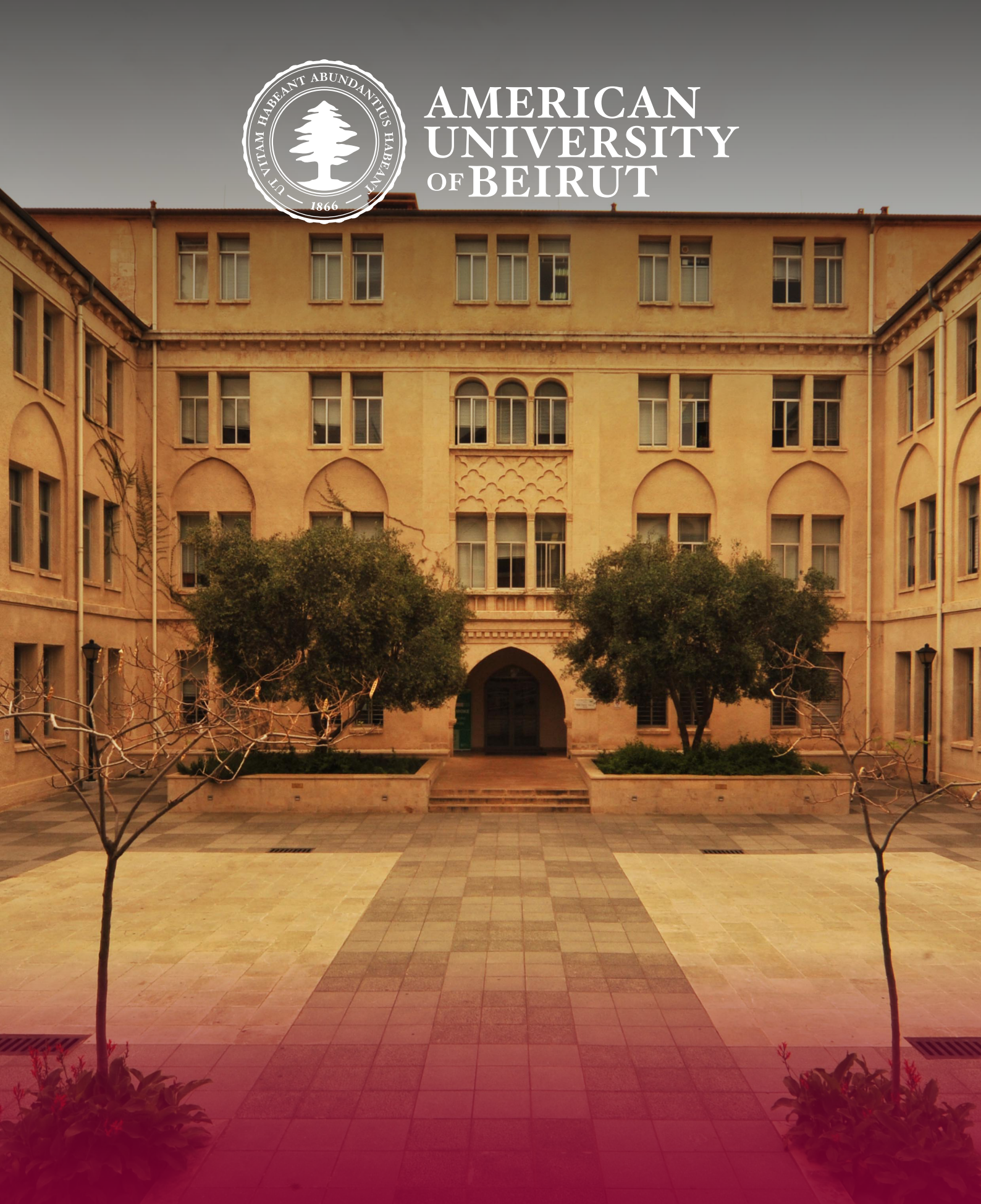
AMERICAN UNIVERSITY OF BEIRUT



Faculty of Health Sciences (FHS)

Graduate

Officers of the Faculty

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Abla Mehio Sibai	Dean
Monique Chaaya	Associate Dean
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Faculty Academic Support

Maya Abi Chahine	Instructor of Public Health Practice (University for Seniors)
Nida' El Helou	Instructor (Practicum Coordination and Career Services)

Historical Background

The Faculty of Health Sciences (FHS) was established in 1954 as an independent School of Public Health, the first of its kind in the region. The name of the school was changed to the Faculty of Health Sciences in 1978 to accommodate programs in allied health.
FHS serves to educate and train professionals and competent leaders to help meet the health needs of Lebanon and the region. Currently, FHS hosts four departments which are Epidemiology and Biostatistics (EPBS), Environmental Health (EH), Health Promotion and Community Health (HPCH), Health Management and Policy (HMP), and a Division of Health Professions. FHS offers the graduate public health program including a master's degree in public health (MPH) (concentrations in epidemiology and biostatistics, health promotion and community health, and health management and policy), an MS in epidemiology, an MS in environmental sciences, major: environmental health (as part of an interfaculty graduate environmental sciences program), and a PhD in epidemiology.

Accreditation

In October 2006, the public health program (PHP) of the Faculty of Health Sciences (FHS) became accredited by the Council on Education for Public Health (CEPH) and was reaccredited in 2012 for a seven years term extending to 2019. In December 2019, the CEPH Board voted to renew the accreditation of the program for another seven-year term ending in 2026. The PHP includes the master of public health, master of science in epidemiology, master of science in environmental health, and the PhD in epidemiology, as well as the newly launched bachelor of arts in health communication. CEPH is an independent agency in the United States, which is recognized to accredit schools and programs of public health. The PHP at FHS was the first graduate public health program to be accredited by CEPH outside the Americas and remains the only program in the Arab region. Accreditation indicates that the PHP of the FHS meets standards for public health education of leading schools of public health in the world.

Mission

To improve the health of populations and advance the public health discipline and field of health professions in the region and beyond, through excellence in education, research, and community engagement.

Vision

The leading academic voice and driver for equity, justice, and better health in the Arab region and beyond.

Graduate Public Health Program (GPHP)

The graduate public health program (GPHP) at FHS provides advanced training in public health to prepare professionals, both practitioners and academicians, to competently assess, research, and respond to the health needs and public health issues in Lebanon and the region. The program applies multidisciplinary and community-based research as well as community service to improve instruction, to advance knowledge, and to address the public health issues and needs of the population served.

Mission Statement

To build the next generation of public health leaders to advance knowledge and impact practice and policy.

GPHP Value Statement

Our teaching, research, and service are guided by core values. These values derive from our context as a leading graduate program of public health in a middle-income regional setting that has suffered from intermittent political conflict and unrest and from our adherence to basic principles of professional conduct, human rights, and service to underprivileged communities.

- **Equality and social justice:** We believe in equality among people; our work is oriented to enhance health equity and social justice by focusing on underserved communities.
- **Civic responsibility:** We believe that each of us has a role to play in advancing knowledge and improving health, and we work to instill a sense of civic responsibility among students and partners organizations with whom we collaborate.
- **Integrity and professional ethics:** We bring a commitment to integrity and professional ethics in all our efforts.
- **Diversity:** We believe that diversity in our faculty, students, and in our practice sites enhances our ability to understand the perspectives and the circumstances that influence health.
- **Excellence:** We are committed to excel in all that we do and believe that our faculty and alumni provide leadership and vision to improve the health of people and communities.
- **Peace:** We research and mitigate the public health effects of conflicts on population and systems as a contribution to achieving peace and justice.

GPHP has programs leading to three academic degrees:

- The Master of Public Health (MPH) with concentrations in:
  - Epidemiology and Biostatistics
  - Health Management and Policy
  - Health Promotion and Community Health

- The Master of Science (MS) with majors in:
  - MS in Epidemiology
  - MS in Environmental Sciences, Major: Environmental Health
- The Doctor of Philosophy (PhD) with a major:
  - Epidemiology

Responsible Code of Conduct (RCR) Requirements

All newly admitted graduate students are required to successfully complete an online course on Responsible Conduct of Research (RCR) from the Collaborative Institutional Training Initiative (CITI Program). The course “covers core norms, principles, regulations, and rules governing the practice of research.” It consists of the following modules: research misconduct, data management, authorship, peer review, mentoring, using animal subjects in research, conflicts of interest, collaborative research and research involving human subjects. FHS requires the completion of the following additional two modules, social and behavioral responsible conduct of research course, as well as students - class projects.

Master of Public Health (MPH)

The master of public health (MPH) is a professional degree that provides students with interdisciplinary educational experiences combining the biological, epidemiological, environmental, sociological, behavioral and managerial dimensions of public health. Students then choose specialized training in an area of concentration and engage in relevant community-based experiences in public health practice.

Admission Requirements

Applicants for graduate study in the MPH program may be considered for admission in one of the following categories:

Graduate

Candidates qualify for this category if they:

a. Hold a bachelor's degree from AUB or an equivalent degree from another recognized institution with a cumulative Grade Point Average (GPA) of at least 3.0 and a GPA of at least 3.3 or its equivalent in the major field of study
b. Hold a graduate degree from AUB or another recognized institution with a cumulative GPA of 3.3 or its equivalent.

On a case-by-case basis, applicants to the program may be admitted to this category if the GPA in the major field of study is between 3.0 and 3.3, provided their cumulative GPA is at least 3.3.

When only a cumulative GPA is available, applicants will qualify for this category if their average is 3.3 or more.

On a case-by-case basis, applicants to the program with major and/or cumulative GPA between 3.0 and 3.3, who have sufficient and significant work experience, may be admitted to this category upon recommendation of the department and approval by the Graduate Studies Committee (GSC).

Spring/mid-year admissions are accepted on a case-by-case basis if places are available. Students admitted at mid-year may only register as part-timers.

Graduate on Probation

Candidates qualify for this category if they hold a bachelor's degree from AUB or an equivalent degree from another recognized institution with an undergraduate major and cumulative GPA between 3.0 and 3.3.

When only a cumulative GPA is available, applicants will qualify for this category if their average is between 3.0 and 3.3.

Special Student Not Working for a Degree

On exceptional basis either upon the recommendation of the department or based on the public health experience of the applicant, those with a cumulative GPA below 3.0 can be considered for admission as a non-degree graduate student. The concerned department has to provide the GSC with a clear justification for its recommendation. However, applicants who are considering admission to the MPH program should also have a relevant and sufficient work experience to be considered for admission as special students.

A student registered as special not working for a degree graduate student can register for a minimum of 7 and a maximum of 12 core and concentration credits in the relevant department and must obtain a cumulative GPA of at least 3.7 in the registered courses to be considered for admission to the MPH program. The average of all completed courses will be evaluated for admission into the MPH along with the undergraduate average and public health experience.

Selection Criteria

Applicants to the MPH program must specify the area of concentration of their choice by priority on the application form. Admission into the concentration areas within the MPH program is based on the following criteria:

- **Choice of Faculty:** Priority for consideration for admission goes to applicants who indicate FHS as their first choice.
- **Choice of Concentration:** Priority for consideration for admission in a concentration area goes to applicants indicating that concentration as their first choice.
- **Grade Point Average:** Normally, priority for consideration for admission goes to applicants with a higher-grade point average.

Other factors taken into consideration include background diversity (prior degree and previous academic institution), geographic diversity, years and type of work experience, personal statement, recommendation letters, and interview when applicable.

Graduation Requirements

MPH is a competency-based program where students are assessed on each foundational and concentration knowledge component and competency at least once.

Students must demonstrate that they have satisfied the minimum level of requirements in order to graduate from the program.

