W. Richard, Ph.D., Pennsylvania State University; *Dairy Science.*
- \* Atallah, Nicola, D.E., University of California; *Irrigation.*
- \* Barnard, Enos, Ph.D., University of Wisconsin; *Horticulture.*
- \* Dagher, Nuhad, Ph.D., Iowa State University; *Poultry Science.*
- Fliege, Ferdinand, Dr.rer.nat., University of Hannover; *Plant Pathology.*
- \* al-Haj, Fawzi, Ph.D., University of Wisconsin; *Extension Education.*
- \* Hallab, Abdul Hamid, Ph.D., Louisiana State University; *Food Technology.*
- \* Kawar, Nasri, Ph.D., Pennsylvania State University; *Entomology.*
- Nightingale, Ray, Ph.D., Cornell University; *Agricultural Economics.*
- \* Saad, Adib, Ph.D., University of Wisconsin; *Plant Pathology.*
- \* Saghir, Abdur-Rahman, Ph.D., University of California; *Weed Science.*
- \* Sayegh, Antoine, Ph.D., Oregon State University; *Soils.*
- \* Tannous, Raja, Sc.D., Massachusetts Institute of Technology; *Food Technology.*
- Thierstein, Gerald, M.S., Kansas State University; *Agricultural Mechanization.*

#### SENIOR LECTURERS

- Chaudhary, Shaukat, Ph.D., Washington State University; *Taxonomy.*
- Raza, Muhammad, Ph.D., Cornell University; *Rural Sociology.*

#### ASSISTANT PROFESSORS

- Chrysomilides, George, Ph.D., University of Leeds; *Agricultural Economics.*
- Dagher, Shawky, Ph.D., University of Massachusetts; *Food Technology (Part time).*

---

\* On Tenure Appointment.  
\*\* On Furlough or Leave.

- \*\* Green, Brook, Ph.D., Cornell University; *Agricultural Economics*.  
 Jones, Lynn, Ph.D., North Carolina State University; *Animal Science*.  
 Karr, James, Ph.D., Pennsylvania State University; *Animal Science*.  
 Katanani, Ahmad, Ph.D., Iowa State University; *Agricultural Economics*.  
 Nasr, Hikmat, Ph.D., University of Wisconsin; *Plant Breeding and Genetics*.  
 Paeth, Robert, Ph.D., Oregon State University; *Soil Conservation*.  
 Sawaya, Wajih, Ph.D., Washington State University; *Food Technology and Nutrition* (Part-time).

#### INSTRUCTORS

- Abdul Baki, Adib, M.S., AUB; *Irrigation*.  
 Salji, Joseph, M.S., AUB; *Food Technology and Nutrition*.

#### VISITING ASSISTANT PROFESSOR (COURTESY APPOINTMENT)

- Nimah, Musa, Ph.D., Utah State University; *Irrigation*.

#### VISITING LECTURERS (COURTESY APPOINTMENTS)

- Accatino, Primo, Ph.D., University of Wisconsin; *Crop Production*.  
 Barghouti, Shawki, Ph.D., University of Wisconsin; *Agricultural Extension*.  
 Brough, Owen, Ph.D., Iowa State University; *Agricultural Economics*.  
 Gotsch, Carl, Ph.D., Harvard University; *Agricultural Economics*.  
 House, Leland, Ph.D., Purdue University; *Crop Production*.  
 Leeuwrik, Dirk, Ph.D., Michigan State University; *Crop Production*.  
 McCrary, J. Dean, Ed.D., University of Kentucky; *Crop Production*.  
 Saari, Eugene, Ph.D., University of Minnesota; *Crop Production*.

#### VISITING RESEARCH ASSOCIATE (COURTESY APPOINTMENT)

- Solh, Névine, Maîtrise en Sciences, University of Paris; *Animal Production and Protection*.

