

# **FACULTY OF HEALTH SCIENCES**

# **FACULTY LIST**

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## **OFFICERS OF THE FACULTY**

Salem, Elie	President of the University
Bashour, Tali'	Vice President for Medical Studies
Karam, Nadim	Vice President for Health Affairs and Community Development, <i>Dean</i>
Nahas, George	Vice President for Planning and Educational Relations
Najjar, Michel	Vice President for Development and Public Affairs
Moubayed, Walid	Dean of Admissions and Registration
Bashir, Sameera	Librarian

## **FACULTY STAFF**

Nseir, Micheline	Administrative Assistant
Lahoud, Cecile	Secretary
Chaddad, Rita	Secretary
Khater, Paul	IT Assistant
Abbas, Lina	Project Assistant
Aramouni, Jaqueline	Project Assistant
Assaf, Eliane	Project Assistant
Atallah, Pierre	Project Assistant
Chalhoub, Rita	Project Assistant
Foskolos, Grace	Project Assistant
Massoud, Hiam	Project Assistant
Shaker, Linda	Project Assistant
Khamis, Youssef	Office Assistant
Yazbic, Georges	Driver

## **FACULTY MEMBERS**

Abdallah, Bahia	M.P.H., Health Services Administration, American University of Beirut, Lebanon
Abdel Rahman, Abeer	M.P.H., Health Services Administration, American University of Beirut, Lebanon
Abi Habib, Laurie	Ph.D., Social Anthropology, Manchester University, U.K.
Abi Hanna, Pierre	M.D., Internal Medicine, University of Illinois, U.S.A
Abou Chawareb, Maha	Diploma in Gerontology, University of Malta, Malta
Abou Mrad, Jean	M.S., International Business, Point Park College, Pennsylvania
Aghar, Nada	M.P.H., Health Services Administration, American University of Beirut, Lebanon

Alam Eddine, Bassam	Ph.D., Natural Sciences, University of Fribourg, Switzerland
Allouch, Zeina	M.P.H., Health Services Administration, American University of Beirut
Aoun, Habbouba	M.S., Population Studies, American University of Beirut, Lebanon
Azar, Aida	Ph.D., Clinical Epidemiology, Erasmus University of Rotterdam, Netherlands
Azar, Mathil	D.E.A., Nursing, Midwife, St. Joseph University, Lebanon
Azzi, Rola	Ph.D., Safety Science/Occupational Toxicology University of New South Wales, Australia
Baboudjian Nayiri	M.A., English Literature, American University of Beirut, Lebanon
Badr, Lina	Ph.D., PNP Nurse Practitioner UCLA, U.S.A.
Basbous, Wafa	D.E.S.S. d'Expert Démographe, Institut de Démographie de Paris (IDP), France
Bassil, Dolly	M.P.H., Epidemiology and Biostatistics, American University of Beirut, Lebanon
Bechwati, Brigitte	M.S., Nursing, St. Joseph University, Lebanon
Chamoun, Antoine	M. Eng., Civil Engineering, Saint Joseph University, Lebanon
Chaoui, André	D.E.S., Animal Physiology, Faculté Libre des Sciences, France
Daher, Mirna	B.S., Nursing, University of Balamand, Lebanon
Daoud, Ziad	Ph.D., Medical Laboratory- Microbiology, Complutense University of Madrid- Spain, IPP- France
Deyirmenjian, Mary	M.P.H., Health Services Administration, American University of Beirut, Lebanon
Dhaini, Hassan	Ph.D., Toxicology University of Michigan Ann Arbor, U.S.A.
Djaffar, Isabelle	Ph.D., Molecular and Cellular Biology, Université Paris VII, France
Eddeh, Michel	Ph.D., Mathematics, Université Paris VI, France
El-Daw, Badrieh	M.S., Education, B.S., Nursing, American University of Beirut, Lebanon
Fakhoury, Rajaa	Ph.D., Clinical Biochemistry, Manchester University, U.K.
Gemayel, Pierre	B.S., Law, Sagesse University, Lebanon
Georges, Vicky	Maitrise, Nursing, St. Joseph University, Lebanon
Ghanem, Noha	Ph.D., Organic Chemistry, Université de Montpellier II, France

Ghantous, Marwan	Computer Engineer, St. Joseph University, Lebanon
Habib, Hiba	Maitrise, Nursing, Lebanese University, Lebanon
Haddad, Barbara	D.E.A., Public Health, Lebanese University, Lebanon
Haddad, John	Ph.D., Molecular Biology and Immunology, University of Dundee, U.K
Haddad, Mona	M.P.H., Epidemiology & Biostatistics – Health Management, American University of Beirut, Lebanon
Hatjian, Berj	Ph.D., Environmental & Occupational Hygiene, University of Newcastle-Upon-Tyne, U.K.
Hayek, Joumana	D.E.A., Sciences, Université Paris I – Sorbonne, France
Jaalouk, Lina	M.S., Health Promotion Management, Marymount Univeristy, U.S.A.
Kalash, Pamela	D.U., Santé Communautaire, Saint Joseph University, Lebanon
Karam, Jessica	Midwife, St. Joseph University, Lebanon
Karam, Nadim	M.D., Family Medicine, Johns Hopkins University, U.S.A.
Khalife, Marie Therese	D.E.S.S., Psychology, St. Joseph University, Lebanon
Khalil, Samar	M.S., Environmental Impact Assessment, Auditing and Management Systems, University of East Anglia, U.K.
Kharrat, Rita	B.S., Documentation, Lebanese University, Lebanon
Maalouf, Sarar	M.A., Psychology, American University of Beirut, Lebanon
Maalouf, Saydeh	B.S., Nursing, St. Joseph University
Maalouf, Wafa	M.A., Educational Psychology, American University of Beirut, Lebanon
Medawar, Samir	Ph.D., Agriculture, Université Paris VI, France
Maamary, Gebran	Maitrise, History of Sacred Arts, Université Saint Esprit, Lebanon
Mattar, Nevine	M.A., Education in Psychology, American University of Beirut
Mageurian, Zarouhie	M.D., Pathology, St. Joseph University, Lebanon
Nabhani, Maya	M.S., Nutrition, American University of Beirut, Lebanon
Najjar, Walid	Ph.D., Arabic Literature, St. Joseph University, Lebanon

Nehme, Alexandre	M.D., General Medicine, Université Paul Sabatier, France
Obeid, Pierre	Ph.D., Chemistry, University of Patras, Greece
Rabaa, Sally	M.P.H., Health Services Administration, American University of Beirut, Lebanon
Rassam, Paul	M.D., Gastro-Enterology, Medical College of Wisconsin, U.S.A.
Rizk, Ursula	M.P.H., Health services Administration, American University of Beirut, Lebanon
Sahakian, Krikor	Ph.D., Pharmacology, Université de Paris XI, France
Salem, Suhaila	M.A., English Literature American University of Beirut, Lebanon
Salibi, Joseph	M.B.A., Webster University, U.S.A.
Samaha, Hanady	M.D., Oncology, St. Joseph University, Lebanon
Seriani, Nathalie	M.A., Psychology, St. Joseph University, Lebanon
Slim, Nada	Midwife, St. Joseph University, Lebanon
Stéphan, Elie	M.D., Family Medicine, St. Joseph University, Lebanon
Stéphan, Joumana	M.S., Biostatistics, John Hopkins University, U.S.A.
Sukarieh, Ola	B.S., Nursing, University of Balamand, Lebanon
Tabet, Caroline	D.E.A., Psychology, St. Joseph University, Lebanon
Tannous, Christine	D.E.S.S., Psychology, St. Joseph University, Lebanon
Wehbe, Micheline	M.S., Nursing, St. Joseph University, Lebanon

## PROGRAMS OF STUDY

The Faculty of Health Sciences encompasses the following academic and co-academic programs:

1. Academic programs leading to degrees in applied medical sciences and community health and development:
  - BS in Nursing (NG offered in English and French) 3 years
  - TS – BS Transition Program in Nursing (offered in English and French)
  - BS in Medical Laboratory Sciences (Regular and Pre-Medical track) 3 years
  - MS in Clinical Laboratory Sciences (with three different concentrations) 2 years
    - Clinical Microbiology
    - Diagnostic Molecular Biology
    - Molecular Toxicology
  - BS in Public Health and Development Sciences (offered in English) 3 years
  - BS in Health Promotion (offered in English) 3 years
2. Co-Academic Programs
  - A. Professional Development
    - Continuing Education and Skills Development Programs
    - Quality Assurance Programs
    - Other Manpower Development Programs
  - B. Community Development
    - Service and Resource Centers: Refer to previous section in the catalogue on Co-Academic programs at the Faculty of Health Sciences.

## COURSE CODES

Each course is assigned a number of credit hours normally equivalent to the number of hours of classroom teaching per week. In the case of practical training courses in the Nursing program, each credit is equivalent to 3 hours of training. The letters preceding the course number indicate the area or subject of study to which the course belongs.

FHSC	Faculty	ENGL	English Language and Literature
NURS	Nursing	FREN	French Language and Literature
MLAB	Medical Laboratory Sciences	ARAB	Arabic Language and Literature
CLAS	Clinical Laboratory Sciences	CVSQ	Cultural Studies
PDHP	Public Health/Health Promotion	LISP	Library and Information Science

There are 2 types of courses:

**Major courses:** Students should pass the major courses with an average of 65% or 70%. (Refer to respective department curriculum).

**Non – major courses:** Student should pass the non-major courses with an average of 60%. (Refer to respective department curriculum).

## **UNDERGRADUATE PROGRAMS**

The University policies stipulated in the “General Information Section” in this catalogue are supported by the Faculty of Health Sciences unless otherwise stated.

### **1. ADMISSION REQUIREMENTS**

Admission to the undergraduate program in the Faculty of Health Sciences is on a semester basis.

- a. Applications are processed as described in Section I of this catalogue.
- b. Applicants must satisfy University admission requirements as described in the catalogue.

### **2. ADMISSION OF TRANSFER STUDENTS**

See University Rules and Regulations

### **3. ACADEMIC RULES AND REGULATIONS**

See University Rules and Regulations

#### **A-Academic performance**

See University Rules and Regulations

#### **B- Grievance Procedure**

Students may appeal against a decision regarding them taken by the Faculty. The appeal must be submitted in writing. A Grievance Committee structured according to the rules and regulations of the University will evaluate the situation.

### **4. STUDENT HOUSING SERVICES**

Students have access to the St. Georges Hospital dormitory that is located next to the Faculty building. Lodging prices are subsidized. Reservations must be made upon acceptance for admission.

### **5. FINANCIAL AID**

The University offers financial aid. A sponsorship program may be available for qualified nursing students through St. Georges Hospital.

### **6. TEACHING LABORATORY**

Teaching laboratory sessions are an integral part of many basic as well as clinically oriented courses.

#### **A-Facilities**

The laboratories in the Faculty of Health Science and the St. George Hospital laboratory are multidisciplinary; designed and equipped to cope with all the experiments that are carried out as part of curricular requirements. The settings meet the needs of basic laboratory research work.

### **B- Supplies**

All laboratory supplies as required by each department must be purchased at the student's expense. No charge is made to regular students taking required laboratory work for normal amounts of expendable material used in connection with the laboratory subject.

### **C- Damages**

Students will be charged for damage to instruments caused by neglect. The amount of the charge will be the actual cost of repair, and, if the damage results in total loss of apparatus, adjustments will be made in light of the condition of the instruments. Where there is a danger of costly damage, an instructor should be requested to check the equipment's set-up. When a group does laboratory work, charges for breakage will be divided among the members of the group concerned. The amount of the charge will be stated immediately or as soon as it can be determined.