To be eligible for graduation in the MPH program, students must accomplish the following:

- Pass all required courses with a minimum grade of C+.
- Earn an overall GPA of at least 3.3.
- Successfully complete a minimum of 42 credit hours.

Credit Requirements

Course Type	Credits
Required core	23
Required concentration	10 - 11
Required public health experience	5

Electives	3 - 4
Total number of credits required for graduation	**42**

Credit Load

Full-time students must carry a minimum load of 12 credits per term. Students can register for up to 18 credits per term. Students who wish to register for more than 18 credits must petition the Graduate Studies Committee for approval. Part-time students must carry a minimum load of 4 credits per term. Students who wish to register for less than 4 credits must get the registration adviser's approval to ensure that their residency does not exceed the maximum of four years as per AUB policy. These students must petition the Graduate Studies Committee for approval.

Policy on Practicum Registration

All MPH students are required to satisfactorily complete a 300-hour practical experience as part of the MPH program. The Practicum consists of 2-credit-hours of public health practice which students are expected to register for upon completion of all core and concentration courses. In exceptional circumstances, part-time students working full-time who wish to complete their practicum hours over two terms may petition to do so. Students are allowed to register for the Practicum in the same term with only one core and/or concentration course along with the Integrative Learning Experience (ILE) II course (as long as the course not yet taken does not consist of material needed to effectively undertake the activities of the practicum). To be allowed to register for a concentration course along with the practicum, the students need to seek the approval of the concerned department.

Policy on Transferring to Another Concentration

The MPH program has three options for concentration, which are epidemiology and biostatistics (EPBS), health promotion and community health (HPCH), and health management and policy (HMP). Every year, a quota for admissions is set for each. Students are accepted into the program in a particular concentration area. Students may petition to transfer to another area of concentration. Petitions are reviewed in current and prospective departments in light of student academic performance, justification for transfer and implications on the quota. The final decision is made by the Graduate Studies Committee. Students cannot transfer to another concentration before the grades of the first term of enrolment in the current concentration are released.

Policy on Course Exemption

Some graduate courses may be exempted for students, if the student has acquired the relevant knowledge components and satisfactorily completed the requirements of every competency.

- Exemption from a required graduate course toward program and/or graduation requirement may be considered only if the student have proof that they have satisfactorily completed a comparable graduate level course in a recognized university normally with a minimum grade of B+ or the equivalent.
- Course exemption is possible if the course was taken in a period not exceeding the last 5 years.
- Graduate students are allowed to be exempted from courses totally to a maximum of 6 graduate credits.
- The requirement of this particular exempted course is waived but not its credits (i.e., the candidate has to replace the exempted course credits with other course(s) having the same number of credits). Students are still expected to complete the minimum number of credits required for graduation (MPH 42 credits; MS 30 credits).
- The course instructor assesses the equivalence of courses through comparison of course description and learning objectives. The course instructor may require that the petitioning student take an exam in order to demonstrate proficiency in the subject prior to the official registration period for the required course or before the deadline of the drop and add period.
- In cases where students want to equate a course offered in another faculty for a required graduate course in the MPH/MS program, the course instructor (or relevant department chairperson) must approve the petition for equating courses prior to the student registering for the course. This could only happen when the required course is not offered during the term in which the student needs to complete the degree requirements.
- HMPD 306 course exemption policy: Students enrolled in the MPH-HMP program and who took in their undergraduate studies a microeconomics course, such as ECON 211 or AGSC 212 or their equivalent from other recognized universities, can petition to be exempt from the workshop course HMPD 306. The instructor of the HMPD 306 course or chairperson of the HMP department reviews the petition for possible approval.

Procedure for Exemption

- Students submit a petition for course equivalence attaching the syllabus and official university transcript from the other university/program.
- The course instructor decides if the course can be exempted based on the course syllabus and/or a test.
- If an exam is required, the student is asked by the graduate officer to sit for the exam either prior to the start of the term when the course is offered or before the deadline of the drop and add period.
- As per the course instructor's decision, the petition is approved/rejected and forwarded to the Graduate Studies Committee then the Office of the Registrar at AUB.

Policy on Partial Practicum Waiver

No exemption is granted from the practicum experience. The practicum must be completed while students are enrolled in the MPH program with no exceptions. However, a partial waiver of hours can be granted on a case-by-case basis. Students with the required level of experience prior to joining the MPH program may request a partial waiver to complete 150 hours of practicum work (instead of 300 hours), if they offer enough evidence of fulfilment of the practicum waiver criteria. Students who have a minimum of four years of full-time, relevant, and documented public health work experience prior to joining the MPH program, are eligible to apply for a partial waiver of 150 practicum hours. This experience should match a minimum of two core and one concentration competencies of the MPH program.

Students granted partial waiver register for a 1-credit practicum course (HMPD/HPCH/EPBS 366). The waived practicum credit should be replaced with a one-credit elective.

Policy on Transfer of Credits

Transfer of Credits from One Master's Degree to Another

A transfer of credits may be considered when the student has satisfactorily completed a graduate course with a minimum grade of B+ or equivalent at a recognized university. Credits counted towards another graduate degree at AUB or another institution cannot be transferred if they have already been used to satisfy requirements for another awarded graduate degree. In this case, students might be considered for exemption from a course but not credits. The transferred credits are accepted after seeking approval of the course instructor. The approval of the Graduate Studies Committee is required for all transfer credits.

Transfer of Credits from a Graduate Diploma Program

Transfer of course credits from graduate academic and professional diploma programs at AUB to a graduate degree program is allowed following the academic rules and regulations specified by the university. The number of course credits that can be transferred is up to 12 for graduate academic diplomas and up to 6 for graduate professional diplomas. In addition, only graduate-level courses in which the applicant earned an equivalent grade of B+ or above can be transferred. The approval of the Graduate Studies Committee is required for all transfer credits.

Transfer of Credits from Joint Graduate Programs

Transfer of credits from graduate programs that are jointly offered with FHS at AUB is possible before the completion of the degree in the event that the student wants to change major. The number of credits that can be transferred from joint programs cannot exceed 12 credits of comparable courses at FHS. However, the maximum number of transferable credits from non-CEPH accredited programs is 6 core or concentration credits. The approval of the Graduate Studies Committee is required for all transfer credits. Request for transfer of credits for MPH/MS students is only possible if the student has completed the course within the previous 5 years of the transfer request date.

Procedure for Transferring Credits

To transfer credits, the candidate submits a course equivalence petition through the online petition system and attaches the following official documents after consulting with the academic and registration advisers:

- A detailed description of course content and syllabus.
- An official statement of records/grades earned for the course(s).

For transfer of credits, the graduate officer verifies that the transferring university has comparable academic standards to those of the American University of Beirut.

The instructor of the specific course reviews the syllabus and recommends the equivalence of the course.

The online petition passes through a chain of approvals until the final decision is taken by the Graduate Studies Committee.

Probation

Placement on Probation

Students can be placed on academic probation if they fail to make normal progress towards the degree. The academic performance of the student is first evaluated by the department upon completion of the first 8 credits of coursework towards the degree and then is evaluated every term.

Part-timers can only be evaluated after completion of at least 8 credits. Their cumulative GPA is evaluated whenever a minimum of 8 credits is completed.

Students are placed on probation if one of the following occurs:

- They fail in any graduate course taken for credit (passing grade is C+).
- They fail to obtain a minimum overall GPA of 3.3 in graduate courses.

Removal of Probation

- Students placed on probation due to average must remove the probation at the end of the following term by attainment of a cumulative GPA of at least 3.3.
- Students placed on probation due to course failure should retake the course the next time it is offered and achieve a minimum passing grade of C+. In case this condition cannot be met, students in consultation with the adviser must petition the faculty/school Graduate Studies Committee to retake the course.

Dismissal from the Program

A student on probation may be dismissed upon the recommendation of the Graduate Studies Committee if one of the following occurs:

- The student fails to be removed from probation after one term or its equivalent for part-timers (8 credit hours).
- Placement on probation more than once (not counting the probation at admission time).
- The student attains a cumulative GPA of less than 2.3 after completion of 8 credits or fails two courses in one term.
- The student attains a cumulative GPA of 2.3 or above but less than GPA of 3.3 in any term, and fails one course in that term (This rule does not apply to the first term of study).
- In the judgment of the GSC, is not making satisfactory academic progress, or has behaved in contempt of the norms and values upheld by the faculty. Additional information about personal circumstances and general academic performance will be sought.

GSC will make their decisions based on all the above points.

Curriculum

The master of public health (MPH) curriculum is composed of three principal elements which include core courses, concentration courses and public health experience courses. Core courses emphasize critical public health competencies. Concentration courses provide students with an opportunity to specialize in a chosen discipline of public health. The public health experience courses provide an opportunity to practice the knowledge and skills acquired from the coursework (core and concentration courses) into hands-on experience that is then synthesized and linked to core and concentration competencies.

Students enrolled in the MPH program may choose to specialize in one of three different disciplines of public health which are epidemiology and biostatistics, health promotion and community health, and health management and policy.

I. Core Courses (Required of all MPH Students)

		Lecture Hrs./ Week	Lab Hrs./ Week	Credits
ENHL 301	Environmental Health and Sustainable Development	1	0	1
EPBS 300	Principles of Epidemiology	1.5	2	2
EPBS 310	Basic Biostatistics	2	2	3
HMPD 300	Health Systems Management	3	0	3
HPCH 301	Health Communication	2	0	2
PBHL 303	Design and Evaluation of Public Health Programs	2	2	3
PBHL 304	Public Health Policy and Advocacy	3	0	3
PBHL 305	Contemporary Issues in Public Health	1	0	0
PBHL 306A	Workshop Series: Library and Literature Search Skills	0	0	0
PBHL 306B	Workshop Series: Proposal Writing and Literature Synthesis for Public Health Research and Practice	0	0	0
PBHL 306C	Workshop Series: Conflict Resolution, Mediation and Negotiation Skills	0	0	0
PBHL 310	Research Methodology in Public Health	2	2	3
PBHL 312A	Foundations of Public Health	2	2	3
Public Health Experience Courses				
PBHL 399A	Integrative Learning Experience I	0	0	1
PBHL 399B	Integrative Learning Experience II	0	0	2

II. Concentration Courses

A. Epidemiology and Biostatistics (EPBS)

		Lecture Hrs./ Week	Lab Hrs./ Week	Credits
Required Concentration Courses				
EPBS 312	Analysis of Continuous Data	1.5	2	2
EPBS 313	Analysis of Categorical Data	2	2	3
EPBS 316	Epidemiology, Prevention and Control of Communicable Diseases	2	0	2
EPBS 317	Epidemiology of Non-Communicable Diseases and Mental Health Disorders	1.5	2	2
EPBS 320	Epidemiology Beyond the Basics	1.5	2	2

Required Public Health Experience Courses				
EPBS 365	Practicum	0	30	2
Students in this group should take at least 3 credits of electives to complete their credit requirements.				

B. Health Promotion and Community Health (HPCH)

		Lecture Hrs./ Week	Lab Hrs./ Week	Credits
Required Concentration Courses				
HPCH 331	Theories in Health Promotion	2	0	2
HPCH 332	Community Health Promotion, Mobilization, and Advocacy	2	0	2
HPCH 333	Social Marketing for Health Promotion	2	0	2
HPCH 334	Qualitative Research in Health Promotion	3	0	3
HPCH 335	Implementation Research for Public Health	2	0	2

Required Public Health Experience Courses				
HPCH 365	Practicum	0	30	2
Students in this group should take at least 3 credits of electives to complete their credit requirements.				