#### RESEARCH ASSISTANTS

- Aprahamian, Sona, B.S., AUB; *Food Technology and Nutrition*.  
 Dagher, Claude, B.S., AUB; *Crop Production and Protection*.  
 Fares, Ramona, B.S., The University of Toledo; *Animal Production and Protection*  
 (Senior Research Assistant).  
 Karakhanian, Mary, B.S., AUB; *Crop Production and Protection*.  
 Kayal, Nour, M.S., AUB; *Animal Production and Protection*.  
 Khoren, Herarpy, B.S., AUB; *Animal Production and Protection*.  
 Masri, Hind, M.S., AUB; *Crop Production and Protection*.  
 Meneshian, Rita, M.S., AUB; *Food Technology and Nutrition* (Senior Research Assistant).  
 Mihranian, Armig, B.S., AUB; *Soils*.  
 Mihranian, Mary-Jeanne, B.S., AUB; *Plant Pathology*.  
 Mouhtar, Mary, M.S., AUB; *Crop Production and Protection*.  
 Musalli, Henriette, M.S., AUB; *Food Technology and Nutrition*.

Rifka, Ghada, B.S., AUB; *Crop Production and Protection*.

Saadah, Akram, B.S., AUB; *Crop Production and Protection*.

Shadarevian, Sossy, B.S., AUB; *Food Technology and Nutrition* (Senior Research Assistant).

Silahian, Alexander, B.S., AUB; *Soils*.

Tannir, Labib, B.S., AUB; *Crop Production and Protection*.

Uwayjan, Michel, B.S., AUB; *Animal Production and Protection* (Senior Research Assistant).

Vartanian, Varoujan, B.S., AUB; *Plant Pathology*.

#### VISITING RESEARCH ASSISTANT (COURTESY APPOINTMENT)

Suleiman, Farouk, Doctorat 3<sup>e</sup> Cycle Botany, University of Paris; *Plant Pathology*.

### General Information

The Faculty of Agricultural Sciences (FAS) was established in 1952 in recognition of the need for a modern institution to train leaders for agricultural development in the Middle East.

The Faculty offers programs of study leading to professional degrees in the Agricultural Sciences. Major fields for *undergraduates* are: agricultural economics and rural sociology, animal production and protection, crop production and protection (agronomy), crop production and protection (horticulture), food technology and nutrition, soils and irrigation, and general agriculture. In *graduate* study leading to the M.S. degree, the majors include: agricultural economics, agricultural mechanization, agronomy, animal pathology, animal production, entomology, extension education, food technology, horticulture, irrigation, nutrition,\* plant pathology, poultry production, rural sociology, and soils. The Faculty offers the Doctor of Philosophy degree in Agronomy. Both the undergraduate and graduate programs provide training for students who wish to practice agriculture professionally as well as those who wish to pursue further graduate study and a career in research. Emphasis is on food and agriculture in the Middle East.

The academic programs are administered by the Dean's Office in accordance with policies established by the Faculty and the Academic Affairs Committee. This Committee, which is advisory to the Dean, is composed of elected and appointed members of the Faculty with the Dean as Chairman. In addition to its function of establishing admission and curricular requirements, the Committee decides on all cases of admission, academic probation, promotion, and dismissal of students from the Faculty.

#### ADMISSION

For complete and detailed information regarding admission to the University, including certificates recognized, see the section on admission at the beginning of this bulletin.

All applicants must be accepted by the Academic Affairs Committee, which will consider academic qualifications, character and physical fitness.

---

\* Under the Interfaculty Nutrition Program (see the chapter at the end of this bulletin entitled Graduate Study, page 119)

## GRADUATION REQUIREMENTS

To be eligible for graduation with the degree of Bachelor of Science (in Agriculture) and the Ingénieur Agricole Diploma, a student must 1) follow one of the prescribed programs of study, 2) complete a minimum of 126 semester credit hours after being admitted to Agricultural Sciences, 3) complete a minimum of six semesters and two summer sessions of residency, 4) achieve an overall minimum grade average of 70, and 5) be approved for graduation by the Faculty. For students who transfer to Agricultural Sciences from another Faculty or University, course credits pertinent to the agricultural curriculum may be transferred at the discretion of the Academic Affairs Committee. However, advanced standing can be considered only for students who transfer from an agriculture program of another recognized institution of higher learning.

Students who complete the second and third years in the FAS with a general average of 85 or above, who have never been on academic probation, and who are recommended by the Faculty of Agricultural Sciences, are awarded their degrees *with distinction*.

## ACADEMIC RULES AND REGULATIONS

The following rules and regulations supersede those published in the 1974-75 University catalog.