## **7. TRANSPORTATION**

Students are responsible for providing their own transportation to and from clinical agencies.

## **8. GRADUATION REQUIREMENTS**

To be eligible for graduation, students who enter as sophomores must complete a minimum of 102, 102, 105, and 106 credits as described in the respective curricula of Public Health and Development Sciences, Health Promotion, Medical Laboratory Technology, and Nursing programs. For other graduation requirements refer to the "General Information Section" in this catalogue.



# **GRADUATE PROGRAM**

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To earn a Master's degree, a student must successfully complete 30 credits of coursework (including six credits that may be earned for a Thesis) approved by the Program.

## **1. ADMISSION REQUIREMENTS:**

Applicants to the Master's degree program must hold a Bachelor of Science degree from a recognized institution of higher learning with a minimum cumulative average of 80 or its equivalent in the last two years of undergraduate study and in major courses of the field of study. Applicant should present the following documents:

- A completed official application form
- Official transcripts from Universities attended for the last three years
- A certified copy of the Lebanese Baccalaureate or its equivalent
- Two letters of recommendations
- Three recent passport-size photographs
- A non-refundable application fee
- Proof of English Proficiency (a minimum score of 527 on the paper-based TOEFEL exam or 197 on the computer-based TOEFEL exam. Scores remain valid up to 4 years from test date)
- Statement of interest

Graduate acceptance is granted upon recommendation of the Graduate Admission Committee after reviewing the application.

The Graduate Admission Committee may admit students on probationary status based on their presented credentials. A student admitted on probation must achieve a minimum average of 80 in the first 6 credits of the first semester of graduate study. Failure to satisfy these requirements will result in automatic dismissal from the graduate program.

Students not admitted on probation due to unsatisfactory undergraduate achievements may be allowed to enroll in remedial courses to improve their undergraduate cumulative average and reapply for admission to the graduate program.

## **2. ACADEMIC RULES & REGULATIONS:**

### **A. Time Limit**

All students are expected to complete all requirements within a minimum of two years and a maximum of 4 years.

Course credits earned in the program of graduate studies or accepted by transfer are valid for a maximum of six years, unless an extension is granted in special circumstances based on a written petition by the student.

### **B. Transfer Credits**

A maximum of 6 graduate credits obtained at an accredited institution of higher learning may be accepted towards the degree. A grade of 80 or above is required for transfer credits to be accepted. Courses must not be used as credit towards any other degree at UOB. Transfer credits will be granted for courses that have an equivalent offered at UOB.

**C. Passing Grade**

The passing grade for all courses is 70.

**D. Full-Time Status**

Students are considered to have a full-time status when their credit load per semester is nine credits or above.

**E. Graduation Requirements**

In order to graduate, students must achieve a minimum cumulative average of 80.

**F. Probationary Status**

A student is placed on probation in any of the following cases:

- The student has a failing grade in any of the courses (less than 70).
- The student has a cumulative average under 80.

**G. Dismissal**

A graduate student may be dismissed from the program in any of the following cases:

- The student has a failing grade in 2 courses within the same semester.
- The student stays on probation for two consecutive semesters.

**H. Appeal**

A graduate student may petition the Dean when there is a dispute that cannot be resolved at the Program level.

**Bachelor Of Science In**  
**Medical Laboratory Sciences (Regular Track)**

**FIRST YEAR**

**Semester 1**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
FHSC 200	Introduction to Biology I	3
FHSC 201	Introduction to Biology I- Laboratory	1
FHSC 222	Basic Chemistry	3
FHSC 223	Basic Chemistry Laboratory	1
FHSC 280	Information Technology and Health Sciences	2
ENGL 203	English Communication Skills III	3
		13

**Semester 2**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
FHSC 203	Basic Human Physiology	4
FHSC 225	Basic Organic Chemistry	3
FHSC 227	Basic Organic Chemistry Laboratory	1
ENGL 204	English Communication Skills IV	3
FHSC 260	Introduction to Sociology	3
		14
LISP 200	Library Use and Research Techniques <sup>1</sup>	1
		15

**Summer**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
FHSC 204	Principles of Genetics	2
FHSC 224	Basic Analytical Chemistry	2
		4

**SECOND YEAR**

**Semester 3**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CVSQ 217	Cultural Studies I	3
MLAB 210	Basic Biochemistry *	3
MLAB 211	Clinical Chemistry I *	3
MLAB 212	Basic Immunology and Hematology*	4
MLAB 213	General Microbiology *	3
		16

\* Major course with passing grade = 65

\*\* Major course with passing grade = 70

1 LISP 200 is a no-fee obligatory 1 credit course for graduation.

**Semester 4**

<u>Name of Course</u>		<u>Credit</u>
FHSC 282	Principles of Epidemiology and Biostatistics	3
MLAB 221	Clinical Chemistry II *	3
MLAB 222	Clinical Immunology and Hematology*	3
MLAB 223	Clinical Bacteriology*	3
	Elective	
		—
		16

**Summer**

<u>Name of Course</u>		<u>Credit</u>
	Practical training**	1
	Practical training**	1
	Practical training**	1
		—
		3

**THIRD YEAR****Semester 5**

<u>Name of Course</u>		<u>Credit</u>
MLAB 224	Medical Parasitology and Mycology*	2
MLAB 230	Molecular Biology*	3
MLAB 231	Seminars in Medical Laboratory Sciences*	3
FHSC 288	Research in Health Care Sciences	3
CVSQ 218	Cultural Studies II	3
	Practical Training**	1
	Practical Training**	1
		—
		16

**Semester 6**

<u>Name of Course</u>		<u>Credit</u>
MLAB 232	Medical Virology *	2
MLAB 233	Toxicology *	2
FHSC 268	Fundamentals of Management and Marketing	3
	Elective	3
	Practical Training**	1
	Practical Training**	1
	Practical Training**	1
		—
		13

**TOTAL** **96**

\* Major course with passing grade = 65

\*\* Major course with passing grade = 70

**List of practical training course:**

MLAB 251	Applied Clinical Chemistry **	1
MLAB 252	Applied Clinical Hematology **	1
MLAB 253	Applied Clinical Bacteriology**	1
MLAB 254	Applied Clinical Parasitology and Body Fluids Analysis**	1
MLAB 255	Applied Clinical Immunology and Endocrinology**	1
MLAB 256	Applied Blood Banking**	1
MLAB 257	Applied Anatomic Pathology**	1
MLAB 258	Techniques in Molecular Biology and Assisted Reproduction**	1

\* Major course with passing grade = 65

\*\* Major course with passing grade = 70

**Bachelor Of Science In**  
**Medical Laboratory Sciences (Premed Track)**

**FIRST YEAR**

**Semester 1**

<b><u>Name of Course</u></b>	<b><u>Credit</u></b>	
FHSC 200	Introduction to Biology I	3
FHSC 201	Introduction to Biology I- Laboratory	1
FHSC 222	Basic Chemistry	3
FHSC 223	Basic Chemistry Laboratory	1
FHSC 280	Information Literacy and Health Sciences	2
ENGL 203	English Communication Skills III	3
FHSC 240	Mathematics for Applied Sciences	3
	<hr/>	16

**Semester 2**

<b><u>Name of Course</u></b>	<b><u>Credit</u></b>	
FHSC 203	Basic Human Physiology	4
FHSC 226	Organic Chemistry I	3
FHSC 224	Basic Analytical Chemistry	2
ENGL 204	English Communication Skills IV	3
FHSC 260	Introduction to Sociology	3
	<hr/>	15
LISP 200	Library Use and Research Techniques <sup>1</sup>	1
	<hr/>	16

**Summer**

<b><u>Name of Course</u></b>	<b><u>Credit</u></b>	
FHSC 204	Principles of Genetics	2
FHSC 227	Basic Organic Chemistry Laboratory	1
FHSC 228	Organic Chemistry II	3
	<hr/>	6

**SECOND YEAR**

**Semester 3**

<b><u>Name of Course</u></b>	<b><u>Credit</u></b>	
MLAB 210	Basic Biochemistry *	3
MLAB 211	Clinical Chemistry I *	3
MLAB 212	Basic Immunology and Hematology*	4
MLAB 213	General Microbiology *	3
FHSC 241	Fundamentals of Physics I	3
FHSC 242	Fundamentals of Physics Lab. I	1
	<hr/>	17

\* Major course with passing grade = 65    \*\*Major course with passing grade = 70

<sup>1</sup> LISP 200 is a no-fee obligatory 1 credit course for graduation.

**Semester 4**

<b><u>Name of Course</u></b>	<b><u>Credit</u></b>
FHSC 282 Principles of Epidemiology and Biostatistics	3
MLAB 221 Clinical Chemistry II *	3
MLAB 222 Clinical Immunology and Hematology*	3
MLAB 223 Clinical Bacteriology*	3
FHSC 243 Fundamentals of Physics II	3
FHSC 244 Fundamentals of Physics Lab. II	3
	<hr/>
	17

**Summer**

<b><u>Name of Course</u></b>	<b><u>Credit</u></b>
Practical training**	1
Practical training**	1
	<hr/>
	2

**THIRD YEAR****Semester 5**

<b><u>Name of Course</u></b>	<b><u>Credit</u></b>
MLAB 224 Medical Parasitology and Mycology*	2
MLAB 230 Molecular Biology*	3
MLAB 231 Seminars in Medical Laboratory Sciences*	3
FHSC 288 Research In Health Care Sciences	3
CVSQ 217 Cultural Studies I	3
Practical Training**	1
Practical Training**	1
Practical Training**	1
	<hr/>
	17

**Semester 6**

<b><u>Name of Course</u></b>	<b><u>Credit</u></b>
MLAB 232 Medical Virology *	2
MLAB 233 Toxicology*	2
FHSC 268 Fundamentals of Management and Marketing	3
CVSQ 218 Cultural Studies II	3
Practical Training**	1
Practical Training**	1
Practical Training**	1
	<hr/>
	13
	<hr/>
<b>TOTAL</b>	<b>104</b>

\* Major course with passing grade = 65

\*\* Major course with passing grade = 70

**List of practical training course:**

MLAB 251	Applied Clinical Chemistry	1
MLAB 252	Applied Clinical Hematology	1
MLAB 253	Applied Clinical Bacteriology	1
MLAB 254	Applied Clinical Parasitology and Body Fluid Analysis	1
MLAB 255	Applied Clinical Immunology and Endocrinology	1
MLAB 256	Applied Blood Banking	1
MLAB 257	Applied Anatomic Pathology	1
MLAB 258	Techniques in Molecular Biology and Assisted Reproduction	1



## Master Of Science In Clinical Laboratory Sciences

### Clinical Microbiology Concentration

#### Fall 1

<u>Name of Course</u>	<u>Credit</u>
CLAS 301      Laboratory Organization, Management, and Quality Assurance	3
CLAS 303      Applied Molecular Biology	3
CLAS 304      Research Methods	3
	9

#### Spring 1

<u>Name of Course</u>	<u>Credit</u>
CLAS 305      Human Pathology	3
	Elective
CLAS 321      Medical Microbiology	3
	9

#### Fall 2

<u>Name of Course</u>	<u>Credit</u>
CLAS 302      Bio-molecules: Structures and Functions	2
CLAS 322      Antimicrobial Agents and Mechanisms of Resistance	2
CLAS 323      Infection Control Practices	2
CLAS 320      Thesis	6
	12