C. Health Management and Policy (HMP) Health Service Management Track

		Lecture Hrs./ Week	Lab Hrs./ Week	Credits
Required Concentration Courses				
HMPD 306	A Workshop on Microeconomics for Healthcare	0	0	0
HMPD 315	Performance Improvement	3	0	3
HMPD 318	Policy and Decision Making in Health Systems	2	0	2
HMPD 342	Financial Management and Accounting in Health Care Organizations	3	0	3
HMPD 351	Health Economics	2	0	2

Required Public Health Experience Courses				
HPCH 365	Practicum	0	30	2
Students in this group should take at least 4 credits of electives to complete their credit requirements.				

Interdisciplinary Courses

PBHL 303 Design and Evaluation of Public Health Programs 2.2; 3 cr.
This course introduces students to the concepts and methods of public health program design and evaluation. Students will develop skills for assessing population needs for the development of health programs. The course then covers public health program design, including developing measurable objectives, identifying evidence-based intervention strategies, and planning for program implementation. Students will learn to select appropriate methods for impact and process evaluation of health programs. Prerequisites: PBHL 310 and (PBHL 312 or PBHL 312A). Open to students majoring in PHNU.

PBHL 304 Public Health Policy and Advocacy 3.0; 3 cr.
This course introduces students to the relevant concepts and approaches in public health policy and advocacy. It will provide students with a basic understanding of the public health policymaking process as well as the basic elements of advocacy. The aim is to make MPH students informed of the complex nature of public health policy development, be critical consumers of health policy research and evidence, and analytical of the influence of various actors on the policy process. Students will learn the stages of the policy process (i.e., agenda setting, policy development, policy implementation and policy evaluation). The field draws upon numerous disciplines. As such, course readings will be drawn from political science, sociology, biomedical sciences, and policy studies. Students will also cover the basic elements of an advocacy process, including defining the issue, understanding the audiences, and crafting advocacy strategies. Case studies, class discussions, and guest speakers will provide tangible examples of public health policy and advocacy processes at the national, regional, and international levels. Ethics and equity considerations will be included in discussions related to concepts and application. Open to students majoring in PHNU.

PBHL 305 Contemporary Issues in Public Health 1.0; 0 cr.
The seminar provides a platform to discuss contemporary issues in public health. Students integrate previously acquired knowledge and skills into analyzing local, regional, or global contemporary issues and their impact on public health and the environment. Course content will vary each year in light of salient issues and will be tailored to student interests. Students are expected to be active learners and to participate in the selection of relevant academic articles/media resources (in consultation with the course instructor), and to facilitate class discussions. Prerequisite: PBHL 399A or (EPBS 300, EPBS 310, PBHL 310, and (PBHL 312 or PBHL 312A)).

PBHL 306A Workshop Series: Library and Literature Search Skills 0 cr.
A 2-day hands-on compulsory workshop for all MPH students where learners acquire search skills to look for, identify, read, evaluate and save their literature searches in order to write a synthesis for their academic work. The workshop trains learners on the use of major resources at the university libraries (search engines, databases…), search techniques, and the use of databases to search, store and save searches. It also provides them with skills to evaluate the extracted information, synthesize the literature and identify a gap. Based on this, they write up a short synthesis of a selection of relevant literature. Open to students majoring in PHNU.

PBHL 306B Workshop Series: Proposal Writing and Literature Synthesis for Public Health Research and Practice 0 cr.
This is a required 2-day workshop for all MPH students that enables learners to develop skills for writing a concept note and draft proposal for public health research and practice on a question or topic of their interest that they have discussed or thought through in Public Health Research Methods or a similar course. Given that the field of public health entails both research and intervention, technical skills for developing a project proposal for research and intervention are necessary for the public health practitioner. The workshop addresses the types of concept notes and proposals, their elements, and stages of writing. The workshop will also provide learners with an overview of the traits of a good writer and tips from successful proposals as well as with examples of weak or unsuccessful applications. Prerequisites: PBHL 306A & PBHL 310. Open to students majoring in PHNU.

PBHL 306C Workshop Series: Conflict Resolution, Mediation and Negotiation Skills 0 cr.
A two-day workshop where graduate students will be trained on how to manage interpersonal conflict effectively. During this workshop, learners will develop an understanding of different types of interpersonal conflict, as well as causes and prominent human behaviors in a conflict situation. They will also practice negotiation skills and conflict resolution strategies through simulations of various scenarios while using mediation and problem-solving skills. Prerequisite: HPCH 301.

PBHL 307 Public Health and Armed Conflict 3.0; 3 cr.
This is a graduate (3-credit) course that applies a health lens analysis to understanding war and armed conflict. The health lens is useful because health is universal and we can deploy the rich tools of health analysis to wars/armed conflicts. On the one hand, through looking at health, we can appreciate the wide range of consequences of wars/armed conflicts. On the other hand, a health examination illuminates our understanding of wars/armed conflicts themselves (e.g. analysis of attacks on healthcare give insights about conduct of war and the positions of belligerents towards applicable international laws during conflict). We can then build on the insights generated from a health lens analysis to develop interventions to safeguard health in war/armed conflict and to even impact war/armed conflict. Our approach is informed by human rights and humanitarian principles.

PBHL 308 Methods in Humanitarian Settings 1.0; 1 cr.
This one-credit course is offered to FHS students who are enrolled in the Certificate of Public Health in Conflict and Protracted Crises. The course: 1) introduces students to the definition, types, and management of humanitarian emergencies; 2) enhances their methodological skills to conduct research and evaluation in complex humanitarian and disease outbreak settings; 3) prepares them to identify and discuss solutions to practical, conceptual, and ethical challenges in humanitarian response. Prerequisites: PBHL 310 and (PBHL 312 or PBHL 312A).

PBHL 310 Research Methodology in Public Health 2.2; 3 cr.
This course addresses the principles of research design and the methods used in both quantitative and qualitative public health research. The course encourages students to think critically about public health evidence and how it is derived. Topics include the following: the distinct but complementary roles of quantitative and qualitative research approaches; synthesizing published literature to identify a research gap; formulating research questions; choosing appropriate methods of quantitative data collection for public health; the process of qualitative data collection and qualitative analysis using software; and ethical issues in public health research. Practical and conceptual issues are both discussed. Open to students majoring in PHNU.

PBHL 312A Foundations of Public Health 2.2; 3 cr.
This is a graduate course which introduces learners to the field of Public Health, its principles, values, and functions. Students will learn how to use theory in public health to analyze contemporary local and global health issues and their determinants. Course material focuses on biological, psychological, environmental, behavioral, wider social and global determinants of health and their interrelationships. Throughout the course, students use a variety of learning material to apply theory, critical thinking and discuss public health ethics in a broad array of real-world examples. The course will prepare graduate students for further course work and training in PH. Open to students majoring in PHNU.

PBHL 315 Global Health Equity 3 cr.
This course focuses on a critical discussion of social and structural determinants of health equity globally. Students are enrolled at the Faculty of Health Sciences, American University of Beirut, Lebanon; College of Health Sciences, School of Public Health, Universidad San Francisco de Quito, Ecuador; The School of Nursing, University of Victoria, British Columbia; and the College of Public Health, University of Iowa, Iowa City. Each site will also have a faculty mentor. The students and faculty mentors will meet virtually in 'real time' around a set of readings which will establish the common base of understanding of health inequities, social and structural determinants of equity and health, and historical injustices in each site. This will be followed by the development of a common photovoice project to highlight common and differing inequities and their impact on wellbeing. Our aim is to leverage technology to create a platform to connect public health students across continents, thereby providing novel perspectives and deepening discussions of health equity. This course is open to seniors with instructor permission.

PBHL 316 Injury as Public Health Priority 2.0; 2 cr.
This course introduces students to injury as a growing public health problem. It provides students with an overview of the concept of injury, injury classification, root causes and factors that affect both risk to and protection from injury. Students will learn about the burden of disease associated with injury both locally in Lebanon and globally. Student will examine key determinants of injury and the factors influencing injury events (e.g., the Haddon Matrix), as well as understand the various types of injury intervention programs. The course also explores sources of injury data that can be used to conduct injury research. The course is comprised of 30 didactic sessions and field visits to expose students to the real-world environments where injuries occur and are treated and analyzed. Field sessions will include visits to the National Traffic Safety Council, and the AUBMC Emergency Department to learn about post-injury care and clinical research, and to learn about surveillance systems for injury. These visits will give students practical insights into the sources of injury data and the challenges of conducting injury research in different environments and introduce students to key stakeholders in the injury ecosystem in Lebanon. Prerequisites: PBHL 310 or its equivalent.

PBHL 317 Injury Seminar 1.0; 0 cr.
This injury seminar exposes students to various topics of injury research and methodologies. It advances students' understanding of injury as a public health problem. Seminar topics include methodological approaches to several injuries, traumatic brain injury, occupational injury, road traffic injury, substance use and overdose and other emerging injury topics, as well as the application of policies and laws for injury prevention and control. Throughout the course, students are expected to learn about and understand injury-related topics via: (1) Reading and evaluation of the required journal articles and (2) Active engagement in class discussion related to a) Identification and appraisal of research and grey literature, b) Systematic Review and meta-analysis, c) Critical appraisal of research methodologies.

PBHL 320 Special Topics in Public Health 1-3 cr.
A course that explores special topics, contexts, populations, or skills that influence public health practice and research. The course is focused on applied experiences, dialogue and discussion, and critical thinking. Repeated for credit under different topics. Offered occasionally.

PBHL 325 Cross Border Public Health Surveillance 2.2; 3 cr.
This course provides students with essential skills in cross-border public health surveillance, with a focus on health security in the MENA region. Students will explore key topics such as international health regulations, strategies for strengthening health systems, risk communication, preparedness, and data collection methods designed to address regional challenges, particularly those affecting mobile populations.

PBHL 399 Integrative Learning Experience I and II 1-2 cr.

The Integrative Learning Experience (ILE) provides an opportunity for students to synthesize the competencies that they have gained during the MPH program by completing a substantive project of public health relevance. Over the course of two consecutive regular terms, students are expected to design and implement a project that addresses their interests while contributing to the field of public health. A variety of project forms are acceptable within the guidelines set by the Graduate Public Health Program. Each student will develop and implement the project under the guidance of a faculty adviser. The ILE is completed over two terms: Integrative Learning Experience I, PBHL 399A (1 credit) and Integrative Learning Experience II, PBHL 399B (2 credits). Prerequisite for PBHL 399A: Completion of all but two of the concentration courses. ENHL 301 (concurrent) & PBHL 303 & PBHL 304 & PBHL 310 (concurrent) & (PBHL 312 or PBHL 312A) & EPBS 300 (concurrent) & EPBS 310 (concurrent) & HMPD 300 (concurrent) & HPCH 301. Prerequisite for PBHL 399B: PBHL 399A.

Department of Environmental Health

Chairperson	Jurdi, Mey
Professors	Habib, Rima; Jurdi, Mey; Massoud, May; Nuwayhid, Iman
Associate Professor	Dhaini, Hassan
Lecturer	Nasr, Joumana
Instructor	El Helou, Nida
Part-time Lecturer	Araji, Fayez

The Department of Environmental Health offers a graduate program leading to the MS degree in environmental sciences (Major: environmental health).

In view of the increasing interest in development and its impact on the human environment, a variety of courses offered by this department are made available to students in other fields.

Graduates of the MSES-environmental health program may occupy senior or intermediate posts in the following:

- Governmental agencies, such as the Ministry of Health, Ministry of the Environment, municipalities, or health centers
- The private sector, which offers a variety of job opportunities in industry, research institutions, universities, schools, and private businesses
- International agencies

Master of Science in Environmental Sciences, Major: Environmental Health

Admission Requirements

For full details on the admission requirements for this interfaculty program, see the Admissions section and the admission policies for the master of science in environmental sciences under Division of University Interdisciplinary Programs (DUIP) of this catalogue

Graduation Requirements

For information regarding graduation requirements, refer to the General University Academic Information in this catalogue.