### **Classification and Promotion**

For clear promotion from Agriculture I to Agriculture II, a student must pass all required core courses designated in the Agriculture I block curriculum with a cumulative average of 65 or above. If any student is required to take English 134, Sociology 201 may be delayed until the Agriculture II year. A student may be promoted from Agriculture I to Agriculture II *on probation* if he/she has missed for a valid reason or failed no more than two (2) courses during the Agriculture I year but has a cumulative average of 65 or above.

For clear promotion from Agriculture II to Agriculture III, a student must pass all required courses designated in the Agriculture II block curriculum and must have a cumulative average for the Agriculture I *and* Agriculture II years of 70 or above. A student may be promoted from Agriculture II to Agriculture III *on probation* if he/she has missed for a valid reason or failed no more than two (2) courses during the Agriculture II year but has a cumulative average for the Agriculture I and Agriculture II years of 70 or above.

### **Grading System**

In the Faculty of Agricultural Sciences the following grading system is used: 90-100 Excellent; 80-89 Good; 70-79 Fair; 60-69 Weak; below 60 Failing. No grade below 40 is reported. All final course grades are expressed in multiples of 5 (100, 95, 90, . . . 45, 40).

### **Incomplete Grades**

A student who receives an incomplete grade at the end of the first or second semester must complete the course within the first week of the next academic session. Summer Session courses with incomplete grades must be completed before the beginning

of the following academic year. If the work for any course is not completed within the period specified, and the student does not have a valid excuse, a failing grade will be reported.

For courses taken in other Faculties, the regulations of the Faculty concerned will apply.

### **Withdrawal from Courses**

A student cannot withdraw from a required course, but may withdraw from any elective course with the approval of the Faculty advisor. The deadline for withdrawing from elective courses is the end of the tenth week of a regular semester or the end of the sixth week of a summer session.

### **Repeating Courses**

A student may repeat any course with the approval of the Faculty advisor; all required courses failed must be repeated. When a course is repeated, the grade obtained the first time the course was taken will not be considered in the calculation of the cumulative average.

### **Evaluation of Academic Performance**

At the end of each semester and summer session, the complete academic record of each student is reviewed by the Academic Affairs Committee and necessary actions taken.

#### *1. Placing on Academic Probation*

In general, a student will be placed on academic probation if:

- a. promoted on probation (see section on Classification and Promotion), or
- b. two courses are failed in any one semester or summer session, or
- c. one-third or more of the total credits attempted are failed in any one semester or summer session, or
- d. the total cumulative average is below 65 in Agriculture I year or 70 in Agriculture II or III years, or
- e. in the opinion of the Academic Affairs Committee, the academic performance is unsatisfactory, even though the required average is attained.

#### *2. Removal of Academic Probation*

Action to remove academic probation at the end of a semester or summer session will be taken if the student:

- a. passes all courses attempted during the semester or summer session in question, and achieves a minimum cumulative average of 65 in Agriculture I or 70 in Agriculture II or Agriculture III, and
- b. is approved for such action by the Academic Affairs Committee.

#### *3. Repeating a Year*

A student may be required to repeat a year if:

- a. the total cumulative average is below 65 at the end of the Agriculture I year

- or below 70 at the end of the Agriculture II or Agriculture III year, or
- b. three (3) courses are failed during any one academic year.

In repeating a year, the student must register full time\* but will be exempted from repeating courses in which grades of 75 or above were attained. Should the course load of repeated courses in any semester or summer session be less than full time, additional courses must be taken from a list approved by the Faculty advisor. For the satisfactory completion of a repeated year, a minimum cumulative average of 70 must be attained for Agriculture I and 75 for Agriculture II and Agriculture III.

#### 4. *Dismissal from the School of Agriculture*

A student may be dropped from the School of Agriculture at the end of an academic session if:

- a. the requirements of a repeated year are not satisfied, or
- b. four (4) or more courses are failed during any one academic year, or
- c. three (3) courses are failed during any one academic year and the cumulative average is below 65 for Agriculture I or below 70 for Agriculture II or Agriculture III, or
- d. a required course is failed three times, or
- e. academic probation is not removed after two consecutive academic sessions.

Any student who, in the judgment of the Academic Affairs Committee, does not show academic or professional promise or does not demonstrate behavior commensurate with the norms expected for a university student, may be required to withdraw from the School.