#### Spring 2

<u>Name of Course</u>	<u>Credit</u>
CLAS 320      Thesis continued	
<b>TOTAL</b>	<b>30</b>

## **Diagnostic Molecular Biology Concentration**

### **Fall 1**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CLAS 301	Laboratory Organization, Management, and Quality Assurance	3
CLAS 303	Applied Molecular Biology	3
CLAS 304	Research Methods	3
		<hr/>
		9

### **Spring 1**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CLAS 305	Human Pathology	3
	Elective	3
CLAS 331	Genomics and proteomics	3
		<hr/>
		9

### **Fall 2**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CLAS 302	Bio-molecules: Structures and Functions	2
CLAS 332	Ethical and medical aspects of molecular biology	2
CLAS 333	Bioinformatics	2
CLAS 320	Thesis	6
		<hr/>
		12

### **Spring 2**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CLAS 320	Thesis continued	
<b>TOTAL</b>		<b>30</b>

## **Molecular Toxicology Concentration**

### **Fall 1**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CLAS 301	Laboratory Organization, Management, and Quality Assurance	3
CLAS 303	Applied Molecular Biology	3
CLAS 304	Research Methods	3
		<hr/>
		9

### **Spring 1**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CLAS 305	Human Pathology	3
	Elective	3
CLAS 341	Principles of Toxicology	3
		<hr/>
		9

### **Fall 2**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CLAS 302	Bio-molecules: Structures and Functions	2
CLAS 342	Molecular and Biochemical Toxicology	2
CLAS 343	Current topics in Toxicology	1
CLAS 344	Mechanisms of carcinogenesis	1
CLAS 320	Thesis	6
		<hr/>
		12

### **Spring 2**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CLAS 320	Thesis continued	
<b>TOTAL</b>		<b>30</b>

## COURSE DESCRIPTIONS

**CVSQ 217 (Previously CS 217) Cultural Studies I** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Civilization Sequence Program.

**CVSQ 218 (Previously 218) Cultural Studies II** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Civilization Sequence Program.

**ENGL 203 (Previously LE 203) English Communication Skills III** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Department of English Language and Literature.

**ENGL 204 (Previously LE 204) English Communication Skills IV** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Department of English Language and Literature.

**LISP 200 (Previously LI 200) Library Usage and Research Techniques** **1.1: 1 cr. E.**  
Refer to Faculty of Arts and Social Sciences, Department of Library and Information Service.

**FHSC 200, 201**  
Refer to Faculty of Sciences Faculty Service Courses.

**FHSC 203, FHSC 204, FHSC 260, FHSC 267, FHSC 280, FHSC 282, FHSC 288**  
Refer to Faculty Service Courses.

**FHSC 222, FHSC 223, FHSC 224, FHSC 225, FHSC 226, FHSC 227, FHSC 228**  
Refer to Faculty Service courses.

**FHSC 240, 241, FHSC 242, FHSC 243, FHSC 244, FHSC 260, FHSC 268**  
Refer to Faculty Service Courses.

**MLAB 210 (Previously ML 217) Basic Biochemistry** **3.0: 3 cr. E**  
This course will introduce students to basic structural and dynamic, chemical and biological processes that occur in living organisms. The subjects of metabolism, energy conversion and usage in biological organisms are discussed in detail. Furthermore, interactions of various catabolic and anabolic pathways are emphasized. The biochemistry of higher organisms is the focus throughout this course.  
Pre-requisite: FHSC 225 or FHSC 226

**MLAB 211 (Previously ML 221) Clinical Chemistry I** **3.1: 3 cr. E**  
Introductory course intended to familiarize the students with clinical chemistry in laboratory medicine. It covers the chemistry of compounds of clinical interest, their implication in the patho-physiology of related diseases, and finally focuses on the available techniques for their assay. Manual determinations of different parameters are performed during weekly laboratory sessions.  
Co-requisite: MLAB 210

**MLAB 212 (Previously ML 270) Basic Immunology and Hematology****4.1: 4 cr. E**

The immunology part in this course covers all major topics of basic immunology, and the theoretical principles of most immunological analytical methods. They include development of the immune system, innate immunity, immunoglobulin structure, the major histocompatibility complex and antigen presentation. The basic Hematology course covers the theory and principles of blood cell production and function. It also introduces the basic practices and procedures. The lectures in this course stress on normal hematopoiesis, morphology of peripheral blood and bone marrow, normal hemostasis.

Pre-requisite: FHSC 203

**MLAB 213 (Previously ML 220) General Microbiology****2.2: 3 cr. E**

The course introduces the basic principles of microbiology. It covers bacterial structure, morphology and techniques of cultivation. The interactions between human and microbial cells are discussed with special emphasis on the disease causation process; it also covers antimicrobial and chemotherapeutic agents. The course introduces the guidelines for collection, handling and processing of clinical specimens.

Pre-requisite FHSC 200

**MLAB 221 (Previously ML 222) Clinical Chemistry II****3.1: 3 cr. E**

This course is a complementary course of MLAB 211. It emphasizes on special parameters and techniques used in diagnostic laboratory medicine.

Pre-requisite: MLAB 211

**MLAB 222 (Previously ML 271) Clinical Immunology and Hematology****3.2: 4 cr. E**

The course includes four components. The first covers hematological anomalies with focus on Anemia and Leukemia in addition to platelet disorders. The second part acquaints the students with various serological concepts; it includes topics pertaining to antigen-antibody interactions, precipitation/agglutination techniques, complement fixation pathways and immunotechniques, immunofluorescence, in addition to discussing autoimmune and infectious diseases. The third part introduces the basic principles in the blood bank applications. The last part deals with the theoretical basis of the main cytologic and histopathologic laboratory techniques and their main applications.

Pre-requisite: MLAB 212.

**MLAB 223 (Previously ML 228) Clinical Bacteriology****3.2 : 3 cr. E**

This course covers characteristics of bacteria of medical importance with a highlighting on the methods for their isolation and identification including advantages, disadvantages, limitations, control and interpretation. It focuses on the clinical implication of these microorganisms in infectious diseases.

Pre-requisite: MLAB 213

**MLAB 224 (Previously ML 248) Medical Parasitology and Mycology****2.1: 2 cr. E**

The course aims at familiarizing students with the basic concepts of parasitology, types of animal associations, adaptation to parasitic mode of life, evolution of parasitism, introduction to the immune system as well as host - parasite relationships. It encompasses Parasite life cycles - infection, transmission, pathology, symptoms, diagnosis, treatment and control of parasitic protozoa and helminthes.

On the other hand, this course constitutes a study of the medically significant fungi. It offers knowledge necessary to identify clinical signs, symptoms, treatment, and epidemiology associated with human fungal diseases. It explores laboratory methods used to detect and identify pathogenic fungi.

Pre-requisite: FHSC 200

**MLAB 230 (Previously ML 261) Molecular Biology****3.0: 3 cr. E**

This course covers the main molecular biology tools and focus on their application in the diagnostic field. Students are introduced to the methods allowing DNA and RNA analysis and quantification (Northern, Southern, PCR, RT-PCR, Real Time PCR) as well as Cloning and gene therapy.

Prerequisite: FHSC 204

**MLAB 231 (Previously ML 272) Seminars in Medical Laboratory Sciences****3.0: 3 cr. E**

This course includes a series of lectures and demonstration sessions that covering special and diversified topics relevant to the medical and biological testing. It is given by specialists in the respective fields Emphasis is put on the advances in the different areas of the medical laboratory sciences.

**MLAB 232 (Previously ML 249) Medical Virology****2.0: 2 cr. E**

The course introduces the basic principles of virology - definition, structure, nomenclature and classification of viruses - modes of viral infections, viral diseases and viral vaccines. It constitutes a study of the interactions of human and animal viruses and their hosts and of important diseases of humans caused by viruses in different taxonomic groups. The emphasis is on aspects of pathogenesis, epidemiology, immune responses and control. Recent advances in the application of molecular biology to the development of diagnostic tests and vaccines will be included.

Pre-requisite: FHSC 200

**MLAB 233 (Previously ML 226) Toxicology****2.0: 2 cr. E**

The chemistry and, briefly, the pharmacology of common drugs of abuse and some therapeutics are discussed. Clinical importance of such assays is highlighted accompanied by demonstrations and applications of different techniques used in this field.

Pre-requisite: FHSC 200

**MLAB 251 (Previously ML 251) Applied Clinical Chemistry****1 cr. E**

Practical experience of 4 weeks duration in clinical chemistry and special procedures allows students to get acquainted with the tests performed in this department and with the special procedures in clinical chemistry. The clinical rotation is complemented by 4 lecture hours covering advanced topics in the respective field.

Co-requisite: MLAB 221

**MLAB 252 (Previously ML 252) Applied Clinical Hematology****1 cr. E**

Practical experience in clinical hematology and phlebotomy of 4 weeks duration, offers the students the possibility to get familiar with the majority of procedures performed in the respective sections. The clinical rotation is complemented by 4 lecture hours covering advanced topics in the respective field.

Co-requisite: MLAB 222

**MLAB 253 (Previously ML 253) Applied Clinical Bacteriology and Mycology****1 cr. E**

Practical experience of 4 weeks in clinical bacteriology provides students with the opportunity to be familiarized with all the tests performed in this department, such as culturing, sensitivity testing and media preparation. The clinical rotation is complemented by 4 lecture hours covering advanced topics in the respective field.

Co-requisite: MLAB 223

**MLAB 254 (Previously ML 264) Applied Clinical Parasitology and Body Fluids Analysis 1 cr. E**

This corresponds to a practical experience in urine analysis and clinical microscopy extending over 3 weeks. The clinical rotation is complemented by 4 lecture hours covering advanced topics in the respective field.

**MLAB 255 (Previously ML 265) Applied Clinical Immunology and Endocrinology 1 cr. E**

Practical experience in the Endocrinology (2 weeks) and Serology (2 weeks) departments allows students to perform special procedures. This includes clinical rotation in the respective section of the hospital laboratory. The student is exposed to the different procedures performed in this branch of the Clinical Laboratory. The clinical rotation is complemented by 4 lecture hours covering advanced topics in the respective fields.

Co-requisite: MLAB 222

**MLAB 256 (Previously ML 266) Applied Blood Banking 1 cr. E**

Practical experience in Blood banking of 4 weeks duration enables students to experience routine and special procedures in Blood Banking. The clinical rotation is complemented by 4 lecture hours covering advanced topics in the respective field.

Co-requisite: MLAB 222

**MLAB 257 (Previously ML 267) Applied Anatomic Pathology 1 cr. E**

Practical experience in the Pathology department of the hospital of 4 weeks duration offers the student the opportunity to acquaint with histology and cytology procedures. The clinical rotation is complemented by 4 lecture hours covering advanced topics in the respective field.

**MLAB 258 (Previously ML 268) Techniques in Molecular Biology and Assisted Reproduction  
1 cr. E**

Practical experience in the Molecular Biology section of the hospital (2 weeks) and in the Fertility center department (2 weeks) offers the student the opportunity to be trained to the main procedures used in routine. The clinical rotation is complemented by 4 lecture hours covering advanced topics in the respective fields.

**CLAS 301 (Previously CLS 301) Laboratory Organization, Management, and Quality Assurance 3 cr. E**

This course targets clinical laboratory scientists who have an interest or responsibility in technical quality management of laboratory testing processes, as well as managers of healthcare laboratories, clinical QC technologists and specialists, laboratory inspectors, and others. The course enables students to develop managerial skills, to acquire knowledge of total quality management, to be able to assume administrative responsibility in any laboratory setting.