Credit requirements

Course Type	Credits
Core	15
Directed Electives	6
Free Electives	3-6
Project/Thesis	3-6
Total number of credits required for graduation	**30**

Credit Load

Full-time students must carry a minimum load of 9 credits per term. Students can register for up to 12 credits per term. Students who wish to register for more than 12 credits must petition the Graduate Studies Committee for approval.

For full information on academic rules and regulations and general requirements for the master of science in environmental sciences (major: environmental health), refer to the graduate General University Academic Information section in this catalogue.

Curriculum

Course Type		Credits
A. Core Courses		**16**
ENHL 301	Environmental Health and Sustainable Development	1
ENHL 312	Occupational Health	3
ENHL 314	Environmental Management Systems	3
ENSC 640	Toxicology and Environmental Health Hazards	3
ENSC 695	Comprehensive Exam	0
PBHL 306A	Library and Literature Search Skills 0 credit	0
PBHL 306B	Proposal Writing and Literature Synthesis for Public Health Research and Practice	0

PBHL 310	Research Methodology in Public Health	3
PBHL 312A	Foundations of Public Health	3

B. Electives	**8-11**
Directed Electives	6
Free Electives	2-5

C. Thesis or Project		**3-6**
ENSC 697	Project	3
ENSC 699	Thesis	6
Total number of credits required for graduation		**30**

Course Descriptions

ENHL 301 Environmental Health and Sustainable Development 1.0; 1 cr.
The course introduces the field of environmental health and highlights its role in contributing to sustainable development. Students discuss the environmental system and the interactions of its physical, socio-economic, and political components impacting human health and ecological vitality. Emphasis is placed on assessing, preventing, and controlling environmental hazards that pose major risks to humans, animals, and ecosystems.

ENHL 307 Food Safety and Health 3.0; 3 cr.
The course focuses on the safety and management of processed food products. It addresses the advantages and limitations of food processing techniques and, in specific, the application of food additives. Areas covered relate mainly to food safety and quality control, health impacts, types and limitations of food processing methods, use of food additives, exposure estimation, toxicological implications, risks and benefits governing use and quality control measures and applications both at the national and international levels.

ENHL 308 Tutorial 1–3 cr.
A tutorial on special environmental health projects of interest to students. Students are required to submit a written report.

ENHL 310/ENSC 640 Toxicology and Environmental Health Hazards 3.0; 3 cr.
The course presents toxicology in three sections. In the first section, the fundamental principles and essentials of toxicology are introduced, particularly dose-response, toxicokinetics, and cellular mechanisms of action. In the second section, the course discusses toxicity of main organ systems. Classic toxicants that adversely affect health, emerging hazardous human exposures, and special topics are discussed in the last section of the course. The course includes lecture style presentations, collective case- studies activities and student-led discussions. Topics of local and regional relevance are also introduced through hosting guest speakers.

ENHL 311 Human Health Risk Assessment 3.0; 3 cr.
Thousands of chemicals are currently in common use and hundreds are introduced newly every year. The toxic effects of these compounds on humans are of significant public health concern. Human health risk assessment (HHRA) studies the nature and probability of adverse health effects in humans who may be exposed to chemicals in contaminated environmental media. HHRA is an essential basis for decision-makers in remediation of environmental contamination and public health protection. This course introduces students to concepts, sources of data, and methods, which are used in the field of human health risk assessment, and provide them with an understanding of current issues in this field. The course examines in detail the four components of risk assessment: hazard identification, dose-response evaluation, exposure assessment, and risk characterization. Additionally, concepts in risk management and risk communication are discussed. The course includes lecture-style presentations, in-class exercises and assignments, and student-led discussions of reports/articles. Students will obtain enough experience to be able to successfully evaluate a health risk assessment report, which will be demonstrated in the final student presentations.

ENHL 312/ENSC 641 Occupational Health 2.3; 3 cr.
This course overviews the general principles of occupational health, relating work, the work environment, and workers' health and wellbeing to general principles of social equity and justice. The course surveys research on the social, economic, political, environmental, and health elements of a workplace using multidisciplinary approaches. Students who join the course are able to identify occupational hazards and work- related injuries and illnesses in workplaces and propose monitoring, management and prevention strategies to lessen their impact on workers. With its emphasis on social justice, the course discusses the factors that make some workers' groups more vulnerable than others. Its unique approach emphasizes global perspectives and popular imaginations of workers through academic publications, newspaper journalism, cinema, lectures, and class discussions. This course is designed for students of multiple educational and training backgrounds and does not require prerequisite knowledge.

ENHL 315 Environmental and Occupational Health Seminar 0 cr.
The Environmental and Occupational Health (EOH) seminar series presents information on current research topics and emerging issues in the EOH field. It exposes students to a broad range of environmental and occupational research, practice, and policy issues. Throughout the seminar series, students will learn about and understand EOH-related topics of current importance to the health of workers and the general population via: (1) careful reading and evaluation of assigned journal articles and (2) active listening to EOH experts and participation during the seminar. Seminar topics would cover multiple themes, such as occupational health and safety in different work settings, toxicology, qualitative and quantitative methodologies and tools used for the recognition, assessment, and evaluation of environmental and occupational hazards, and environmental and occupational health ethics. Issues related to environmental justice, sustainable development, and policymaking will run across the series.

ENHL 320 Special Topics in Environmental Health 1-3 cr.
A course that covers selected topics such as risk analysis, environmental ethics and justice, or environmental policy and allows focused examination of special topics of interest to trainees in environmental health.

ENHL 314/ENSC 642 Environmental Management Systems 3.0; 3 cr.
The implementation of an Environmental Management System (EMS) integrates the precautionary and polluter pays principles into firms' operations and demonstrates commitment to sustainable development. This course provides an overview of the most common international standards for environmental management systems, primarily the International Standards Organization (ISO) harmonized management systems, and its implications for different organizations. It provides students with the skills to formulate and evaluate such management systems. Though the first part of the course is mainly lecture based, student participation in the form of questions and discussion is always welcomed and encouraged. Critical thinking will be promoted throughout the course. Students will be expected to formulate an EMS for an organization and prepare a technical report to communicate project findings to their colleagues through verbal presentation. Emphasis is placed on solving environmental problems using an integrated management approach in order to achieve an optimized environmental performance. Alternate years.

ENHL 325 Environmental Exposure Assessment 2 cr.
The course will introduce students to the tools and strategies used to evaluate air, water and physical stressors encountered by individuals and populations in indoor, outdoor, and occupational environments. Indirect and direct methods of assessing exposures in environmental and occupational settings are reviewed. Criteria for evaluating the quality of an exposure assessment and exposure data in occupational and environmental epidemiology studies are discussed. This course will cover the design of exposure assessment strategies for research and public health practice, the techniques and methods for sampling and analysis, and interpretation of data. In addition, this course will incorporate aspects of inequities in environmental exposures (environmental justice). The class will consist of lectures, discussions of readings and exposure data, and hands-on exposure monitoring.

ENSC 699 Thesis 6 cr.
Thesis.

ENSC 697 Project 3 cr.
The project must be undertaken, in partial fulfillment of the requirements for the degree, upon the completion of at least 27 credits of core and elective courses. Students who are unable to finish the project in one term can register for it one additional time.

Department of Epidemiology and Biostatistics

Chairperson	Ghandour, Lilian
Professors	Chaaya, Monique; DeJong, Jocelyn; Ghandour, Lilian; Jaffa, Miran; Sibai, Abla
Professor of Public Health Practice	Adib, Salim
Assistant Professors	El-Asmar, Khalil; Mumtaz, Ghina
Assistant Professor of Public Health Practice	McCall, Stephen
Instructors of Public Health Practice	Akl, Christelle; Saad, Ghada
Part-time Instructor	Kabalan, Mayssan
Affiliates	El Bejjani, Martine; Tamim, Hani; Fahme, Sasha

The Department of Epidemiology and Biostatistics offers courses in epidemiology, biostatistics, and population health to graduate students in the Faculty of Health Sciences and the Faculty of Medicine. The department is committed to improving public health in Lebanon, the region, and beyond, by training students and public health professionals to become epidemiologists capable of undertaking independent quantitative research for advancing knowledge and informing policy and practice. Its academic programs, adapted to meet the needs of the region, encourage learners to work on projects that address the public health needs of the region.

The course offerings to students in the master of public health (MPH) program, the master of science (MS) in epidemiology program, and doctor of philosophy (PhD) in epidemiology are given as core, required, and elective courses. In addition, members of the department offer courses in statistics and epidemiology to students in the medical degree program and coordinate and participate in teaching courses in preventive medicine and public health programs in the Faculty of Medicine.

Master of Science in Epidemiology (MS-EPID)

Admission Requirements

For full details on admission requirements to the master of science in epidemiology, see the Admissions section of this catalogue. Mid-year admissions are only accepted for part-time students.

Graduation Requirements

For information regarding graduation requirements, refer to the General University Academic Information section in this catalogue.

Credit requirements

Course Type	Credits
Required	22
Electives	2
Thesis	6
Total number of credits required for graduation	**30**

Credit Load

Full-time students must carry a minimum load of 9 credits per term. Students can register for up to 12 credits per term. Students who wish to register for more than 12 credits must petition the Graduate Studies Committee for approval.

For full information on academic rules and regulations and general requirements for the master of science in epidemiology refer to the graduate General University Academic Information section in this catalogue.

Curriculum for MS in Epidemiology

		Lecture Hrs./ Week	Lab Hrs./ Week	Credits
EPBS 300	Principles of Epidemiology	1.5	2	2
EPBS 310	Basic Biostatistics	2	2	3
EPBS 312	Analysis of Continuous Data	1.5	2	2
EPBS 313	Analysis of Categorical Data	2	2	3

EPBS 316 or EPBS 317	Epidemiology, Prevention, and Control of Communicable Diseases Epidemiology of Non-Communicable Diseases and Mental Health Disorders	2 or 1.5	0 or 2	2 or 2
EPBS 319	Advanced Quantitative Methods of Epidemiology	1	0	1
EPBS 320	Epidemiology Beyond the Basics	1.5	2	2
EPBS 320A	Epidemiology Beyond the Basics II	1	0	1
EPBS 395	Comprehensive Exam	–	–	0
PBHL 306A	Workshop Series: Library and Literature Search Skills	–	–	0
PBHL 306B	Workshop Series: Proposal Writing and Literature Synthesis for Public Health Research and Practice	–	–	0
PBHL 305	Contemporary issues in Public Health	1	0	0
PBHL 310	Research Methodology in Public Health	2	2	3
PBHL 312A	Foundations of Public Health	2	2	3

Electives				
EPBS 314	Data management and manipulation	1	2	1
EPBS 318	Introduction to Mathematical Modeling for Infectious Diseases	1.5	1.5	2
EPBS 321	Design and Analysis of Clinical Trials	1	2	2
EPBS 322	Special Topics in Epidemiology	2	0	2
EPBS 324	Special Topics in Biostatistics	–	–	1-3
Students should take at least 3 credits of electives.				

Thesis				
EPBS 399	Thesis			6

Doctor of Philosophy (PhD) in Epidemiology

Mission

The mission of the PhD program in epidemiology is to provide advanced training in epidemiology, statistical skills, and cutting-edge research methods. Graduates of the program acquire competencies to undertake high quality independent research, to assume professorial positions at universities, and to obtain leadership positions in research units in Ministries of Health and healthcare institutions in Lebanon, the region and beyond.