#### AGRICULTURAL RESEARCH-AND EDUCATION CENTER (AREC)

The Agricultural Research and Education Center, located 80 kilometers from Beirut in the Beka'a Valley, includes a research farm, staff residences, classrooms, a small library, laboratories, a dormitory, dining room, and recreational facilities. The facilities of the 100 hectare farm are used for teaching, research and demonstration on: fruits, vegetables, and field crops; dairy, beef, mutton, and poultry production; milk and food processing.

Under the provisions of the undergraduate curriculum, each student spends one semester and summer session successively in residence at the AREC. Courses taken during this period are mainly of a practical nature, and offer the student a unique opportunity to observe and participate in a wide range of farming operations.

#### **Eligibility for the Regular AREC Program**

To be eligible to enroll in the regular second semester program at the AREC during the Agriculture II year, the student must:

- a. be of Agriculture II status, and
- b. not have accumulated more than 3 failed/missed courses since admission to the School of Agriculture.

---

\* Full-time status applies to any student whose course load is at least 12 credits for a regular semester or at least 6 credits for a summer session.

### **Dean's Honor List**

To be placed on the Dean's Honor List, for an, one semester, a student must: (a) be full time; (b) have passed all courses and have a minimum grade average of 80 and (c) be deemed worthy by the Dean. Only approximately 10% of each class may be placed on the Honor List except when more than 10% of the students in a class have an average of 85 or above. Students classified as Special are not eligible for the Dean's Honor List.

### **Curriculum**

The undergraduate program leading to the degree of Bachelor of Science (in Agriculture) and the Ingénieur Agricole Diploma covers a period of six semesters and two summer sessions. To qualify for graduation, a student must complete successfully a minimum of 126 credits of course work including:

1. 90-91 credits of courses specified as Core Requirements including 9 credits of Humanities or Social Sciences,
2. 29-30 credits in a selected major;
3. 6 credits of free electives.

Included in the 9 credit hours of Humanities or Social Sciences in the Core Requirements are Sociology 201 (3 credits), plus an introductory course in Economics (3 cr.). The remaining three credits must be selected with the approval of the student's advisor from among the following Departments or Programs in the Faculty of Arts and Sciences: Cultural Studies, Education, Economics, Fine and Performing Arts, History and Archaeology, Mass Communications, Literature, Philosophy, Political Science and Public Administration, Psychology, Religious Studies, and Sociology and Anthropology.

Full details of the curriculum including the specific core courses are found in the "Information Bulletin for Undergraduate Students", available on request from the Office of the Dean, Faculty of Agricultural Sciences, American University of Beirut.

### **GRADUATE STUDY**

General requirements for graduate study at the University are in the section of this bulletin entitled Graduate Study. Specific information concerning requirements for the Faculty of Agricultural Sciences are found in the *Graduate Study Manual*, available on request from the Office of the Dean, Faculty of Agricultural Sciences, American University of Beirut

### **Course Listings**

For complete course listings and course descriptions, please refer to the 1974-75 University Catalogue.



# **GRADUATE STUDY**

## GRADUATE STUDY

For detailed information about regulations governing graduate study, kindly refer to pages 250-259 in the General Catalogue for 1974-1975.

### General Statement

Graduate study is closely linked with research. Graduate students are introduced to areas and problems of current research, and are expected to approach them in a critical and independent manner. Candidates for the degree of Doctor of Philosophy are expected to make an original contribution to knowledge in their fields.

Graduate study is under the direction of the Board of Graduate Studies, with the assistance of the Graduate Committees of the various Faculties. The Board of Graduate Studies is responsible to the University Senate.

The members of the Board of Graduate Studies are: R. Burrowes (Social Sciences), F. Haddad (Registrar), U. al-Khalidy (Medical Sciences), S. Makarim (Humanities), J. Manassah (Pure Sciences), *Secretary of the Board*, F. Regier (Engineering), A.R. Saghir (Agriculture).

### AREAS IN WHICH GRADUATE STUDY IS OFFERED

The University offers both the Master's degree and the degree of Doctor of Philosophy. The Master's degrees offered are Master of Arts (M.A.), Master of Business Administration (M.B.A.), Master of Engineering (M.E.), Master of Public Health (M.P.H.), Master of Science (M.S.) and Master of Science in Pharmacy (M.S. in Pharmacy).

**I. Master's degrees** are offered in the following areas of specialization:

#### *Interfaculty Program*

Nutrition (M.S.)  
Neuroscience (M.S.)