**CLAS 302 (Previously CLS 302) Structure & Function of Biomolecules 2 cr. E**

This course is designed to extend the student's knowledge of the structures and properties of biomolecules and their relationship to the properties of cells, tissues and organisms. The course examines the relationship between the structure of the biomolecule and its function, the structural characteristics of subunits that dictate the molecular final structure, and the structural features in macromolecules that play a role in specific molecular interactions.

**CLAS 303 (Previously CLS 304) Applied Molecular Biology****3 cr. E**

This course is designed to introduce major molecular biology techniques used in diagnosis and prediction of risk in clinical laboratories. In addition to an overview of the basic techniques in molecular diagnostics, the course examines advanced techniques in areas such as DNA identity, applications in hematology, applications in infectious diseases, and other diagnostic tools in a number of common genetic disorders.

**CLAS 304 (Previously CLS 305) Research Methodology****3 cr. E**

This course is an introduction to the research process in clinical and laboratory sciences and the various steps, methods, strategies and procedures associated with it. The course is designed to equip students with the necessary skills to design, undertake and disseminate basic and clinical research.

**CLAS 305 (Previously CLS 306) Human Pathology****3 cr. E**

The course offers an advanced covering of a wide number of human diseases mainly infectious diseases, genetic disorders, molecular basis of cancer, in addition to certain metabolic diseases.

**CLAS 321 (Previously CLS 311) Medical Microbiology****3 cr. E**

This course introduces microbes from a medical and ecological perspective. The course begins with a concise description of the microbial world with special emphasis on microbial structure, classification, and interaction with the human host. The course covers subjects in bacterial microbiology, virology, mycology, and parasitology, with special emphasis on mechanisms of infection characteristic of each studied microorganism. The main focus of the course is on the clinical behavior of pathogens to humans.

**CLAS 324 (Previously CLS 303) Case Studies in Microbiology****3 cr. E**

This course deals with the diagnostic and clinical aspects of the infectious diseases. It takes the students from the bedside to the lab setting exposing them to both patient examination and laboratory procedures. It entails the involvement of the students in ward visits and lab work. A weekly case presentation and discussion is done and evaluated.

**CLAS 322 (Previously CLS 312) Antimicrobial agents & Mechanisms of Microbial Resistance****2 cr. E**

This course provides a solid foundation for understanding the basis and the development of antimicrobial resistance. The course covers resistance mechanisms against bacterial antibiotics, antiviral, antifungal, and antiparasitic drugs. Topics covered also include effects of resistant microorganisms on cancer treatment, as well as their impact on public health.

**CLAS 323 (Previously CLS 313) Infection Control in Clinical Practices****2 cr. E**

This course provides a comprehensive guide to the principles and practices of infection control and prevention, in addition to the basic elements of microbiology and epidemiology that underlies them. The course offers an evidence-based overview of routine and latest infection control practices, as well as isolation techniques.



**CLAS 331 (Previously CLS 322) Genomics & Proteomics****3 cr. E**

The objective of this course is for students to gain an understanding of how genomic data are gathered and analyzed. The course introduces research methods used to accumulate genomic data, instruct on how to access major genomic databases, how various nucleotide alignment algorithms work, and how to use them. Topics covered include functional and structural homology, and analysis of gene expression patterns using gene chip technology. In addition, the course introduces and discusses latest proteomics techniques to measure protein activities, modifications and localization, and interactions of proteins in complexes.

**CLAS 332 (Previously CLS 323) Ethical and Medical Aspects of Molecular Biology****2 cr. E**

This course introduces the basic principles of biotechnology and its applications in various disciplines such as medicine, agriculture, and environmental sciences. The course is designed to provide students with the knowledge and understanding of the scientific, commercial, and ethical aspects of biotechnology. Knowledge of scientific concepts as well as commercial, legal, moral, ethical, and social aspects of biotechnology will enable students to take into account ethical considerations in any molecular experimental design or research they will conduct in the future.

**CLAS 333 (Previously CLS 324) Bioinformatics & Molecular Modeling****2 cr. E**

The course is an introduction to theory and methods used for genome-level sequence analysis. Specific topics covered include sequence alignment, biological database design, geometric analysis of protein structure, and macromolecular simulation. The module uses public databases and software to extract, analyze and interpret DNA and protein sequences and to model structures of proteins.

## **Nursing Program**

The Nursing Program is a community-based, population- focused BSN Program. It is offered in English & French in partnership with St. George Hospital University Medical Center.

### **Philosophy:**

The philosophy of the Nursing Program emanates from the philosophy of the University of Balamand, which is committed to raising future generations with no discrimination against race, nationality, religion or gender.

The Nursing Program believes that:

- \* **NURSING** is both a scientific discipline and a profession. The discipline is based on scientific knowledge, values and ethics while the profession aims at practicing the discipline in providing health care.
- \* **HEALTH** is a basic social right where the needs of individuals, families, and communities are respected, accepted, and attended to.

### **Mission:**

The mission of the Nursing Program is to prepare professional nurses who are well equipped to meet the challenging demands of health care in the Lebanese community and the region.

The program aims at fostering excellence and innovation in the delivery and management of evidence-based health care through critical thinking, analytical skills, leadership abilities, creative endeavors, and community involvement.

### **Concepts underlying the Nursing Curriculum:**

The basic concepts of the Nursing Program are the following:

1. Critical Thinking
2. Community Involvement
3. Leadership abilities
4. Professionalism

### **Nursing Program Objectives:**

The Nursing Program provides a learning environment to foster purposeful self-direction, critical thinking and well-informed decision-making.

The main aim of the program is a graduate who can assume leadership in nursing and the health care field.

### **To achieve these ends the graduate will:**

1. Demonstrate competence in the primary roles at the cognitive, affective and psychomotor levels.
2. Demonstrate commitment to making a difference at all levels of health promotion, prevention of disease, health protection and rehabilitation.
3. Demonstrate know-how and care for individuals, families and communities.
4. Act as advocate for all health consumers especially, the very young, very old, the disadvantaged and disabled.
5. Demonstrate potentials for leadership by leading, coordinating and collaborating with the health team.
6. Improve nursing and the image of the nurse in society.
7. Participate in research in the field of health care sciences.

**Clinical Placements:**

Nursing students are placed in clinical settings that provide them with the opportunities to apply theory to practice at the primary, secondary and tertiary levels of health care.

St. George Hospital and other community based health care agencies serve as a framework for clinical training.

## **BACHELOR OF SCIENCE IN NURSING**

**(Offered in English and French)**

### **FIRST YEAR**

#### **Semester 1**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
FHSC 220	General Chemistry	3
FHSC 280	Information Technology and Health Sciences	2
ENGL 203#	English Communication Skills III	3
FHSC 260	Introduction to Sociology	3
NURS 210	Introduction to Professional Nursing	2
	Elective	3
		<hr/>
		16

#### **Semester 2**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
FHSC 202	Introduction to Human Anatomy	2
FHSC 203	Basic Human Physiology	4
NURS 211	Introduction to Nursing Practice	4
FHSC 205	Introduction to Microbiology	2
ENGL 204#	English Communication Skills IV	3
		<hr/>
		15
LISP 200	Library Usage and Research Techniques <sup>1</sup>	1
		<hr/>
		16

### **SUMMER**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
FHSC 261	Introduction to Psychology	3
NURS 212	Legislation and Nursing SERVICE TRAINING <sup>2</sup>	1
		<hr/>
		4

### **SECOND YEAR**

#### **Semester 3**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
NURS 220	Nursing Care of Adults I	5
NURS 221	Practicum in Nursing Care of Adults I	3
NURS 224	Nursing Care in Perinatology and Gynecology	3
NURS 225	Practicum in Nursing Care in Perinatology and Gynecology	3
FHSC 229	Pharmacology	2
FHSC 264	Human Growth and Development	2
		<hr/>
		18

<sup>1</sup> LISP 200 is a no-fee obligatory 1 credit course for graduation.

<sup>2</sup> Service Training is a requirement for graduation equivalent to 60 hours. Students are evaluated as P=Pass or F=Fail.

#### **Semester 4**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
NURS 222	Nursing Care of Adults II	5
NURS 223	Practicum in Nursing Care of Adults II	3
NURS 226	Nursing Care of Children	3
NURS 227	Practicum in Nursing Care of Children	3
FHSC 282	Principles of Epidemiology and Biostatistics	3
		<hr/>
		17

#### **SUMMER**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
NURS 228	Nursing Care of the Elderly	1
NURS 229	Practicum in Nursing Care of the Elderly SERVICE TRAINING <sup>1</sup>	1
		<hr/>
		2

#### **THIRD YEAR**

##### **Semester 5**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CVSQ 217	Cultural Studies I	3
FHSC 288	Research in Health Care Sciences	3
NURS 230	Mental Health and Psychiatric Nursing	3
NURS 231	Practicum in Mental Health and Psychiatric Nursing	3
NURS 232	Nursing Care of Adults in Critical Condition	3
NURS 233	Practicum in Nursing Care of Adults in Critical Condition	3
		<hr/>
		18

##### **Semester 6**

<b><u>Name of Course</u></b>		<b><u>Credit</u></b>
CVSQ 218	Cultural Studies II	3
NURS 234	Nursing in the Community	3
NURS 235	Practicum in Nursing in the Community	3
NURS 236	Leadership and Management in Nursing and Health	3
NURS 237	Practicum in Leadership and Management in Nursing and Health First Aid Course <sup>2</sup>	3
		<hr/>
		15

***TOTAL NUMBER OF CREDITS TO BE COMPLETED AT GRADUATION = 106 CR.***

# In the French Section, FREN 201 and FREN 202 respectively replace ENGL 203 and ENGL 204  
All NURS courses passing grade is 70. Other courses passing grade is 60.

1 Service Training is a requirement for graduation equivalent to 110 hours. Students are evaluated as P=Pass or F=Fail.

2 This is a no-fee, no-credit course required for graduation.

## **Ladder Programs in Nursing**

### **Objectives:**

- \* To provide the non-university BT & TS degree holders the opportunity to earn a Bachelor of Science in Nursing
- \* To enhance the quality of nursing and health practices through the use of leadership and educational skills
- \* To synthesize theoretical and empirical knowledge from nursing, scientific and humanistic disciplines with practice
- \* To enhance therapeutic nurse-patient relationship by developing self-awareness

### **BT-BSN Program\***

#### **A. BT Holders With No Working Experience:**

A holder of a BT in nursing of a government accredited BT program, with no working experience, may join the BSN program after meeting the University admission requirements concerning English or French. The student has to follow the basic program i.e. 105 credits. However, he/she can sit for competency examinations to earn credits for the following courses:

- \* NURS 221 & NURS 223 - Practicum of Nursing Care of Adults I & II
- \* NURS 225 - Practicum of Nursing Care in Perinatology and Gynecology
- \* NURS 227 - Practicum in Nursing Care of Children
- \* NURS 233 - Practicum in Nursing Care of Adults in Critical Condition

#### **B. BT Holders With Working Experience:**

A holder of BT in nursing of a government accredited BT program with at least 3 years of experience may join the BSN program after meeting the University admission requirements concerning English or French.

The student has to take at least 90 credits. The applicant's credentials will be reviewed and assessed to decide what additional courses he/she should take for eligibility.