Program Goals

The PhD in epidemiology aims to:

- Graduate epidemiologists with advanced training, who can teach advanced courses, lead independent epidemiological research, and promote rigorous epidemiological practice.
- Strengthen epidemiological research, collaborations, and partnerships to improve data systems and address existing and emerging public health problems in Lebanon and the region.

Admission Requirements

To be eligible for admission to the PhD program, candidates must:

- Hold a master's degree in epidemiology or a relevant discipline such as public health, nursing, statistics and health informatics, pharmacy, biological sciences, and others, from AUB or other recognized institution of higher learning. A minimum cumulative GPA of 3.7 or its equivalent, is required for admission.
- Have achieved an acceptable score on the Graduate Record Exam (GRE) general component taken in the last five years, with a minimum score of 152 in Quantitative and 151 in Verbal.
- Demonstrate English proficiency as stipulated in the university Graduate Catalogue for requirement for admission into PhD studies. Submit a complete application to the Office of Admissions that includes the following items: (1) Official transcripts and certified copies of degrees and certificates from previous universities, (2) official GRE scores on the general component, (3) letters of recommendation (a minimum of three letters), (4) personal statement outlining interest in the program of study focusing on research interests and experience, and (5) an updated CV.

Following the review of applications, shortlisted applicants will be contacted for an interview.

Financial Support

The department offers, on a selective basis, substantial support which fully covers tuition and includes a monthly stipend. There are also some funds available to support participation in international conferences; these funds are awarded on a competitive basis. In return, students help in teaching (preparing and delivering) introductory courses, proctoring, and correcting exams among other related tasks.

Program Requirements

The PhD in epidemiology program requires the completion of 27.5 credit hours of coursework beyond the master's degree and 24 credit hours of thesis work. The credit load for the PhD in epidemiology program is detailed below:

Course Type	Credits
Core PhD-level Courses (including 1.5 credit of research ethics course)	17.5
Required master's level courses in epidemiology and biostatistics	4-5
Electives	5-6
Thesis	24
Total number of credits required for graduation	**51.5**

Course	Course Name	Credit Hours
Epidemiology/ Biostatistics core courses (16 cr.)		
EPBS 403	Advanced Epidemiology Methods: Case Control and Cohort Studies	3
EPBS 404	Introduction to Causal Inference Methods	2
EPBS 405	Social and Behavioral Factors in Epidemiology	2
EPBS 406	Epidemiology in Action	3
EPBS 410	Applied Multivariate and Longitudinal Methods in Health Sciences	3
EPBS 411	Statistics for Psychosocial Research Psychometrics and measurement of Latent Constructs	3
Research related core courses (1.5 cr.)		
EPBS 440	Doctoral Seminar	0
EPBS 445	Writing Research Grants	0
SHRP 315	Introduction to Research Ethics and Responsible Conduct of Research	1.5

Specified set of Epidemiology/Biostatistics courses (4-5 cr.)		
EPBS 312	Analysis of Continuous Data	2
EPBS 313	Analysis of Categorical Data	3
EPBS 314	Data Management and Manipulation	1
EPBS 315	Nonparametric Data Analysis	2
EPBS 319	Advanced Quantitative Methods in Epidemiology	1
EPBS 320	Epidemiology Beyond the Basics	2
EPBS 321	Design and Analysis of Clinical Trials	2
EPBS 328	Systematic Review and Meta-Analysis	3
SHRP 332	Applied Survival Analysis	1

Elective courses		**5-6**
Thesis courses		**24**
EPBS 480	Qualifying Exam Part I: Comprehensive Exam	0
EPBS 481	Qualifying Exam Part II: Defense of Thesis Proposal	0
EPBS 482 (3), EPBS 483 (6), EPBS 483A (6), EPBS 484 (9), EPBS486 (0): PhD Thesis		
EPBS 487	Thesis Defense	0

Teaching Requirement Courses		
EDUC 401	C-THE I: Teaching in Higher Education – Theory	0
EDUC 402	C-THE II: Teaching in Higher Education – Theory II & Practicum	0

Thesis Qualifying Exam: Parts 1 and 2

After taking and passing all core and required courses, students should register in two zero credit courses, the thesis proposal preparation, and the comprehensive exam. They should pass both parts of the PhD Qualifying Exam: Part 1 which is the written comprehensive exam, administered by the department; and part 2 which is the oral exam involving defense of the thesis proposal, administered by the thesis committee (refer to the graduate General University Academic Information section of the catalogue for details about the PhD Qualifying Exam).

Thesis Defense

Students have to defend their thesis within at most three years following passing Part 2 of the PhD Qualifying Exam.

Teaching Requirements

One of the competencies of the PhD program is for doctoral students to develop experience in teaching. This is accomplished by: (a) serving as a teaching assistant in one or more courses (minimum of 3 credits in total) taught by departmental faculty, and (b) registering, and successfully completing the requirements of two zero-credit courses-EDUC 401 and EDUC 402, as required by the Graduate Council.

Residency Requirements

The program completion time frame for the regular track is 3 to 5 based on AUB residency requirements. Extension requires Graduate Council approval upon recommendation by the faculty Graduate Studies Committee. Authorized leaves of absence, approved by the PhD Program Committee/Department are the only means of waiving the residency and registration requirements. Policies concerning statute of limitations (for program completion) and leaves of absence are identified in the graduate General University Academic Information section of the catalogue.

Core courses of the program should be taken at AUB, while further required or elective courses could be taken at a recognized institution of higher learning, preferably CEPH accredited, amounting to at most 12 credits that are transferable upon departmental approval. Courses are eligible for transfer only if they are taken beyond master's degree requirements and fulfill the criteria for type of eligible courses as outlined in the graduate General University Academic Information section of the catalogue for PhD transfer of credits. Students will be encouraged to spend a full term or a shorter duration in a School of Public Health in the US, Canada, or Europe to take courses or engage in research.

To fulfill the minimum residence requirements for the PhD degree, students must register for at least six terms beyond the completion of the master's degree.

Course Descriptions

EPBS 300 Principles of Epidemiology 1.5:2; 2 cr.
This course introduces graduate students to the basic principles and methods of epidemiology and the application of the epidemiological approach to public health research, policy, and practice. The course consists of weekly lectures and practical application sessions. Students will learn about the rubrics of epidemiology, dynamics of disease transmission, common sources of epidemiological data, measures of morbidity and mortality, observational study designs, measures of association, biases and confounding, and general principles of causation in epidemiology. The main concepts will be covered during the lecture. The application sessions (e.g., problem-solving exercises, case-studies, journal critiques, mapping…) will allow students to apply their acquired epidemiological knowledge and understand the role of epidemiological evidence in current practices of public health policy and practice. Open to students majoring in PHNU.

EPBS 310 Basic Biostatistics 2.2; 3 cr.
This course is an introduction for graduate students to statistical techniques applied to health and biomedical related data. The objectives are twofold: descriptive and inferential statistics. This course will provide theoretical and applied foundation that are needed to: 1) Carry out statistical analyses appropriate for the data and the study design, 2) Deduce accurate inferences and conclusions that concern the study population, 3) Disseminate and interpret biostatistical results and conclusions in a proficient manner. At the end of this course, students will be well rounded with the different analytical techniques that range from basic descriptive analysis, to mid- level analysis that distinguishes between the various distributions and applies the tests suitable for the outcome under examination, in addition to advanced modelling techniques using regression approaches linear, logistic and non-parametric methods. Open to students majoring in biomedical engineering.

EPBS 312 Analysis of Continuous Data 1.5:2; 2 cr.
In this course, students will learn to use regression analysis to address a research question. It covers basic exploratory data analysis for univariate (outcome) continuous observations with single or multiple covariates, followed by regression methods and diagnostics with a main focus on multiple regression. The emphasis of the course is on the application of statistical techniques that are carried out using the statistical package STATA and R. Lectures include lab sessions, article reading and appraisal as well as group discussions. Prerequisite: EPBS 310 or consent of instructor.

EPBS 313 Analysis of Categorical Data 2.2; 3 cr.
This course aims at introducing biostatistical approaches to analyze categorical and count data. In particular, students will learn about (1) probability distribution for binomial and multinomial data, (2) measures of association and test of association for nominal and ordinal data, (3) analysis for Two Way and Three Way contingency tables including interaction and confounding (4) generalized linear models (5) logistic regression for independent, matched case-control data, and data with small sample size and rare events (6) Poisson and Negative Binomial regressions for count and rates with and without over-dispersion, (7) Multi-category logit for nominal and ordinal data. The statistical package STATA will be used in this course. Prerequisite: EPBS 310 or consent of instructor.

EPBS 314 Data Management and Manipulation 1.2; 1 cr.
The data management course is an introduction to data manipulation and management using Stata, SPSS, and Epi-data. The course covers data structure design including data checking as well as data manipulation, data imputation and basic statistical programming. The course is offered at the computer lab where students can have hands- on experience in dealing with real data sets. In case enrolled students have a project specific data, they have the chance to directly apply the acquired course material on the dataset. Weekly assignments are given to allow the students to explore advanced and customized application of the material offered in the classroom.

EPBS 315 Nonparametric Data Analysis 1.2; 2 cr.
Nonparametric tests are often used in place of their parametric counterparts when certain assumptions about the underlying population are questionable. This course introduces the students to the theory and applications of nonparametric statistics. Methods include estimation and testing of hypotheses for the one sample location problem, two sample location problem, multi-sample location problem, correlation, regression, and tests for proportions. Prerequisite: EPBS 310 or graduate basic biostatistics course.

EPBS 316 Epidemiology, Prevention and Control of Communicable Diseases 2.0; 2 cr.
This course is based on service learning, a pedagogical approach that "combines academic instruction, meaningful service to the community and critical reflective thinking to enhance student learning and social responsibility. Service learning differs from volunteerism and internship through its use of structured, critical inquiry and the importance placed on establishing partnerships with communities and generating mutual benefit." Service learning allows students to experience non-traditional classroom teaching, which is a way of "sharing" and "receiving" knowledge and expertise with and from the community partners involved. This will lead to enhanced learning for students and a greater benefit to the community.

EPBS 317 Epidemiology of Non-Communicable Diseases and Mental Health Disorders 1.5:1.5; 2 cr.
The course will begin with a comprehensive overview of Non-Communicable Diseases (NCDs) and Mental Health Disorders (MHDs), and then proceed with the two modules. Module 1 focuses on the epidemiology of select MHDs that are major sources of morbidity, mortality and disability worldwide and in the region. The second module focuses on major NCDs and their shared behavioral risk factors. The course is designed to advance both epidemiological knowledge and skills. The lectures will provide the students with a summary of the epidemiological evidence of a select NCD/MHD, presenting the latest available estimates on morbidity, mortality, and burden, as the main commercial and psychosocial determinants, as well as evidence-based effective prevention strategies and interventions. During the discussion session, and through various learning modalities (article discussion, case scenarios, short videos) the students will address the issue from an epidemiological perspective, critically appraising the methodological issues related to measurement, study design, data interpretation as well as control/prevention strategies. Throughout the course, students are expected to learn about and understand the epidemiology of the selected NCDs and MHDs via: (1) active listening and participation during the lectures and discussion sessions; (2) careful reading and evaluation of the required peer-reviewed journal articles and other sources of information; and (3) critically reviewing the literature when working on their own paper. Prerequisites for the course include EPBS300 or any equivalent graduate or undergraduate-level course in epidemiology.