#### *Faculty of Arts and Sciences*

Anthropology (M.A.)	Marine Sciences (M.S.)
Arabic Language and Literature (M.A.)	Mass Communications (M.A.)
Archaeology (M.A.)	Mathematics (M.A. and M.S.)
Biology (M.S.)	Middle Eastern Studies (M.A.)
Business Administration (M.B.A.)	Philosophy (M.A.)
Chemistry (M.S.)	Physics (M.S.)
Comparative Literature (M.A.)	Political Studies (M.A.)
Economics (M.A.)	Psychology (M.A.)
Education (M.A.)	Public Administration (M.A.)
English Language (M.A.)	Religious Studies (M.A.)
English Literature (M.A.)	Sociology (M.A.)
Geology (M.S.)	Statistics (M.A. and M.S.)
History (M.A.)	

*Faculties of Medical Sciences*

Bacteriology and Virology (M.S.)  
 Biochemistry (M.S.)  
 Epidemiology (M.S.)  
 Human Morphology (M.S.)  
 Parasitology (M.S.)  
 Pharmaceutical Chemistry (M.S. in Pharmacy)  
 Pharmacodynamics and Toxicology (M.S. in Pharmacy)  
 Pharmacognosy (M.S. in Pharmacy)  
 Pharmacology and Therapeutics (M.S.)  
 Pharmacy (M.S. in Pharmacy)  
 Physiology (M.S.)  
 Public Health (M.P.H.)

*Faculty of Engineering and Architecture*

Architecture (M.E.)	Mechanical Engineering (M.E.)
Civil Engineering (M.E.)	Sanitary Engineering (M.E.)
Electrical Engineering (M.E.)	

*Faculty of Agricultural Sciences*

Agricultural Economics (M.S.)	Food Technology (M.S.)
Agricultural Mechanization (M.S.)	Horticulture (M.S.)
Agronomy (M.S.)	Irrigation (M.S.)
Animal Pathology (M.S.)	Plant Pathology (M.S.)
Animal Production (M.S.)	Poultry Production (M.S.)
Entomology (M.S.)	Rural Sociology (M.S.)
Extension Education (M.S.)	Soils (M.S.)

**II. Ph.D. degrees** are offered in the following areas of specialization:

*Faculty of Arts and Sciences*

Arab History	Chemistry
Arabic Literature	Physics

*Faculties of Medical Sciences*

Biochemistry	Basic Medical Sciences
--------------	------------------------

*Faculty of Agricultural Sciences*

Agronomy

## PROCEDURE FOR APPLYING FOR ADMISSION TO GRADUATE STUDY

Application forms for admission to graduate study can be obtained from the Office of the Registrar, American University of Beirut, Beirut, Lebanon. All applications for admission should be made on these forms, and returned to the Office of the Registrar. Any subsequent correspondence should also be addressed to the Office of the Registrar.

Completed application forms should reach the Office of the Registrar by May 1 for students who wish to begin graduate study in the summer session or in the first semester of the academic year. Students who wish to begin graduate study in the second semester should ensure that completed application forms reach the Office of the Registrar by January 1.

Before applying for graduate study, students are encouraged to communicate with the chairman or graduate advisor of the department of extended fields of study; in order to be acquainted with the special areas of research carried in the department.

#### REQUIREMENTS FOR ADMISSION TO GRADUATE STUDY

Graduate study is offered only on a selective basis for students who have shown distinct academic ability.

To be admitted to graduate study, an applicant must hold a Bachelor's degree from the American University of Beirut (or an equivalent degree from another recognized institution). An average of at least 80 in the major field of study (or a performance at an equivalent standard if the degree was obtained elsewhere) is required for admission to the Master's program. However, in exceptional cases, graduates of the American University of Beirut with an average between 75 and 80 in their major field of study (or with an equivalent performance at another institution) may be admitted to the Master's program *on probation*.

For admission directly to Ph.D. study upon completion of the Bachelor's degree at this University, an applicant must have an average substantially above 80 in his major field of study (or a performance at an equivalent standard if the degree was obtained elsewhere). Applicants for Ph.D. study who hold the Master's degree must have demonstrated at the Master's level both outstanding academic ability and the potential to conduct scholarly research.