The courses are the following:

<b><u>Course Code</u></b>	<b><u>Course</u></b>	<b><u>Credit</u></b>
FHSC 220	General Chemistry	3
FHSC 280	Information Technology of Health Sciences	2
ENGL 203 & 204	English Communication Skills III & IV	6
FREN 201 & 202	Techniques de l'Expression I & II	6
FHSC 261	Introduction to Psychology	3
FHSC 202	General Anatomy	2
FHSC 203	Human Physiology	4
FHSC 260	Introduction to Sociology	3
NURS 210	Introduction to Nursing as a Profession	2
FHSC 264	Human Growth and Development	2
NURS 211	Introduction to Nursing Practice	4
FHSC 229	Pharmacology	2
NURS 220/ NURS 221	Nursing Care of Adults I	5

NURS 222/ NURS 223	Nursing Care of Adults II	5
NURS 224/ NURS 225	Nursing Care in Perinatology & Gynecology	3
FHSC 282	Principles of Epidemiology & Biostatistics	3
NURS 228/ NURS 229	Nursing Care of the Elderly	1
NURS 226/ NURS 227	Nursing Care of Children	3
NURS 230	Mental Health & Psychiatric Nursing	3
NURS 231	Practicum in Mental Health & Psychiatric Nursing	3
FHSC 288	Research in Health Care Sciences	3
NURS 212	Legislation and Nursing	1
CVSQ 217 & 218	Cultural Studies I & II	6
NURS 234	Nursing in the Community	3
NURS 235	Practicum in Nursing in the Community	3
NURS 232	Nursing of Adults in Critical Condition	3
NURS 233	Practicum in Nursing Care of Adults in Critical Condition	3
NURS 236	Leadership & Management in Nursing And Health	3
NURS 237	Practicum in Leadership & Management in Nursing and Health	3
	Elective	3
TOTAL		90

The student can sit for competency examinations to earn credits for the following courses:

<u>Course Code</u>	<u>Course</u>	<u>Credit</u>
NURS 210	Introduction to Nursing as a Profession	2
FHSC 264	Human Growth and Development	2
NURS 211	Introduction to Nursing Practice	4
FHSC 229	Pharmacology	2
NURS 228/ NURS 229	Nursing Care of the Elderly	1
NURS 212	Legislation and Nursing	1
FHSC 280	Information Technology of Health Sciences	2
TOTAL		14

### **TS-BSN Program\***

A holder of TS in nursing with at least 1 year of experience may join the BSN program after meeting the University admission requirements concerning English or French.

The student has to take at least 90 credits [identical to courses in BT-BSN Program (B)] of which 33 are mandatory and the rest can be earned by examination. The program is the same as that of the BT-BSN.

The mandatory courses are the following:

<b><u>Course Code</u></b>	<b><u>Course</u></b>	<b><u>Credit</u></b>
ENGL 203 & 204	English Communication Skills III & IV	6
FREN 201 & 202	techniques de l'Expression I & II	6
CVSQ 217 & 218	Cultural Studies I & II	6
FHSC 282	Principles of Epidemiology & Biostatistics	3
FHSC 288	Research in Health Care Sciences	3
NURS 230	Mental Health & Psychiatric Nursing	3
NURS 231	Practicum in Mental Health & Psychiatric Nursing	3
NURS 236	Leadership & Management in Nursing And Health	3
NURS 237	Practicum in Leadership & Management in Nursing and Health Elective	3
TOTAL		<hr/> 33

\* Passing grade of all NURS courses is 70

Passing grade of all courses other than Nursing is 60

A student who fails a competency examination twice for a designated course will have to enroll and successfully complete that course



## **COURSE DESCRIPTIONS**

- CVSQ 217 (Previously CS 217) Cultural Studies I** **3.0: 3 cr. E,F**  
Refer to Faculty of Arts and Social Sciences, Civilization Sequence Program.
- CVSQ 218 (Previously CS 218) Cultural Studies II** **3.0: 3 cr. E,F**  
Refer to Faculty of Arts and Social Sciences, Civilization Sequence Program
- ENGL 203 (Previously LE 203) English Communication Skills III** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Department of English Language and Literature.
- ENGL 204 (Previously LE 204) English Communication Skills IV** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Department of English Language and Literature.
- FREN 201(Previously LF 201) Techniques de l'expression I** **3.0: 3 cr. F**  
Refer to Faculty of Arts and Social Sciences, Department of French Language and Literature.
- FREN 202 (Previously LF 202) Techniques de l'expression II** **3.0: 3 cr. F**  
Refer to Faculty of Arts and Social Sciences, Department of French Language and Literature.
- LISP 200 Library Usage and Research Techniques** **1.1:1 cr. E,F**  
Refer to faculty of Arts and Social Sciences, Department of Library and Information Service.
- FHSC 202, 203, 205, FHSC 220, FHSC 229, FHSC 260, FHSC 261, FHSC 264, FHSC 280, FHSC 282, FHSC 288**
- NURS 210 (Previously NG 200) Introduction to Professional Nursing** **2.0: 2 cr. E,F**  
Introduces the framework of the nursing curriculum, concepts related to the profession and discipline of nursing are discussed, as well as the major historical events that have shaped the nursing profession. Issues and moral problems that arise in the practice of delivering health care are addressed within the context of ethical principles.
- NURS 211 (Previously NG 202) Introduction to Nursing Practice** **3.3: 4 cr. E,F**  
This course introduces the principles of communication, the components of the nursing process and basic practice issues. In the laboratory, students practice skills in safety, hygiene, infection control, communication and basic physical assessment.  
Pre-requisite: NURS 210
- NURS 212 (Previously NG 224) Legislation and Nursing** **1.0: 1 cr. A**  
This course enhances students' awareness and increases students' understanding of the legal aspects of nursing in Lebanon.  
Pre-requisite: NURS 210

**NURS 220 (Previously NG 214) Nursing Care of Adults I****5.0: 5 cr. E,F**

This course builds upon the nursing concepts introduced in NURS 211. Emphasis is on health promotion, health restoration and rehabilitation of adults with medical-surgical problems that are not critical in nature. The focus is on the pathophysiologic mechanisms that might influence the occurrence and the expression of the disease. Management is discussed through holistic, bio-behavioral, and nutritional perspectives. The nursing process serves as a framework for study, research, and application. Pre-requisite: NURS 211.

Co-requisite: FHSC 229

**NURS 221 (Previously NG 215) Practicum in Nursing Care of Adults I****0.9: 3 cr. E,F**

Students will assess, plan, implement and evaluate nursing care of adult patients under clinical supervision. Appropriate nursing care for patients with a wide range of disorders will be implemented in a variety of settings, emphasizing the impact of illness and hospitalization on the family, as well as, the need for continuity of care and patient teaching as he/she returns to the community.

Co-requisite: NURS 220

**NURS 222 (Previously NG 216) Nursing Care of Adults II****5.0: 5 cr. E,F**

This course is a continuation of NURS 220 and follows the same framework previously outlined.

Pre-requisite: NURS 220, NURS 221

**NURS 223 (Previously NG 217) Practicum in Nursing Care of Adults II****0.9: 3 cr. E,F**

This course provides the students with opportunities for implementation of the scientific principles discussed in NURS 222.

Co-requisite: NURS 222

**NURS 224 (Previously NG 220) Nursing Care in Perinatology and Gynecology****3.0: 3 cr. E,F**

This course deals with the reproductive family and women's health throughout the life span. The student focuses on physical, psychological and emotional needs of mothers, newborns, and families. The course focuses on family health during the reproductive cycle, as well as on prevalent gynecological conditions. Pre/Co-requisite: NURS 220/221.

**NURS 225 (Previously NG 221) Practicum in Nursing Care in Perinatology and Gynecology****0.9: 3 cr. E,F**

This practicum prepares the student to play an active role in family-oriented maternity care. It encompasses the entire childbearing process from preconception to postpartum. The student gets hands-on experience in the outpatient and in-patient areas, as well as in community settings.

Co-requisite: NURS 224

**NURS 226 (Previously NG 240) Nursing Care of Children****3.0: 3 cr. E,F**

This course provides the student with the opportunity to learn the needs of the child, well and ill, from infancy through adolescence. The nursing process serves as a framework for study and application. Emphasis is placed on health promotion, maintenance and restoration of health during the stages of child development.

Pre-requisite: FHSC 264, NURS 224 & 225

**NURS 227 (Previously NG 241) Practicum in Nursing Care of Children** **0.9: 3 cr. E,F**  
Clinical practice is organized to provide students with direct observation and application of nursing care concepts for children. Students are provided with opportunities to use the nursing process, develop effective communication skills, identify teaching needs of children, practice selected psychomotor skills and apply play therapy techniques. The clinical setup can range from outpatient department to general unit and critical care areas.  
Co-requisite: NURS 226

**NURS 228 (Previously NG 218) Nursing Care of the Elderly** **1.0: 1 cr. E,F**  
This course focuses on developing skills in problem-solving and clinical judgment so that student may successfully act with the aging process and the health problems of the elderly.  
Pre-requisite: NURS 222, 223

**NURS 229 (Previously NG 219) Practicum in Nursing Care of the Elderly** **0.3: 1 cr. E,F**  
Students will assess, plan, implement and evaluate nursing care of the elderly under clinical supervision. Appropriate nursing care of elderly patients will be discussed emphasizing the impact of illness or the aging process on the family.  
Co-requisite: NURS 228

**NURS 230 (Previously NG 230) Mental Health and Psychiatric Nursing** **3.0: 3 cr. E, F**  
This course focuses on mental health and illness of individuals, couples and families throughout the life cycle. Principles of communication and therapy are emphasized, as well as the development of nursing intervention for patients experiencing psychiatric problems.  
Pre-requisite: FHSC 261 & FHSC 264

**NURS 231 (Previously NG 231) Practicum in Mental Health and Psychiatric Nursing** **0.9: 3 cr. E,F**  
This course is designed to offer students hands-on experience in the area of therapeutic communication and therapeutic modalities. The focus is on clients with maladjustment patterns ranging from mild to critical. Therapeutic modalities such as crisis intervention, family therapy, and group therapy are within the scope of this course. Fieldwork encompasses in-hospital and community-based experience.  
Co-requisite: NURS 230

**NURS 232 (Previously NG 226) Nursing Care of Adults in Critical Condition** **3.0: 3 cr. E,F**  
This course focuses on adult experiences and critical psycho-physiologic disruptions. The student will focus on advanced nursing skills, the application of biomedical technology and the care of families under severe stress.  
Pre-requisite: NURS 228, 229

**NURS 233 (Previously NG 227) Practicum in Nursing Care of Adults in Critical Condition** **0.9: 3 cr. E,F**  
This course focuses on the application of the theoretical content of NG 226. Clinical practice is organized to provide students with direct observation and application of nursing care concepts of adults, old adults and families in critical condition. Student learning includes working with adults experiencing complex, multiple system problems requiring rapid utilization of the nursing process. Multidisciplinary interaction with the health team is a major component of the course.  
Co-requisite: NURS 232.

**NURS 234 (Previously NG 250) Nursing in the Community**

**3.0: 3 cr. E,F**

The course provides students with the opportunity to study nursing in multiple setups, outside a hospital setting. It gives students the opportunity to learn about the health and psychosocial needs of individuals, families and communities on the full health trajectory.

Pre-requisite: NURS 226 & 227

**NURS 235 (Previously NG 251) Practicum in Nursing in the Community**

**0.9: 3 cr. E,F**

Students gain hands-on experience outside hospital walls. Students meet the challenge of transferring their skills and know-how to the client in his/her own milieu.

Co-requisite: NURS 234

**NURS 236 (Previously NG 252) Leadership and Management in Nursing and Health**

**3.0: 3 cr. E,F**

This course helps the student develop an understanding of the role of the professional nurse as a leader and change agent. The theoretical framework is based on the concepts of communication, problem solving, decision making, and evaluation, delegating authority and effecting change.