EPBS 318 Introduction to Mathematical Modelling of Infectious Diseases 1.5:1.5; 2 cr.
Mathematical modelling of infections is increasingly developing as a key tool for understanding transmission patterns, emergency planning, and assessing control strategies - hence playing a critical role in policy making. This graduate course introduces students to the basic concepts of mathematical modelling of infectious diseases and allows them to acquire a hands-on practical experience in designing simple, yet informative models to predict the course of epidemics and estimate the impact of interventions. The course consists of lectures and practical sessions that include class exercises and discussion, computer applications, and article discussion. Applications to different types of infectious diseases and control interventions will be discussed. Students will build and run basic disease models using Berkeley Madonna, a user-friendly mathematical package. Students should be comfortable with basic calculus and have an interest in infectious diseases epidemiology.

EPBS 319 Advanced Quantitative Methods in Epidemiology 1.0; 1 cr.
This course will provide students with an overview of the theory and applications of advanced quantitative methods in epidemiology. The purpose of the course is to assist students in answering complex etiological research questions in epidemiology. The course includes two main modules: (1) Cox models with time varying coefficients, (2) Competing risk analysis. Prerequisites: EPBS 320, EPBS 313 or instructor's approval.

EPBS 320 Epidemiology Beyond the Basics 1.5:2; 2 cr.
The course provides advanced knowledge of epidemiologic studies and covers in details methodological issues concerning the design and the analysis of observational studies (cross sectional, case control and cohort studies). It also introduces design and analysis of randomized clinical trials. The course addresses key validity issues related to selection of study subjects, accuracy of measures of measures, confounding bias, and discusses effect modification. The course is blended and relies on didactic teaching, applications on and class discussion of selected articles, online discussion sessions, and designing of two observational studies Ethical considerations in epidemiologic research are discussed throughout the course. Prerequisites: (EPBS 300 and EPBS 310) or (SHRP 300 and SHRP 310), or consent of instructor. Equivalent to SHRP 320.

EPBS 320A Epidemiology Beyond the Basics II 1.0; 1 cr.
The course complements and expands on materials and activities covered in EPBS 320 (Epidemiology beyond the Basic), which provides advanced knowledge of epidemiologic studies and covers in details methodological issues concerning the design and the analysis of observational studies (cross sectional, case control and cohort studies) as well as key validity issues. EPBS 320A aims at reinforcing students' skills in designing and evaluating observational epidemiological studies. Topics discussed include causality, potential outcomes, and counterfactuals, directed acyclic graphs (DAGs), confounding and biases, and key features of setting up a cohort study and challenges in follow up. Prerequisites: EPBS 320 or SHRP 320.

EPBS 321 Design and Analysis of Clinical Trials 1.2; 2 cr.
A course that focuses on issues in the design and organization of randomized controlled clinical trials: ethical and legal issues, patient selection, recruitment, masking and randomization, endpoint definition, protocol development, and statistical analysis. Designs such as cross-over designs, factorial-designs, and meta-analysis are discussed. Prerequisites: (EPBS 300 and EPBS 310) or (SHRP 300 and SHRP 310), or consent of instructor.

EPBS 322 Special Topics in Epidemiology 1-3 cr.
A course that covers selected topics of special interest to trainees in epidemiology. Examples include assessment of disease burden using epidemiological studies, occupational epidemiology, epidemiology of aging, epidemiology of maternal-child problems, or nutritional epidemiology. Prerequisite: EPBS 300 or consent of instructor.

EPBS 324 Special Topics in Biostatistics 1-3 cr.
A course that covers selected topics in biostatistics of special interest to researchers and trainees in epidemiology and biostatistics. Prerequisite: EPBS 310 or consent of instructor.

EPBS 327 Field Epidemiology 0.2; 1 cr.
The field epidemiology course is an introduction to the concepts of epidemiology as it relates to applied field epidemiology. This course covers the key steps of an outbreak investigation and introduces main concepts of surveillance, its analysis and importance. This course focuses on problem-based, interactive methods: students can have a hands-on experience in dealing with basic outbreak investigation steps and surveillance data through real life case-studies which are discussed in group-work in class. Prerequisite: EPBS 300 or any undergraduate or graduate basic epidemiology course.

EPBS 328 Systematic Review and Meta-Analysis 2.2; 3 cr.
The course is structured around the steps of executing a systematic review of trials of interventions: specifying the Population Intervention Comparison Outcomes (PICO) question, searching for potentially relevant articles; selecting eligible studies; abstracting data; assessing risk of bias, conducting a meta-analysis; grading the quality of evidence; and interpreting results. PICO is an acronym referring to the components of the question forming the basis for a research study, a systematic review in this case: Population, Intervention, Comparison, Outcomes. Weekly assignments are designed to guide students in the production of a systematic review. The final paper consists of a report of the systematic review suitable for publishing in a peer-reviewed journal. This is a relatively intensive course and students need to allocate adequate time and effort. Prerequisites: (EPBS 310 and EPBS 300) or (SHRP 300 and SHRP 310), or consent of instructor.

EPBS 336 Tutorial in Epidemiology 1-3 cr.
Tutorial in epidemiology.

EPBS 337 Tutorial in Biostatistics 1-3 cr.
Tutorial in biostatistics.

EPBS 365 Practicum 0.30; 2 cr.
The practicum offers students the opportunity to practice their obtained knowledge and gain research experience in epidemiology and biostatistics mainly through the design of epidemiological studies or data collection and analyses of various types of data. Students are advised internally by a faculty member and externally by an outside preceptor in the practicum site. Practicum sites may include the Ministry of Public Health, Ministry of Social Affairs, non-governmental agencies, UN agencies (UNICEF, ESCWA, UNFPA), and health services organizations. Prerequisites: Completion of all, or all but one, of the core and/or concentration courses. Prerequisite: PBHL 399A.

EPBS 366 Practicum 0.15; 1 cr.
Practicum for students who receive a partial waiver. Prerequisite: PBHL 399A.

EPBS 395 Comprehensive Exam 0 cr.
Comprehensive exam.

EPBS 399 Thesis 6 cr.
Thesis.

EPBS 403 Advanced Epidemiology Methods: Case Control and Cohort Studies 2.2; 3 cr.
The main objective of the course is to enhance students' ability to design and conduct unbiased and efficient research. It is specifically designed to expand students' understanding of the methods of sampling for case control and cohort studies, and train students on hybrid designs (case cross over designs, nested case controls and casecohort). Prerequisite: EPBS 320 or its equivalent.

EPBS 404 Introduction to Causal Inference Methods 2.0; 2 cr.
This course provides an overview and understanding of key concepts and theoretical frameworks of causal inference without and with models. The course will cover causation in health research, Directed Acyclic Graphs (DAGs), and epidemiologic methods for causal inference such as inverse probability weighting and marginal structural models. Other topics such as mediation and instrumental variables will also be covered. The course will involve lectures and practical applications through journal club, lab sessions with data, homework, and class projects. Prerequisite: EPBS 320 or SHARP 300/320 (or any equivalent intermediate level course in epidemiology and basic biostatistics).

EPBS 405 Social and Behavioral Factors in Epidemiology 2.0; 2 cr.
This course is about the influence of the social context on the distribution of disease and its consequences, and about conducting epidemiological and public health research that is mindful of social and behavioral factors. While social epidemiology has come to be identified with the study of social inequalities, understanding how society and culture influence health requires a broader view of social determinants than the statistical analysis of the effects of socioeconomic variables on health outcomes. The course situates itself at the intersection of epidemiology and the social sciences. It draws on a range of approaches to illustrate the ways that social forces affect health. Prerequisites: PBHL 310, EPBS 300, and EPBS 310(or an equivalent basic epidemiology course).

EPBS 406 Epidemiology in Action 2.2; 3 cr.
This course aims at exploring different public health modalities, strategies, interventions, and approaches during man-made (conflict) and natural disasters. It also enables public health practitioners capable of selecting those most relevant to each situation's type, context and type of population affected. Skills needed in the management of disaster situation will be introduced as an integrated component, such as coordination and communication skills. In natural disasters, outbreak investigation methods will be included, using case studies of local, regional, and global disease outbreaks. The response plan to natural and man-made disasters such as storms and earthquakes, injuries from armed conflicts will be developed. Prerequisites: EPBS 300 (or its equivalent of basic epidemiology course).

EPBS 410 Applied Multivariate and Longitudinal Methods in Health Sciences 2.2; 3 cr.
Data are often complicated by high dimensionality and inter-observation correlations. This course aims at providing a solid grounding in the analysis of multivariate data, repeated measure data and correlated data. Specifically, students will learn to (1) distinguish between univariate and multivariate outcomes, (2) group comparison for multivariate outcomes using One-Way and Two-Way MANOVA, (3) multivariate analysis using General Linear Model, (4) analysis of longitudinal data and (5) analysis of correlated clustered data. SAS, STATA and SPSS will be used in this course as statistical packages. Prerequisites: EPBS 310, EPBS 313, and EPBS 312.

EPBS 411 Statistics for Psychosocial Research Psychometrics and Measurement of Latent Constructs 2.2; 3 cr.
This course will introduce students to the principles of measurement, reliability, and validity, as well as latent-variable based measurement models, including factor analysis (exploratory and confirmatory). Students will learn about the basic principles of classical test theory and latent variables, and using Stata; will learn how to conduct reliability and validity tests, including exploratory and confirmatory factor analysis. Students will also learn the basic steps and components of scale development, and critically appraise the process of validation of a scale. Students will be able to also read and evaluate scientific articles relevant to measurement in public health. The instructional method consists of lectures and applied sessions on Stata. Prerequisites: EPBS 300 and EPBS 310.

EPBS 440 Doctoral Seminar 0 cr.
Doctoral seminar.

EPBS 445 Writing Research Grants 0 cr.
Writing research grants.

Thesis Courses

EPBS 480 Qualifying Exam Part I: Comprehensive Exam 0 cr.
Every term.

EPBS 481 Qualifying Exam Part II: Defense of Thesis Proposal 0 cr.
Every term.

EPBS 482 PhD Thesis 3 cr.
Every term.

EPBS 483 PhD Thesis 6 cr.
Every term. Listed as 483A when registered the second time.

EPBS 484 PhD Thesis 9 cr.
Every term.

EPBS 486 PhD Thesis 0 cr.
Every term. Taken after 24 credits of thesis are completed in case further thesis work is necessary.

EPBS 487 PhD Thesis Defense 0 cr.
PhD Thesis Defense.

Department of Health Promotion and Community Health

Chairperson	Makhoul, Jihad
Professors	Abdulrahim, Sawsan; Makhoul, Jihad
Associate Professors	Kabakian-Khasholian, Tamar; El Kak, Faysal (Joint appointment with FM)
Lecturers	Al Barazi, Rana; Kanj, Mayada; Khawam, Grace
Instructors of Public Health Practice	Kalot, Joumana; Najem, Martine
Part-time Instructor	Hassan, Nabil
Affiliate	Saracini, Federico
Research Affiliate	Salloum, Ramzi

Departmental courses are designed to introduce students to the field of health promotion and community health. Health promotion is the process of enabling people to increase control over and improve their health through a wide range of social and health-related interventions. Community health is concerned with the improvement or maintenance of the health characteristics of communities. Emphasis is placed on the role of health promotion specialists to design, implement and evaluate health-promoting interventions with participation of communities and groups. Ethical issues in health promotion and community health are emphasized in all courses.