Before admission to graduate study, all students must pass the English entrance examination. This examination is administered by the University, and the passing score is 575 (600 for students entering the program for Teaching English as a Foreign Language: TEFL). Applicants who score between 500 and 574 in the English entrance examination (between 550 and 599 for students entering the TEFL program) may be admitted to graduate study, on condition that they take and pass a special non-credit course in English Communication Skills for Graduate Students (English 202) during the first semester of graduate study.

Exemption from the English entrance examination is given to applicants who hold a degree from the American University of Beirut, or who have completed at least two years of full-time study in residence in a recognized institution in Australia, Canada, The Irish Republic, New Zealand, the United Kingdom or the United States.

For further information on the requirements for English, see page 14 of this bulletin.

#### SUPERVISION

During his first semester of graduate study, each student will be assigned to an advisor or advisors by the Department or Program in which he is enrolled. The advisor will guide the student in the initial phase, in planning his studies and selecting his courses. At a later date the student will be assigned to a Thesis Advisor. The Thesis advisor will normally be the Chairman of the Examining Committee.

### **Financial Aid**

A limited number of fellowships and half-time graduate assistantships in teaching or research, that cover tuition and living expenses, are available in certain programs. Inquiries regarding these fellowships and assistantships should be addressed to the chairman of the department of the intended field of study.

### **Interfaculty Graduate Nutrition Program (GNP)**

The Interfaculty Graduate Nutrition Program leading to the M.S. degree draws on the resources of various Departments of the Faculties of Agricultural Sciences, Arts and Sciences, and Medical Sciences in providing opportunities for study and research in the general field of Nutrition. The Program is administered by the Graduate Committees of the three Faculties concerned in collaboration with an interfaculty Coordinating Committee.

The Program is designed around two core courses in nutrition:

Nutrition/FTN 311 – Advanced Nutrition I.  
Nutrition/FTN/AP 312 – Advanced Nutrition II;

as well as three prerequisite courses:

FTN 261 – Introductory Biochemistry,  
FTN 221 – Basic Principles of Nutrition,  
AP 275 or Biology 216 – Animal Physiology.

At the same time, there is ample scope for the student to specialize in one area of nutrition (e.g., clinical nutrition, animal nutrition, food science) by selecting appropriate additional courses and conducting his thesis research in one of the various Departments involved in specialized research. All other requirements are as defined in the Graduate Program of the Faculty concerned.

To be accepted into the program the student must:

- (1) Meet the general University requirements for admission to graduate study;
- (2) Be recommended by the Coordinating Committee and the Department concerned and accepted by the appropriate Faculty Graduate Committee.

### **INTERFACULTY GRADUATE NEUROSCIENCE PROGRAM**

A new interfaculty graduate program leading towards the M.S. degree in neuroscience is starting in October 1974. The program draws on the resources of the Faculties of Medical Sciences, the Faculty of Engineering and Architecture and the Faculty of Arts and Sciences and is administered by the Neuroscience Coordination Committee in collaboration with the Graduate Committees of the three faculties concerned.

Neuroscience is the study of the nervous system. The scientific disciplines which are considered the basic core of neuroscience include neuroanatomy, neurophysiology, neurobiophysics (including neurocommunication and allied fields such as cybernetics, bionics, and artificial intelligence), neurochemistry, neuropharmacology, neuropathology and behavior. The faculty of several departments of the University will contribute to the basic neuroscience program. These include the Medical School Departments of Anesthesia, Human Morphology, Internal Medicine, Pathology and Physiology, the Pharmacy School Department of Pharmacodynamics, the Faculty of

Engineering and Architecture Department of Electrical Engineering and the Faculty of Arts and Sciences Department of Psychology.

To be accepted into the program, the student must meet the requirements of the appropriate Faculty Graduate Committee, after being recommended by the Neuroscience Coordination Committee and the department concerned. The course program followed by the student and the thesis that is undertaken will be selected in consultation with the Neuroscience Coordination Committee depending on the student's background and interests.

## **DIVISION OF EXTENSION AND SPECIAL PROGRAMS**

*Director: Cajoleas, L., Associate Professor of Education.*

The Division of Extension and Special Programs is the administrative and coordinating center for the extension services of the University. Such services make available the educational competencies of AUB to the countries of the region in the development of human resources.