Pre-requisite: NURS 226 & 227

**NURS 237 (Previously NG 253) Practicum in Leadership and Management in Nursing and Health**

**0.9:3 cr. E,F**

Practicum designed to help the student make the transition from the relatively dependent role as a student to the relatively independent role as a beginning practitioner. It is divided into 2 blocks, one that is in-hospital oriented and the other focusing on administering and managing nursing care in health promotion, screening and rehabilitation in different settings.

Co-requisite: NURS 236

**NURS 254 (Previously NG 254) Professional Issues Seminars**

**1.0: 1 cr. E,F**

Current issues and trends, and legal aspects related to the profession in Lebanon are analyzed in this seminar course. Its purpose is to enhance students' awareness of major areas of concern to the nursing profession as a whole.

Co-requisite: NURS 236.

**BACHELOR OF SCIENCE IN**  
**PUBLIC HEALTH & DEVELOPMENT SCIENCES**

**FIRST YEAR**

**Semester 1**

<b><u>Name Of Course</u></b>	<b><u>Credit</u></b>
FHSC 200      Introduction to General Biology	3
FHSC 221      Basic Chemistry for Health Sciences	3
FHSC 280      Information Technology and Health Sciences	2
ENGL 203      English Communication Skills III	3
FHSC 261      Introduction to Psychology	3
	14

**Semester 2**

<b><u>Name Of Course</u></b>	<b><u>Credit</u></b>
FHSC 260      Introduction to Sociology	3
FHSC 223      Basic Chemistry Laboratory	1
FHSC 262      Introduction to Business	3
ARAB 203      Arabic Language	3
ENGL 204      English Communication Skills IV	3
PDHP 201      Environment, Health and Development**	3
	16
LISP 200      Library Usage and Research Techniques <sup>1</sup>	1
	17

**SUMMER**

<b><u>Name Of Course</u></b>	<b><u>Credit</u></b>
PDHP 200      Microbiology for Health Sciences	3
Elective	3
	6

**SECOND YEAR**

**Semester 3**

<b><u>Name Of Course</u></b>	<b><u>Credit</u></b>
CVSQ 217      Cultural Studies I	3
FHSC 281      Community Health, Education and Mobilisation	3
PDHP 205      Public Health Nutrition and Food Hygiene**	3
PDHP 206      Occupational Hygiene and Toxicology**	3
PDHP 207      Physics for Health Care Sciences	2
	14

\*\* Major course: students should secure an average of 70.

<sup>1</sup> LISP 200 is a no-fee obligatory 1 credit course for graduation

#### **Semester 4**

<b><u>Name Of Course</u></b>		<b><u>Credit</u></b>
PDHP 212	Introduction to Ecology	3
PDHP 208	Clean Technology and Pollution Control**	3
PDHP 209	Municipal Sanitation**	3
FHSC 284	Project Planning and Evaluation**	3
FHSC 282	Principles of Epidemiology and Biostatistics	3
FHSC 266	Anthropology and Health	2
		<hr/>
		17

*Red Cross Course<sup>1</sup>*

#### **SUMMER**

<b><u>Name Of Course</u></b>		<b><u>Credit</u></b>
PDHP 230	Project Residency-PD** <sup>2</sup>	5
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		5

#### **THIRD YEAR**

##### **Semester 5**

<b><u>Name Of Course</u></b>		<b><u>Credit</u></b>
PDHP229	Epidemiology in Public Health Practice**	3
FHSC 263	Human Resources Management	3
PDHP 220	Economics of Health and Development**	3
PDHP 222	Public Administration in Lebanon**	3
PDHP 214	Family Health**	3
		<hr/>
		15

##### **Semester 6**

<b><u>Name Of Course</u></b>		<b><u>Credit</u></b>
FHSC 288	Research in Health Care Sciences	3
PDHP 223	Seminars in Development**	3
FHSC 286	Financial Management in Health and Development Programs**	3
PDHP 225	Issues in Community Health**	3
CVSQ 218	Cultural Studies II	3
		<hr/>
		15

\*\* Major course: students should secure an average of 70.

***TOTAL NUMBER OF CREDITS TO BE COMPLETED AT GRADUATION = 102 CR.***

***Number of Credits in Major: 43 CR***

1 This is a no-fee, no-credit course requirement for graduation

2 Topics for project, seminars and tutorials will be chosen by student according to his/her interest, availability and the consent of the student's advisor.

## **COURSE DESCRIPTIONS**

**CVSQ 217 (Previously CS 217) Cultural Studies I** **3.0: 3 cr. E**

Refer to Faculty of Arts and Social Sciences, Civilization Sequence Program.

**CVSQ 218 (Previously CS 218) Cultural Studies II** **3.0: 3 cr. E**

Refer to Faculty of Arts and Social Sciences, Civilization Sequence Program

**ARAB 203 (Previously LA 203) Arabic Language** **3.0: 3 cr. E**

Refer to Faculty of Arts and Social Sciences, Department of Arabic Language and Literature.

**ENGL 203 (Previously LE 203) English Communication Skills III** **3.0: 3 cr. E**

Refer to Faculty of Arts and Social Sciences, Department of English Language and Literature.

**ENGL 204 (Previously LE 204) English Communication Skills IV** **3.0: 3 cr. E**

Refer to Faculty of Arts and Social Sciences, Department of English Language and Literature.

**LISP 200 (Previously LI 200) Library Usage and Research Techniques** **1.1: 1 cr. E.**

Refer to Faculty of Arts and Social Sciences, Department of Library and Information Service.

**FHSC 200, FHSC 221, FHSC 223, FHSC 260, FHSC 261, FHSC 262, FHSC 263**

Refer to Faculty Service Courses.

**FHSC 266 (Previously HSC 220) Anthropology and Health** **2.0: 2 cr. E**

This course explores some of the important concepts, methods and perspectives that have been developed by anthropologists and their relevance for health care sciences. Among the topics considered are: culture, qualitative methods, cultural relativity and ethics, gender, family, political structures, symbolic systems.  
Prerequisite: FHSC 260

**FHSC 280, FHSC 281, FHSC 282, FHSC 284, FHSC 288**

Refer to Faculty Service Courses.

**PDHP 200 (Previously HPD 202) Microbiology for Health Sciences** **3.0: 3 cr. E**

Introduction to the biology of microorganisms emphasizing the microbial structure, metabolism and infectious diseases they cause and the related immune response. This course introduces the students to the world of micro-organisms and covers medical and environmental issues related to Microbiology.  
Prerequisite: FHSC 200

- PDHP 201 (Previously HPD 200) Environment, Health and Development** **3.0: 3 cr. E**  
This course examines the interactions between the environment and human development, with an emphasis on public health. Students are introduced to current environmental challenges at the local, regional and global level. The course also examines efforts to overcome environmental obstacles by introducing potential or alternative solutions and resources.
- PDHP 205 (Previously HPD 220) Public Health Nutrition and Food Hygiene** **3.0: 3 cr. E**  
The course covers subject matter related to the science of nutrition, including human nutrition, food hygiene and community nutrition.  
Prerequisite: PDHP 200
- PDHP 206 (Previously HPD 222) Occupational Hygiene and Toxicology** **3.0: 3 cr. E**  
The course introduces students to the notions of physical, chemical, biological and psycho-social hazards in the working environment. The sources of these hazards (e.g. noise, vibration, toxic gases, lead, asbestos, viruses, stress), their toxic potential and the measures available for their control and prevention are explored. Course includes field surveys in industries.
- PDHP 207 (Previously HPD 224) Physics for Health Care Sciences** **2.0: 2 cr. E**  
Students completing this course will be able to identify potential sources of physical hazards, by having a good grasp of the basic associated concepts. They will be able to evaluate these hazards, understand their interactions with man and the environment, and appreciate risk associated with their exposure. Means of detection, quantification and control utilized to reduce human exposure to these hazards are presented.
- PDHP 208 (Previously HPD 228) Clean Technology and Pollution Control** **3.0: 3 cr. E**  
This course develops skills in business and environmental management and clean production engineering. It looks at the types, sources, nature and dynamics of pollution and their effects on man and his environment. Identification, monitoring, control, risk assessment, biological monitoring. Quality assurance, modeling and standards and legislation of environmental pollution are examined. Prerequisite: PDHP 201.
- PDHP 209 (Previously HPD 230) Municipal Sanitation** **3.0: 3 cr. E**  
An introductory course into solid waste, water quality and waste water management. The course deals with domestic and industrial solid waste production, handling and disposal, physical, chemical, biological and radioactive water quality and pollution dynamics, and municipal, residential and industrial waste water treatment.
- PDHP 212 (Previously HPD 226) Introduction to Ecology** **3.0: 3 cr. E**  
The course focuses on understanding relationships between living and non-living matter in their environment. Main topics in ecology such as food chains, natural balance, mineral cycles and natural resources are examined. The course also touches upon man-made threats to the global ecology (eco-toxicology).
- PDHP 214 (Previously HPD 244) Family Health** **3.0: 3 cr. E**  
The course leads to the understanding of how family dynamics affect individual and community health. It also casts light on the developmental stages and needs of the growing child, as well as maternal and child health at various stages, including vaccination requirements and family planning. The course includes field visits and exposure to real life situations.



**PDHP 220 (Previously HPD 240) Economics of Health and Development** **3.0: 3 cr. E**  
Students are introduced to theories of economic development covering topics of demand and supply in health care systems and insurance, and cost-benefit analysis of health care system initiation, maintenance and development.

**PDHP 222 (Previously HPD 242) Public Administration in Lebanon** **3.0: 3 cr. E**  
The course exposes students to the role of international, national and local politics in the provision and promotion of health care, using selected cases studies and taking into consideration current trends in Lebanon and the Middle East

**PDHP 223 (Previously HPD 246) Seminars in Development** **3.0: 3 cr. E**  
A senior level course dealing with selected topics in the development of education, management and administration of services and research in the fields of environmental, occupational and community health. Seminars will be presented by guest speakers and include debates and critical discussions. The course emphasizes hot topics of current interest in Lebanon and the Middle East.  
Prerequisite: PDHP 220.

**PDHP 225 (Previously HPD 250) Issues in Community Health** **3.0: 3 cr. E**  
A critical in-depth examination of factors affecting the health of rural and urban communities in developing and developed countries, including the impact of urbanization, migration, politics, poverty and globalization.  
Prerequisite: FHSC 281.

**PDHP 229 (Previously HSC 223) Epidemiology in Public Health Practice** **3.0: 3 cr. E**  
This course addresses the different concepts and methodologies of epidemiology utilized in the field of public health. It also provides an overview of some of the different sub-disciplines within the broad remit of this field, such as occupational and molecular epidemiology, which have evolved during the past several decades, in order to upgrade the analytical and problem solving skills of the students.  
Prerequisite: FHSC 266

**PDHP 230 (Previously HPD 232) Project Residency in Public Health & Development Sciences** **5.0: 5 cr. E**  
An individualised project designed, planned, executed, written and presented by the student on a topic of their choice related to Health promotion. An essential course in the major, each student is expected to complete a minimum of two months (8 hours/day), under the supervision of a faculty member, within the context of an organization or institution involved with addressing needs related to health, social welfare and development.  
Pre-requisite: permission of the student's advisor.