Course Descriptions

HPCH 301 Health Communication 2.0; 2 cr.
Health communication is an area of study that examines how human and mediated communication can influence the outcomes of health-care and health promotion efforts. This core MPH course introduces the students to the basic concepts of health communication and its scholarship, including the focal areas of health literacy and patient-provider communication, social marketing, health campaigns, risk communication, crisis communication, and health advocacy. In the course, students will discuss the ways communicating about health is influenced by individual, social, and societal factors. The course will provide students with tools to critically evaluate existing health campaigns and to outline strategies to effectively communicate with different audiences about health-related topics. They will also design culturally appropriate, evidence-based health messages, designed for specific publics. Through this course, students will also learn how to effectively communicate scientific information with different audiences (e.g., general population, experts, the media), appropriately choosing oral and written materials and communication channels.

HPCH 331 Theories in Health Promotion 2.0; 2 cr.
This course focuses on theories utilized to understand health determinants and outcomes and to promote individual and population health. Students will critically examine perspectives from health promotion and other social science disciplines through theoretical readings and empirical case studies. They will also discuss the merits and challenges of using theory to analyze health and to intervene at multiple levels from the individual to the structural levels. Prerequisite: PBHL 312 or PBHL 312A or (PHNU 300 (concurrent). Open to students majoring in PHNU.

HPCH 332 Community Health Promotion, Mobilization and Advocacy 2.0; 2 cr.
In this course, students learn about the notion of community health, and the principles of community organizing to identify needs, values and resources in a community setting in order to develop an advocacy plan that will address a priority community health issue. Topical areas cover community organizing, types of community assessments, prioritization, community based participatory approaches, advocacy strategies, and community organizing and advocacy ethics. Prerequisite: PBHL 312 or PBHL 312A.

HPCH 333 Social Marketing for Health Promotion 2.0; 2 cr.
In this course, students will learn the theoretical underpinnings of social marketing, a framework used to develop strategies aimed to address social and public health issues and to design effective, sustainable, and ethically sound public health campaigns. As a service-learning course, students apply concepts acquired into the development of a social marketing plan for a local community partner organization, responding to selected public health issues. This course is offered in face-to-face format and uses diverse models of teaching and learning styles, including service learning, providing students with an interactive and meaningful learning environment. Prerequisites: HPCH 331 and PBHL 303.

HPCH 334 Qualitative Research in Health Promotion 3.0; 3 cr.
The course develops learners' qualitative research skills to address a research question relevant to health promotion. Students engage through classroom discussions, role play and assignments to gain hands on experience in conducting qualitative research beyond class settings. Students learn about qualitative research designs and methods and then apply the research process by generating data, and analyzing the data to answer a research question of their choice. They will also learn how to evaluate the quality or rigor of a qualitative research proposal or manuscript. Topics include in-depth interviews, observations, focus groups, thematic analysis, research rigor and research ethics. Prerequisites: PBHL 310 and PBHL 312 or PBHL 312A.

HPCH 335 Implementation Research for Public Health 2.0; 2 cr.
This course introduces implementation research, its frameworks, methods, and applications. Through readings and case studies, students will develop an understanding of implementation strategies at the individual, organizational and policy levels, and will discuss issues related to sustainability and scaling-up. They will develop a project where they articulate an implementation research problem of importance in their context, identify implementation strategies, select the appropriate study design, and consider the ethical aspects of the work. This is a required course for all students enrolled in the graduate program on the WHO-TDR scholarship scheme. Prerequisite: PBHL 303.

HPCH 339 Tutorial in Health Promotion and Community health 1-3 cr.
A guided study in particular topics in health behavior and health education as defined by instructor and student.

HPCH 341 Special Topics in Health Promotion and Community Health - Special Populations 1-3 cr.
A course in which students explore the personal, social and community determinants that influence the health of special populations such as women, children and adolescents, or an aging population. Issues of assessment as well as design, implementation, and evaluation of interventions at a variety of levels to promote the health of such special populations are discussed.

HPCH 342 Special Topics in Health Promotion and Community Health - Exploring the Context of Intervention 1-3 cr.
A course in which students explore social and political determinants affecting health and health behavior in Lebanon, generally, and in rural and urban contexts, among others. Through group projects and investigations, students learn how culture, laws, policies, economics, kinship, and communal ties interact and produce health inequalities in Lebanon today. At the end of this course, students build up case studies analyzing social and political forces surrounding a contemporary health issue of their choice within a particular context.

HPCH 343 Forced Migration 3.0; 3 cr.
This course provides: 1) an introduction to key legal and theoretical frameworks on forced migration (internal and cross-border) and the meanings of the term refugee as a political and social construct; 2) a survey of global actors in the vast field of refugee humanitarian relief; and 3) a description and critique of the refugee "humanitarian relief industry." The course addresses forced migration as a global phenomenon, but synthesizes conceptual and legal writings on the subject with refugee experiences in the Arab region. It incorporates readings from multiple disciplines (including literature), invited talks by practitioners and activists, and learning opportunities outside the classroom. The course's thematic focus is health, broadly conceived, and its philosophical orientation is embedded in demands for human rights and justice for all refugees.

HPCH 365 Practicum 0.30; 2 cr.
A practicum in which students gain field experience in the assessment, development, implementation, and/or evaluation of interventions for health promotion at the individual, interpersonal, organizational, community or policy levels. Students integrate knowledge and theory learned in the classroom setting with the realities of public health practice. Sites for practicum can include community health centers, hospitals, local or international NGOs, governmental organizations, schools or academic field projects. Prerequisites: Completion of all, or all but one, of the core and/or concentration courses. Prerequisite: PBHL 399A.

HPCH 366 Practicum 0.15; 1 cr.
Practicum for students who receive a partial waiver. Prerequisite: PBHL 399A.

Department of Health Management and Policy

Chairperson	Kassak, Kassem
Professors	El-Jardali, Fadi; Saleh, Shadi
Associate Professor of Public Health Practice	Kassak, Kassem
Instructor	Germani, Aline
Instructors of Public Health Practice	Abou Samra, Clara; Bou Karroum, Lama; Fadlallah, Racha; Jamal, Diana
Part-time Lecturer	Kahhale, Joseph
Part-time Instructors	Chaya, Rima; Kanaan, Nivine

The Health Management and Policy Department (HMPD) advances the field of health systems, policy, and management through excellence in education, research and practice that is relevant to Lebanon and the Global South. HMPD is considered as a leader in producing health systems and policy research in the Arab world. Through the master of public health (MPH) program, HMPD provides graduate students with the skills they need to lead and manage healthcare organizations and systems. Research interests of departmental members include areas related to health policy, policymaking, health financing and management, human resources for health, quality of care, patient safety, accreditation, role of civil society in policy, health in conflict, and the role of community networks in impacting health.

HMPD prepares students and learners to become leaders and influencers in healthcare organizations and systems. The multidisciplinary curriculum at HMPD allows students to gain conceptual, analytical, and practical skills in health management, health policy and decision-making, strategic planning, human resources management, performance improvement, health information systems, budgeting, program and policy evaluation, and knowledge translation.

Throughout the years, HMPD has informed and influenced health systems, management practices and policies in Lebanon and the region. HMPD has strong connections to overseas institutions, and its faculty members have direct links with policymakers, stakeholders and influencers in Lebanon and the region. Our departmental members have a wide range of expertise not limited to Lebanon but also extending to the Arab region and beyond. In addition to their teaching, they are also engaged in research that is impact oriented and aims to improve health systems. Departmental members regularly engage with policymakers and stakeholders in effort to build and sustain collaborations and partnerships; students are regularly exposed to these interactions through course work and get the opportunity to listen to real life experiences and understand the roles of different stakeholders in the decision-making process.

Graduates from HMPD have assumed leadership roles in public health systems at the national, regional, and global levels. The department hosts the executive master of healthcare leadership (EMHCL) which is designed for professionals who have significant responsibility in the healthcare sector - including those from care delivery, pharmaceutical and product manufacturing, healthcare consulting, health management systems, insurance, patient advocacy, public health, policy, and regulation institutions. HMPD also has a Health Leadership Academy (HLA), an executive program that offers a set of consecutive modules, three days each, addressing key topics under the broad theme of leadership in healthcare and bringing hands-on experience of leading experts in the field.

Course Descriptions

HMPD 300 Health Systems Management 3.0; 3 cr.
This course is designed for public health graduate students to identify organizational and health system challenges and apply systems thinking in resolving them. The course is a core MPH module that examines the organization, delivery and funding of healthcare and addresses the main components, resources, and functions of health systems at several levels including national, regional, and international. It critically integrates analyses of structural biases and social inequities as barriers to equitable public health and healthcare systems. Although the course topics have relevance to national and regional challenges, an international comparative approach is adopted.

HMPD 306 A Workshop on Microeconomics for Healthcare 0 cr.
The course introduces students to the fundamental principles of economics, including demand and supply, opportunity cost, elasticity, and marginal analysis. Through these core economic principles, students will be able to understand how individuals, institutions, and markets make decisions. The course will draw on cases and examples from health and HealthCare systems, illustrating how economic principles are applied in real world contexts.

HMPD 314 Project Management 2.0; 2 cr.
A course that exposes students to current project management trends, best practices, and strategies that can aid in better management of projects and programs in healthcare settings.

HMPD 315 Performance Improvement 3.0; 3 cr.
HMPD 315 is a service-learning course that blends the theory and practice of performance improvement in healthcare settings. Special attention will be dedicated to discussing organizational culture for quality improvement, and the application of quality improvement tools to healthcare from a global perspective. Prerequisite: HMPD 300.

HMPD 318 Policy and Decision Making in Health Systems 2.0; 2 cr.
This course introduces students to concepts, approaches, and strategies to promote evidence-informed policy making in health systems. It provides students with the knowledge and skills of how to define and frame health systems and policy problems and assess underlying factors; develop and frame policy options; and assess options in terms of benefits, harms, risks, stakeholder reactions and implementation considerations. Students will be introduced to ways to use knowledge translation tools such as briefing notes, policy briefs and rapid response in order to promote the use of evidence in policy and to effectively communicate with policy makers to influence action. Real world health systems case studies will be provided in class. Prerequisites: PBHL 304 and HMPD 300.

HMPD 319 Strategic Management of Health Care Organizations 2.0; 2 cr.
A course that provides knowledge of fundamental strategic management skills applicable in healthcare organizations. Its purpose is to prepare students to think strategically and build knowledge to develop, implement and evaluate effective strategies in healthcare organization.

HMPD 320 Governance in Health Care 2.0; 2 cr.
The course examines the multiple levels of governance in healthcare systems, including theory, dynamics, approaches, dysfunctions, and challenges. The objectives of the course are to: (1) introduce students to governance and accountability at the organizational, clinical, national, regional, and global levels (2) convey an understanding of governance and accountability of different healthcare structures; and (3) examine actors roles, responsibilities, interactions and challenges at each level of governance, including the international; (4) Factual interaction with principal stakeholders to grasp the governance decision making process and the operation inside concerned institutions. This course will assist students in understanding the theory and practice of governance and accountability of healthcare. What does governance at different levels mean; how these levels are interrelated; how this operates in the real world; what are the implications of the existing challenges to achieving change – represent issues among the key questions that will be explored in this course.

HMPD 321 Foundations of Health Administration II 3.0; 3 cr.
A course that deals with current issues in healthcare, such as primary healthcare, healthcare reform, and integration of social sciences in health sciences.

HMPD 325 Quality Management and Accreditation in Health Care 2.0; 2 cr.
A course that examines at multiple levels the theory and practice of quality management and accreditation in healthcare organizations. The objectives of the course are to: (1) convey an understanding of quality of care, with particular attention to conceptual frameworks for continuous quality improvement, quality assessment, improvement and patient safety including approaches, methods and tools, (2) explain how to develop a quality improvement plan, performance indicators and measurement systems for quality and accreditation; and (3) address ethical issues related to quality management, risk management and patient safety with particular attention to Lebanon and the region.