These services include on-campus programs as well as those in the field. The on-campus programs may be special full-time short courses, institutes, part-time evening courses, seminars, special summer courses, or individualized on-the-job observation-study-training for specialized personnel. Field services include short refresher courses, consultantships, lectures, research advising, surveys, and long range advisory assistance. These educational activities are designed to provide opportunities which extend the services of the University beyond the usual regular academic programs and beyond the perimeters of the campus.

Extension services and special programs may be made available by the University upon request to the extent that personnel and facilities are available. Special fees are established for each activity.

### **SPECIAL SUMMER COURSES**

Special programs of study (non-degree) are offered as in-service, refresher, or advanced education in areas of interest to the region. The programs differ each summer. During summer 1974 the following programs were offered:

For summer 1975 the following programs are scheduled:

1. Secondary School Teachers Institute: The Teaching of English – 6 weeks.
2. Secondary School Teachers Institute: The Teaching of Mathematics – 6 weeks.
3. Workshop in Administration for Principals, Inspectors and Supervisors – 6 weeks.
4. Librarians Institute on Cataloging and Classification (in Arabic) - 4 weeks.
5. The Nursing Process Seminar for graduate nurses – 8 weeks.
6. Management Development Program (in Arabic) - 3 weeks.
7. Colloquium on University Education for Development – 2 weeks.
8. University Administrators Conference/Workshop (in Arabic) – 2 weeks.

### **TRAINEES**

Sponsored individuals or small groups may be accepted for limited and specified periods of specialized and supervised training. Such trainees are not candidates for a university degree or a certificate, although some may be university graduates. Trainees are sent by a sponsorship agency to develop their competencies, knowledge and skills in a particular field. Training periods may be of varying lengths of time depending upon the objectives of the program. Recent trainees sponsored by a government ministry, international organization, business firm, or foundation have come to AUB for further study and training in such fields as:

Nutrition Laboratory  
Business Administration

Histopathology Techniques  
Public Administration  
Topography  
English Laboratory Practice  
Pediatrics Nursing.

*Clinical Pathology (Blood Bank, Bacteriology, Microbiology, Basic Laboratory Techniques, Hermatology etc.)*

*Agriculture (Nutrition, Soils, Dairy Production and Forage, Economics and Marketing, Animal Pathology, Crop Protection, Economics and Farm Management, Agronomy).*

### SPECIAL EVENING COURSES

These are offered each semester and are designed to meet the needs of adults in the immediate community for further education. These evening courses provide (a) professional training, such as business management or teaching mathematics, (b) personal growth, such as English language, colloquial Arabic, psychology, etc., and (c) cultural development in such areas as music, art, dance, international relations. Similar and other courses and programs are being planned.

### SPECIAL CERTIFICATE PROGRAMS

Essentials of Business Certificates is an evening program of two courses each semester for four semesters and leading to a certificate. The program consists of the following courses: Accounting, Marketing, Finance, Quantitative Methods for Decision Making, Human Resources, Business Conditions—a total of eight courses over two years.

Several other certificate programs are being planned in such fields as management, agriculture, public health administration, engineering etc.

Separate brochures and further information are obtainable from the Director, Division of Extension and Special Programs.

### CONTRACT PROGRAMS

At the request of sponsoring agencies the Division of Extension and Special Programs is prepared to organize programs or offer services to meet particular needs. Among possible programs and services are the following:

Educational Evaluation and Program Development:  
Design and study of curricula in all fields and levels of education:  
Design of Testing and Counselling Programs:

Management Training Programs:  
Personnel  
Accounting  
Banking  
Human Relations  
Computers

Training Technical Assistants:  
Plant Operation and Maintenance  
Use and Maintenance of Scientific Instruments and Equipments



Electronic Instrumentation

Use and Maintenance of farm Machinery

Water, Waste Water, and Sewerage disposal treatment plant operations and maintenance

Food Science and Technology

Engineering and Architecture Drawing

Allied health services

Language Training:

English Language Communication Skills

Teachers of English

Teaching Materials

Basic and Applied Research Training and Supervision

The above are only a few examples of some of the areas of specialized training and services available from the American University of Beirut.