## **BACHELOR OF SCIENCE** **IN HEALTH PROMOTION**

### **FIRST YEAR**

#### **Semester 1**

<b><u>Name Of Course</u></b>	<b><u>Credit</u></b>
FHSC 200            Introduction to General Biology	3
FHSC 221            Basic Chemistry for Health Sciences	3
FHSC 280            Information Technology and Health Sciences	2
ENGL 203            English Communication Skills III	3
FHSC 261            Introduction to Psychology	3
	14

#### **Semester 2**

<b><u>Name Of Course</u></b>	<b><u>Credit</u></b>
FHSC 262            Introduction to Business	1
ARAB 203            Arabic Language	3
ENGL 204            English Communication Skills IV	3
PDHP 201            Environment, Health and Development**	3
FHSC 260            Introduction to Sociology	3
	15
LISP 200            Library Usage and Research Techniques <sup>1</sup>	1
	16

### **SUMMER**

<b><u>Name Of Course</u></b>	<b><u>Credit</u></b>
PDHP 200            Microbiology for Health Sciences**	3
FHSC 267            Persuasive Communication**	3
	6

### **SECOND YEAR**

#### **Semester 3**

<b><u>Name Of Course</u></b>	<b><u>Credit</u></b>
CS 217                Cultural Studies I	3
PDHP 210            Kinesiology in Health Promotion**	1
CVSQ 217            Cultural Studies I	3
FHSC 281            Community, Health Education and Mobilization	3
PDHP 205            Public Health Nutrition and Food Hygiene	3
PDHP 218            Principles of Health Promotion I**	3
Elective	3
	16

\*\* Major course: students should secure an average of 70 and above.

<sup>1</sup> LISP 200 is a no-fee obligatory 1 credit course for graduation

#### **Semester 4**

<b><u>Name Of Course</u></b>		<b><u>Credit</u></b>
PDHP 213	Marketing, Design and Development of Media Tools**	3
PDHP 216	Lifestyle, Illness and Disease**	2
FHSC 284	Project Planning and Evaluation	3
CVSQ 218	Cultural Studies II	3
FHSC 266	Anthropology and Health	2
FHSC 282	Principles of Epidemiology and Biostatistics	3
		<hr/>
		16

*Red Cross Course<sup>1</sup>*

#### **SUMMER**

<b><u>Name Of Course</u></b>		<b><u>Credit</u></b>
PHPD 240	Project Residency - HP ** <sup>2</sup>	5
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		5

#### **THIRD YEAR**

##### **Semester 5**

<b><u>Name Of Course</u></b>		<b><u>Credit</u></b>
FHSC 263	Human Resource Management	3
PDHP 220	Economics of Health and Development**	3
PDHP 228	Principles of Health Promotion II**	3
PDHP 214	Family Health**	3
PDHP 229	Epidemiology in Public Health Practice.	3
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		15

##### **Semester 6**

<b><u>Name Of Course</u></b>		<b><u>Credit</u></b>
PDHP 232	Educational Strategies in Health Promotion**	3
PDHP 235	Seminars in Health Promotion**	3
PDHP 233	Issues in Health Communication Campaigns**	3
FHSC 288	Research in Health Care Sciences	3
PDHP 225	Issues in Community Health**	3
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		15

\*\* Major course: students should secure an average of 70.

***TOTAL NUMBER OF CREDITS TO BE COMPLETED AT GRADUATION = 102 CR.***

***Number of Credits in Major: 47 CR***

1 This is a no-fee, no-credit course for graduation

2 Topics for project, seminars and tutorials will be chosen by the student according to his/her interest/availability and the consent of the student's advisor.

## **COURSE DESCRIPTIONS**

- CVSQ 217 (Previously CS 217) Cultural Studies I** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Civilization Sequence Program.
- CVSQ 218 (Previously CS 218) Cultural Studies II** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Civilization Sequence Program
- ARAB 203 (Previously LA 203) Arabic Language** **3.0: 3 cr. A**  
Refer to Faculty of Arts and Social Sciences, Department of Arabic Language and Literature.
- ENGL 203 (Previously LE 203) English Communication Skills III** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Department of English Language and Literature.
- ENGL 204 (Previously LE 204) English Communication Skills IV** **3.0: 3 cr. E**  
Refer to Faculty of Arts and Social Sciences, Department of English Language and Literature.
- LISP 200 (Previously LI 200) Library Usage and Research Techniques** **1.1: 1 cr. E**  
Refer to Arts and Social Sciences, Department of Library and Information Service
- FHSC 200, FHSC 260, FHSC 261, FHSC 262, FHSC 263, FHSC 266, FHSC 280, FHSC 281, FHSC 282, FHSC 284, FHSC 288**  
Refer to Faculty Service Courses.
- PDHP 200 (Previously HPD 202) Microbiology for Health Sciences** **3.0: 3 cr. E**  
Introduction to the biology of microorganisms emphasizing the microbial structure, metabolism and infectious diseases they cause and the related immune response. This course introduces the students to the world of micro-organisms and covers medical and environmental issues related to Microbiology.  
Prerequisite: FHSC 200
- PDHP 201 (Previously HPD 200) Environment, Health and Development** **3.0: 3 cr. E**  
This course examines the interactions between the environment and human development, with an emphasis on public health. Students are introduced to current environmental challenges at the local, regional and global level. The course also examines efforts to overcome environmental obstacles by introducing potential or alternative solutions and resources.
- PDHP 205 (Previously HPD 220) Public Health Nutrition and Food Hygiene** **3.0: 3 cr. E**  
The course covers subject matter related to the science of nutrition, including human nutrition, food hygiene and community nutrition.  
Prerequisite PDHP 200

**PDHP 210 (Previously HPD 201) Kinesiology in Health Promotion**

**1.0: 1cr. E**

Application of the principles of mechanics and muscle action to the analysis of skill in basic human movement.

**PDHP 213 (Previously HPD 223) Marketing, Design and Development of Media Tools 3.0: 3 cr. E**

This course covers the design and development of tools used in health promotion initiatives, including: the development of posters, brochures, pamphlets, role model stories, videotapes, health theaters, community affairs, socio-political debates, advocacy positions, press releases, and public announcements. Emphasis is given to methods to selection and tailoring of appropriate tools according to the target group.

Prerequisite: PDHP218

**PDHP 214(Previously HPD 244) Family Health**

**3.0: 3 cr. E**

The course leads to the understanding of how family dynamics affect individual and community health. It also casts light on the developmental stages and needs of the growing child, as well as maternal and child health at various stages, including vaccination requirements and family planning. The course includes field visits and exposure to real life situations.

**PDHP 216 (Previously HPD 225) Lifestyle, Illness and Disease**

**2.0: 2 cr. E**

An introduction to the biologic and behavioral bases of pathogenesis of the major diseases. Causative agents of chronic diseases are examined, with emphasis on those illnesses which have been termed psychosomatic and related to stress, and related methods of adaptation and prophylaxis.

**PDHP 218 (Previously HPD 221) Principles of Health Promotion I**

**3.0:3 cr. E**

Developing effective health promotion initiatives to reduce risk demands a sound grasp of the principles of health behavior and behaviour change. This course examine a wide spectrum of behavior change theories and techniques, including behavior modification, social modeling, social interaction theory, information processing research, and models of behavioral self-regulation and problem solving. Lectures and applications consider different topics, such as substance abuse, hazard control, behavioral risk factor modification including diet, exercise, smoking, stress, safe sexual behaviors, and adherence to medical treatment.

**PDHP 220 (Previously HPD 240) Economics of Health and Development**

**3.0: 3 cr. E**

Students are introduced to theories of economic development covering topics of demand and supply in health care systems and insurance, cost-benefit analysis of health care systems initiation, maintenance and development.

**PDHP 225 (Previously HPD 250) Issues in Community Health**

**3.0: 3 cr. E**

A critical in-depth examination of factors affecting the health of rural and urban communities in developing and developed countries, including the impact of urbanisation, migration, politics, poverty and globalisation.

Prerequisite: FHSC 281

**PDHP 228 (Previously HPD 241) Principles of Health Promotion II** **3.0: 3 cr. E**

The course explores a variety of behavioral, attitudinal, and cognitive approaches to changing health behaviors, including one-to-one, small group, community development and mass media strategies. Specific applications to schools, patient care settings, small groups, and the community-at-large will be presented through case studies, discussions, and readings.

Prerequisite: PDHP 218.

**PDHP 229 (Previously HSC 223) Epidemiology in Public Health Practice** **3.0: 3 cr. E**

This course addresses the different concepts and methodologies of epidemiology utilized in the field of public health. It also provides an overview of some of the different sub-disciplines within the broad remit of this field, such as occupational and molecular epidemiology, which have evolved during the past several decades, in order to upgrade the analytical and problem solving skills of the students.

Prerequisite: FHSC 266

**PDHP 232 (Previously HPD 243) Educational Strategies in Health Promotion** **3.0: 3 cr. E**

An introduction to different educational strategies and the applicability and effectiveness of these strategies to specific health-oriented issues. Students are exposed to different communication methods (lecture, discussions, individual counseling or instructions, and mass media techniques), training methods (skills development, simulation and games, inquiry learning, small group discussion, and modeling and behavior modification), and organizational methods (community development, social actions, social planning, and organizational development).

**PDHP 233 (Previously HPD 249) Issues in Health Communication Campaigns** **3.0: 3 cr. E**

This course addresses issues related to the development, implementation and evaluation of integrated health promotion campaigns. It discusses frameworks that offer a range of ideas and strategies that health promoters can utilize according to the specific health problem and context/target audience, in a step-by-step approach

**PDHP 235 (Previously HPD 245) Seminars in Health Promotion** **3.0: 3 cr. E**

Selected topics are presented on the development of education, management and administration of services and research in the fields of Health Promotion, occupational and community health. Seminars involve guest speakers presentations, general discussions and evaluation. Student evaluation is based on written essays and applying lessons learned to case studies.

Prerequisite: PDHP 228 or permission of the instructor.

**PDHP 240 (Previously HPD 227) Project Residency in Health Promotions** **5.0: 5 cr. E**

An individualised project designed, planned, executed, written and presented by the student on a topic of their choice related to Health Promotion. An essential course in the major, each student is expected to complete a minimum of two months (8 hours/day), under the supervision of a Faculty member, within the context of an organization or institution involved with addressing needs related to health, social welfare and development. Prerequisite: permission of the student's advisor.

## **FACULTY SERVICE COURSES**

### **FHSC 200 (Previously BL 201) Introduction to Biology I**

**3.0: 3 cr. E,F**

Principles of biology, including the cellular basis of life; evolution; energy transfer through living organisms and introduction to Sytematics.

### **FHSC 201 (Previously BL 202) Introduction to Biology I - Laboratory**

**0.3: 1 cr. E**

Required laboratory includes techniques such as microscopy, biochemical analysis, and use of the scientific method.

Co-requisite: FHSC 200

### **FHSC 202 (Previously HSC 207) Introduction to Human Anatomy**

**2.0: 2 cr. E,F**

An introductory course in basic gross anatomy and histology designed for students in health-oriented programs. It provides a basic understanding and working knowledge of tissues, organs and systems of the human body.

### **FHSC 203 (Previously HSC 208) Basic Human Physiology**

**4.0: 4 cr. E,F**

Overviews the basic cell structure, functions and genetic framework. It elaborates on the biological control systems including homeostatic, neural, sensory, hormonal, muscular and others. Finally it covers the physiology of the body organs and respective functions.

### **FHSC 204 (Previously HSC 209) Principles of Genetics**

**2.0: 2 cr. E**

The course presents the general principles of classical and molecular genetics. It deals with the subjects of cytogenetics and pharmacogenetics emphasizing the role of biomonitoring and analysis of genetic elements and mechanisms.

### **FHSC 205 (Previously BIO 215) Introduction to Microbiology**

**2.0: 2 cr. E, F**

Introduction to the biology of microorganisms emphasizing the infectious diseases they cause and the related immune response.

### **FHSC 220 (Previously CH 200) General Chemistry**

**3.0: 3 cr. E**

This course of chemistry is designed primarily for first year students in various health-related programs as nursing, laboratory technology, medical assisting, dental assisting... Emphasis is placed on practical aspects of inorganic chemistry, organic chemistry and biochemistry. Theoretic topics will be given in three parts: Part I "inorganic chemistry" stresses relationships with the life processes that are the subject of part III "Biochemistry". Among theses related topics and processes-acids bases and electrolytes, solutions and redox reactions. Part II "organic chemistry" introduces the various classes of organic compounds. Part III "Biochemistry" deals with the chemical and molecular basis of life itself.

### **FHSC 221(Previously HSC 203) Basic Chemistry for Health Sciences**

**3.0: 3 cr. E**

Designed for the Health Sciences, this course introduces students to the basic concepts of chemistry and encourages them to appreciate the significance of chemical reactions (changes) in everyday life.

**FHSC 222 (Previously CH 202) Basic Chemistry****3.0: 3 cr. E**

Origin of the atomic theory. Determination of atomic weights and formulae. The mole concept. The chemical equation. Acid-base and oxidation-reduction concepts. Properties of gases and gas laws. Liquids and solutions. Types of solutions: ideal and non-ideal solutions. Chemical equilibrium. Ionic equilibrium in aqueous solutions. Solubility. Quantum theory of the atom. Electronic structure of atoms. The chemical bond: ionic and covalent bonds, Hybridization. The Valence-Shell Electron-Pair Repulsion (VSEPR) Model.

**FHSC 223 (Previously CH 203) Basic Chemistry Laboratory****0.3: 1 cr. E**

The aim of this introductory laboratory course is to introduce the students to the basic techniques and equipment of common use in a chemistry lab.

**FHSC 224 (Previously CH 223) Basic Analytical Chemistry****2.0: 2 cr. E**

A brief discussion of: Gravimetric Methods of Analysis, Titrimetric Methods of Analysis. Aqueous solution chemistry. Activities and Activity Coefficients, Equilibrium calculations, Precipitation Titration, neutralization Titration. Complex Acid-Base Systems, Complex-Formation titration, Electrochemistry. Applications of Oxidation-reduction Titrations. Kinetics.

Prerequisite: FHSC 222

**FHSC 225 (Previously CH 248) Basic Organic Chemistry****3.0: 3 cr. E**

This course outlines the combined theories and fundamental concepts of organic chemistry, including structure, shape, IUPAC nomenclature, stereoisomerism, optical activity absolute configuration and properties of the following groups such as halogen, hydroxyl, carbonyl, carboxylic acids and amines. Emphasis is put on important synthesis methods and reagents, basic reaction mechanisms, important naturally-occurring and synthetic organic compounds, and physical methods used in structure determination.

Prerequisite: FHSC 222

**FHSC 226 (Previously CH 240) Organic Chemistry I****3.0: 3 cr. E**

Atomic and molecular orbitals; hybridization and bonding between two carbon atoms. Electronegativity and Resonance. Inductive effect. Stereochemistry: Optical and geometrical isomerism. Substitution, elimination and addition reaction. Properties of alkane, alkene and alkyne. Chemistry of the aromatic hydrocarbons.

Prerequisite: FHSC 222.

**FHSC 227 (Previously CH 241) Basic organic Chemistry Laboratory****0.3: 1 cr. E**

Experiments are intended to introduce students to basic techniques inorganic chemistry, synthesis and extraction, chromatography and identification of functional groups.

Prerequisite: FHSC 222, FHSC 223, FHSC 226. Co-requisite FHSC 225, FHSC 228

**FHSC 228 (Previously CH 242) Organic Chemistry II****3.0: 3 cr. E**

Study of the main functional groups: alcohol, phenols, ethers, and epoxides, aldehydes and ketones, carboxylic acids and derivatives, amine and amides, Spectroscopy and structure. Carbanions. Aryl halides.

Prerequisite: FHSC 226



**FHSC 229 (Previously NG 211) Pharmacology****2.0: 2 cr. E,F**

This course introduces the student to basic concepts in pharmacology. The different groups of drugs are studied in a body systems approach with special emphasis on associated nursing implications.

**FHSC 240 (Previously MT 117) Mathematics for Applied Sciences****3.0: 3 cr. E**

Infinite series. Polar coordinates. Function of several variables. Partial derivatives. Chain rules. Multiple integrals with applications.

**FHSC 241(Previously PS 200) Fundamentals of Physics I****3.0: 3 cr. E**

The course introduces some of the basic fundamentals of physics including: kinematics of a particle, relative motion analysis, Newton's laws of motion, work, energy, center of mass, linear impulse and momentum, collision, torque, elasticity, gravity, properties of fluids simple harmonic motion, transverse and longitudinal waves, resonance sound waves, Doppler effect thermal expansion, first and second laws of thermodynamics, entropy.

**FHSC 242 (Previously PS 201) Fundamentals of Physics I Laboratory****0.3: 1 cr. E.**

This laboratory introduces students to the types of basic apparatus used in physics. Experiments are designed to demonstrate the meaning and applications of the physical concepts included in the "Fundamental of Physics I" course.

Co-requisite: FHSC 241

**FHSC 243 (Previously PS 202) Fundamentals of Physics II****3.0: 3 cr. E**

The course introduces some of the basic fundamentals of physics including: electric charge, Coulomb's law, electrostatic force. Electric field, electric potential, Gauss' Law, capacitors, capacitance, electric current, resistance, Ohm's law, power, emf, internal resistance, magnetic field, magnetic force magnetic materials, alternating currents, rms voltage and current polarization, reflection, refraction, mirrors thin lenses, interference, diffraction, photoelectric effect blackbody radiation, Hydrogen atom, fluorescence, atomic and mass numbers, isotopes, alpha, beta and gamma decays, nuclear fission and nuclear fusion.

**FHSC 244 (Previously PS 205) Fundamentals of Physics II Laboratory****0.3: 1 cr. E.**

This laboratory introduces students to the types of basic apparatus used in physics. Experiments are designed to demonstrate the meaning and applications of the physical concepts included in the "Fundamentals of Physics II" course.

Corequisite: FHSC 243

**FHSC 260 (Previously SC 211) Introduction to Sociology****3.0: 3 cr. E**

Students are introduced to basic theories and concepts in the study of society, including the evolution of human societies, culture, socialization, family, gender, aging, deviance, urbanization, globalisation, mass media and stratification. The course encourages students to critically apply insights gained in the classroom to the social contexts around them.

Prerequisite: ENGL 203

**FHSC 261 (Previously PY 205) Introduction to Psychology****3.0: 3 cr. E**

This course is a general overview of the subject matter of Psychology. It covers basic biological and perceptual processes, development over the life span, learning, memory, consciousness, personality, stress, and coping, psychopathology, social cognition and interpersonal dynamics. Illustrations come from current research, pointing out cross-cultural findings. Special emphasis is placed on the scientific method as a mode of thinking.

**FHSC 262 (Previously BAD 201) Introduction to Business****3.0: 3 cr. E**

This is an introduction to the major fields in business administration. It includes principles of economics, management, marketing, finance, accounting and information systems. Not open to business majors. Prerequisite: ENGL 101.

**FHSC 263 (Previously BAD 239) Human Resources Management****3.0: 3 cr. E**

An analysis of the policies and practices relating to job analysis, human resource planning, staffing, performance appraisal, training and development, wage and salary administration, and collective bargaining.

**FHSC 264 (Previously NG 201) Human Growth and Development****2.0: 2 cr. E, F**

A survey of principal cognitive, social and behavioral processes that operate across the life span. Pre-requisite: FHSC 261

**FHSC 266 (Previously HSC 220) Anthropology and Health****2.0: 2 cr. E**

This course explores some of the important concepts, methods and perspectives that have been developed by anthropologists and their relevance for health care sciences. Among the topics considered are: culture, qualitative methods, cultural relativity and ethics, gender, family, political structures, symbolic systems. Pre-requisite: FHSC 260

**FHSC 268 (Previously BUSN 202) Survey of Management and Marketing****3.0: 3 cr. E**

An introductory course for non-business students. Topics in Management include the functions of management (planning, organizing, directing and controlling) and their implementation. Topics in Marketing include the evolution of the marketing concept, segmentation and positioning, strategic decisions involving product, price, promotion and distribution.

**FHSC 280 (Previously HSC 200) Information Technology and Health Sciences****1.2: 2 cr. E, F**

An introduction to information technology and its applications in the field of Health Sciences, through lectures and applied sessions in the computer laboratory.

**FHSC 281 (Previously HSC 230) Community Health, Education and Mobilization****3.0: 3 cr. E,F**

An introduction to the background, concepts and practices associated with community health and the different forces and determinants that affect the health status and behavior of communities. The course addresses the importance of community mobilization as means of generating and ensuring commitment to change.

**FHSC 282 (Previously HSC 204) Principles of Epidemiology and Biostatistics****3.0: 3 cr. E,F**

An integrated course that introduces the basics in Epidemiology and Biostatistics. Topics include concepts and measures of vital events, health, disease, disability and death, and the risk factors which determine these events in human populations. Methods of presenting health-related data probability models and assessment of causal associations and differences are also covered. Special attention is given to the Lebanese context.

**FHSC 284 (Previously HSC 236) Project Planning and Evaluation**

**3.0: 3 cr. E**

This course aims at introducing the student to the principles of project planning and programming, implementation and evaluation. It walks the students through the process with emphasis on the acquisition of specific skills and use of software.

**FHSC 286 (Previously HSC 237) Financial Management of Health and Development Programs**

**3.0: 3 cr. E**

Introduces the student to the principles and practices important for appropriate financial management of health and development programs. This includes accounting, costing, inventory control, depreciation, alternative mechanisms of financing, etc.

**FHSC 287 (Previously HSC 244) Biotechnologie et Santé Humaine**

**3.3: 3 cr. F**

Ce cours traite certains aspects du monde végétal, animal et alimentaire et leur relation directe avec la santé et les risques qui leur sont associés. Il contient également de l'information au sujet des plantes et leur utilité médicinale, nutritionnelle et cosmétique. Il vise la promotion de la santé par un processus d'évaluation et d'application de conseils pratiques pour protéger sa santé et assurer son bien-être.

**FHSC 288 (Previously HSC 235) Research in Health Care Sciences**

**3.0: 3 cr. E,F**

This is a senior level course which explores the necessary skills to design, undertake and disseminate research. The course considers the basic steps, methods and strategies of the research process: problem identification, hypothesis development, literature review, research design and methodology, data analysis and results communication. Issues of ethics, funding and research policies at institute, national and international levels are discussed.

Prerequisite FHSC 266, ENGL 204.

**FHSC 289 (Previously HSC 211) The Appreciation of the Pictorial Arts**

**3.0: 3 cr. E,F**

This course is a thematic and stylistic approach of several artistic movements in the history of painting and sculpture from the renaissance till the modern present time.

**FHSC 290 (Previously HSC 214) Nutrition and Diet Therapy**

**2.0: 2 cr. E,F**

Introduces the science of human nutrition, the energy derived from dietary sources, the nutritional needs of humans as well as the assessment of nutritional status across the life span. Special therapeutic diets are discussed within the context of a patient teaching plan.