**STUDENTS BY FACULTY AND SCHOOL 1974-1975**

<b>FACULTY OF ARTS AND SCIENCES</b>	Summer Session 1974	First Semester 1974-75
Graduate	272	601
Senior		498
Junior		581
Sophomore		846
Freshman		208
Special	1569	136
Total	1841	2870

**SCHOOL OF MEDICINE**

Graduate	12	41
Fifth Year	39	39
Fourth Year	51	51
Third Year	2	61
Second Year	—	57
First Year	—	64
Special	16	9
Total	120	322

**SCHOOL OF PHARMACY**

Graduate	7	9
Fourth Year	29	24
Third Year	27	29
Second Year	36	42
First Year	38	—
Special	2	—
Total	139	104

**SCHOOL OF NURSING**

Administrative & Teaching	8	4
Degree IV	10	13
Degree III	14	23
Degree II	35	41
Degree I	5	6
Diploma III	37	26
Diploma II	22	14
Diploma I	22	—
Special	2	4
Total	158	131

	Summer Session 1974	First Semester 1974-75
<b>SCHOOL OF PUBLIC HEALTH</b>		
Graduate	14	42
Third Year	4	11
Second Year	11	9
First Year	11	23
Diploma Program	7	22
Certificate Program	34	27
Special	—	1
Total	81	135

**FACULTY OF ENGINEERING  
AND AGRICULTURE**

Graduate	28	87
Term XIV	27	—
Term XIII	—	16
Term XI	205	—
Term X	—	113
Term VIII	138	—
Term VII	—	143
Term V	171	—
Term IV	—	184
Term I	—	200
Special	32	29
Total	601	772

**FACULTY OF  
AGRICULTURAL SCIENCES**

Graduate	128	166
Third Year	35	26
Second Year	44	40
First Year	69	91
Special	7	11
Total	283	334
Total Regular Programs	3223	4668

**SPECIAL PROGRAMS**

Orientation Program	43	132
X-Ray Program	18	23
Total	61	155

**DIVISION OF EXTENSION  
AND SPECIAL PROGRAMS**

	Summer Session 1974	First Semester 1974-75
<b>Special Summer Courses</b>		
Secondary Teachers Institutes	55	--
Secondary School Administrators Workshop	25	--
Librarians' Institute	23	--
Colloquium on University Education for Administrators	29	--
Total	132	--
Grand Total	3416	4823

**DIVISION OF EXTENSION  
AND SPECIAL PROGRAMS**

(Not included in above totals)

Special Evening Programs		353
Trainees	25	45
Trainees -- Management Development Program	55	--
Trainees -- Occupation Safety Sanitary Controls	22	--

**ENROLLMENT DISTRIBUTION BY NATIONALITY  
October 18, 1974**

	Summer Session 1974	First Semester 1974-75
Abu Dhabi	--	9
Afghanistan	63	65
Albania	--	1
Algeria	3	2
Argentina	2	4
Australia	4	9
Bahrain	88	109
Bangladesh	12	16
Brazil	5	11
British Guiana	1	1
Canada	1	5
Chad	1	1
Colombia	--	3
Cyprus	59	71
Denmark	--	2
Ecuador	1	1
Egypt	18	36
Ethiopia	3	11
Finland	1	2
France	5	5
Germany	2	6

	Summer Session 1974	First Semester 1974-75
Ghana	3	7
Greece	16	25
India	4	10
Indonesia	—	1
Iran	60	79
Iraq	37	60
Ireland	—	1
Italy	1	4
Jamaica	1	1
Japan	1	2
Jordan	376	426
Kenya	1	1
Kuwait	56	52
Lebanon	1817	2678
Liberia	—	1
Libya	5	2
Malaysia	—	1
Maldives	3	4
Mexico	5	5
Morocco	7	5
Nepal	8	5
Netherlands	1	3
Nigeria	3	2
Oman	5	9
Pakistan	101	104
Palestine	123	133
Panama	1	1
Philippines	2	2
Qatar	—	3
Saudi Arabia	69	110
Somalia	—	2
South Africa	1	1
Spain	—	2
Sudan	34	35
Sweden	—	2
Switzerland	—	2
Syria	185	252
Tanzania	2	2
Thailand	—	1
Trinidad	—	1
Tunisia	1	1
Turkey	28	23
U.A.E.	20	28
United Kingdom	34	58
U.S.A.	79	235
U.S.S.R.	—	1
Venezuela	8	9

132 - STUDENTS

	Summer Session 1974	First Semester 1974 - 75
Yemen (A.R.)	32	54
Yemen (P.D.R.)	3	5
Undetermined	<u>10</u>	<u>9</u>
Total	3415	4823