HMPD 339 Tutorial in Health Management and Policy 1-3 cr.
Tutorial in health management and policy.

HMPD 342 Financial Management and Accounting in Health Care Organizations 3.0; 3 cr.
Financial Management and Accounting in Health Care Organizations covers significant issues in the areas of cost accounting, financial ratios and statement, working capital management, capital financing, cost analysis and rate setting, budgeting, reimbursement, contracting, and cost controls. The course has been developed to maximize student opportunities for independent analysis through the development of PC-based problem-solving applications, and through in-class discussion and evaluation of pertinent financial issues and problems. An emphasis is placed on the use of information generated through accounting and financial management systems to control operations in healthcare organizations. To promote such understanding, students receive problem-oriented assignments and examinations in which they can apply knowledge and reasoning techniques gained from this and other courses to reach logical decisions that would effectively control operations in the simulated exercises. Prerequisite: HMPD 300 or NURS 507.

HMPD 351 Health Economics 2.0; 2 cr.
This course builds on HMPD 306 and expands on the application of micro- and macroeconomics to healthcare. It will focus on the study of prices and markets in the health sector to help students develop competence in cost analysis and cost projections. Furthermore, it will examine socioeconomic disparities, provider payment mechanisms, and economic evaluations. Prerequisites: HMPD 300 and any of the following courses: HMPD 306, ECON 211, AGSC 212 or other undergraduate micro-economics course pending approval of course instructor.

HMPD 354 Special Topics in Health Management and Policy 1-3 cr.
A course that presents students with analytical tools for an in-depth understanding of current or emerging health policies that are debated in the healthcare industry, as well as tools for generating health policy documents.

HMPD 365 Practicum 0.30; 2 cr.
A course that constitutes an administrative residency program in a healthcare setting such as a hospital, insurance facility, governmental or non-governmental agency, or any other healthcare facility. Through hands-on experience, this practicum prepares students to assume increasing levels of responsibility with competence in these settings. Prerequisites: Completion of all, or all but, one of the core and/or concentration courses. PBHL 399A.

HMPD 366 Practicum 0.15; 1 cr.
Practicum for students who receive a partial waiver. Prerequisite: PBHL 399A.

Joint Programs

Scholars in Health Research Program (SHARP)

The scholars in health research program (SHARP) is a joint FM and FHS graduate program that consists of a 12-credit summer diploma, a 12-credit two-term diploma, as well as a 35-credit master's degree. Each option includes a mix of didactic training based on select core courses with implementation of a hands-on research practicum, training or thesis project. The program provides graduates with the required foundation to pursue a career in clinical and translational research.

SHARP's curriculum is modeled on similar programs in top-tier academic institutions in the US. It is the first of its kind in the region and has been polished by expert faculty over a decade since program launch. Synchronous and asynchronous sessions, VOPs, tutorials, hands-on applications and lab sessions provide an unprecedented enriching experience.

For more information, refer to Faculty of Medicine and Medical Center (FM) section in this catalogue.

MS in Public Health Nutrition

The MS in public health nutrition is the first graduate-level program of its kind in Lebanon and the MENA region. It is offered jointly by the Faculty of Agricultural and Food Sciences and the Faculty of Health Sciences and builds on the strong expertise of each of these schools in the fields of nutrition science and public health, respectively.

The MS in public health nutrition program adopts a multi-disciplinary approach as it aspires to train and equip highly qualified individuals to respond to national and regional needs in the field of public health nutrition by providing them with strong skills in nutrition, policy and program planning, health promotion, monitoring, evaluation, and research.

For more information, refer to the Faculty of Agricultural and Food Sciences section in this catalogue.

Diploma

Diploma in Humanitarian Engineering and Public Health Innovations

The diploma in humanitarian engineering and public health innovations is a joint FHS/ MSFEA interdisciplinary diploma.

The diploma is open to professionals as well as AUB students currently enrolled in graduate programs from all majors wishing to gain academic knowledge and skills in the field of humanitarian engineering and health innovations. The program is a multidisciplinary offering that provides graduate students and professionals with the skills required to find innovative design solutions for challenges faced in humanitarian settings by taking into consideration two complementary perspectives, public health perspective and engineering perspective.

Learning Outcomes of the Diploma

Students who complete the diploma will be able to:

1. Apply participatory needs assessment tools and analyze the different dimensions of a public health problem.
2. Apply formal design methods to develop practical, feasible, scalable, and sustainable humanitarian engineering and public health innovations and interventions.
3. Apply skills required to manage complex projects while working in multidisciplinary teams.
4. Demonstrate entrepreneurial skills to take a solution/intervention from prototype to product.
5. Articulate and adhere to ethical standards in the process followed and, in the intervention, designed.
6. Present and document a problem and its solution to a diverse target audience.

Requirements for the Diploma

It is composed of 15 credits of course work that include:

- HEHI 301, “Foundations of Humanitarian Engineering and Public Health Innovations”
- HEHI 302, “Capstone: Humanitarian Engineering and Public Health Innovations”
- One design course from the following list: AGSC 330, ARCH 344, CHEN 619, CHEN 798A, CIVE 552, CIVE 601, CIVE 628, CIVE 686, EECE 675, ENMG 663, ENMG 698E, ENSC 633, ENST 300, FSEC 310, FSEC 315, LDEM 633, NFSC 306, PBHL 303, URDS 664, URPL 641
- One ethics course from the following list: MHRM 304, PSYC 305
- One social entrepreneurship course from the following list: ENMG 654, ENTM 320, MFIN 359

HEHI 301 - "Foundations of Humanitarian Engineering and Public Health Innovations"; 3 cr.
This is a multidisciplinary course that covers the fundamentals of designing solutions for health challenges faced by disadvantaged populations. It introduces tools for identifying humanitarian and/or development needs and designing practical, scalable, and sustainable solutions and interventions. The course is offered to students from all majors. Students will be exposed to health and health system challenges in addition to design fundamentals including participatory needs assessment, formal multidisciplinary design processes, and relevant technologies and tools with real world applications and case studies.

HEHI 302 - "Capstone: Humanitarian Engineering and Public Health Innovations Capstone"; 3 cr.
The capstone project course is an interdisciplinary service-learning design course focused on development and humanitarian engineering solutions for health challenges. In the capstone, students apply all tools learned in HEHI 301. Students work in multidisciplinary teams with disadvantaged communities, under joint supervision of at least two mentors from MSFEA, FHS, and other faculties. The capstone is divided into two sub-courses, HEHI 302A (1cr.) and HEHI 302B (2cr.), and must be registered in 2 consecutive terms. HEHI 302A has as a prerequisite: HEHI 301. HEHI 302B has as a prerequisite HEHI 302A.

If the student has achieved one or more of the core competencies in ethics or entrepreneurship through previously passed undergraduate or graduate courses, only one elective course can be waived. The student will have to register for at least one course from the approved list of design courses, and another course from either the list of ethics courses or the list of entrepreneurship courses.

If the student has achieved two or all of the core competencies through undergraduate courses, only one course can be waived, and the student will have to register for at least one course from the approved list of design courses, and another course from either the list of ethics courses or the list of entrepreneurship courses.

Thesis/capstones of graduate students can be counted towards the fulfillment of the diploma. Students interested to enroll in the diploma are encouraged to inform the coordinators of the program at healthengineering@aub.edu.lb to benefit from adequate advising on study plans and ensure completion of all requirements.

The diploma is planned to include arrangements to encourage on-going graduate students to enroll with no or limited additional credit burdens. It is composed of 15 credits of graduate course work.

Eligibility Criteria

For professionals:

To be eligible for admission to the diploma program, applicants must hold an undergraduate university degree recognized by AUB with a GPA of at least 3.0 or demonstrate "reasonable potential for academic success."

For AUB students:

To be eligible for admission to the diploma program, applicants must be in good academic standing. Applications are reviewed by the Steering Committee of the Humanitarian Engineering Initiative, and admissions recommendations are voted on by both MSFEA and FHS Graduate Studies Committee.

Registration Process

Professionals who want to pursue the diploma should submit an application to the Office of Admissions. Current AUB graduate students need to fill out a petition form for completion of diploma.

Certificates

Certificate in Innovation Management in Contexts of Uncertainty

Program Overview

The certificate is a 7-credit program offered to Mastercard Foundation Scholars program students from all majors. It aims to introduce students to critical thinking, collaboration across various fields, project management, and the cultivation of resilience skills that are essential for professional growth. Through course work, and the experiential learning course, the certificate will build their capacity to create practical and innovative solutions in their jobs, particularly in contexts of uncertainty. By focusing on real-world applications and hands-on experiences, the program ensures that scholars are not only prepared to face professional challenges but also capable of making transformative contributions to society in times of need.

Program Competencies

Students who complete the certificate will be able to:

PLO1: Identify assets, resources, and problems of population groups in fragile, low-resourced and/or settings of uncertainty using participatory approaches.

PLO2: Demonstrate design techniques and entrepreneurial skills to develop, implement, and scale-up appropriate innovations.

PLO3: Incorporate multidisciplinary perspectives to manage complexity while adhering to ethical standards.

PLO4: Reflect critically on how crises impede effective action and, on the skills, and attitudes needed to mitigate challenges.

The certificate is composed of 7 credits that include:

HEHI 301 - “Foundations of Humanitarian Engineering and Public Health Innovations”; 3 cr.
This is a multidisciplinary course that covers the fundamentals of designing solutions for health challenges faced by disadvantaged populations. It introduces tools for identifying humanitarian and/or development needs and designing practical, scalable, and sustainable solutions and interventions. The course is offered to students from all majors. Students will be exposed to health and health system challenges in addition to design fundamentals including participatory needs assessment, formal multidisciplinary design processes, and relevant technologies and tools with real world applications and case studies.

HEHI 303 - “Experiential Learning”; 4 cr.
A service-learning graduate course that revolves around managing complex projects while working in multidisciplinary teams and collaborating closely with community partners within fragile low-resourced settings. Multidisciplinary teams will conduct background research, develop needs assessments with relevant stakeholders, design and create solutions/interventions that are tested and refined with community partners, and develop a business plan; all under joint supervision of two mentors from two different disciplines. The course will be offered in the winter term. Prerequisites: HEHI 301.

This certificate is also offered in an online format for Mastercard Foundation Scholars program students enrolled in online academic programs.

Certificate for Public Health in Complex Emergencies and Protracted Crises

Program Overview

The certificate is an 8-credit program offered to MPH and MS students at FHS and focuses on the determinants of health in contexts of complex emergencies and protracted crises. The certificate prepares students to address public health challenges in complex emergencies using an evidence-informed and ethically grounded approach. Students gain an understanding of how humanitarian systems operate and how health needs are rapidly assessed and prioritized in crisis settings. They develop the ability to generate and interpret timely evidence and to design, implement, and evaluate interventions that respond to the realities of emergency contexts. Emphasis is placed on understanding the broader determinants that shape health outcomes and translating analysis into practical action. Through coursework, a practicum at a relevant site, and the completion of an ILE, thesis, or project (according to program requirements), the certificate will provide the opportunity for students to gain applied experience relevant to public health practice in complex emergencies.

Program Competencies

Students who complete the certificate will be able to:

- Demonstrate an understanding of humanitarian principles, international legal frameworks, and the structure and coordination mechanisms of the humanitarian system.
- Apply public health tools and research methods, including rapid assessments, to generate, interpret, and communicate evidence relevant to complex humanitarian settings.
- Demonstrate the capacity to plan, implement and evaluate a health intervention in a variety of humanitarian contexts.
- Analyze the political, social, environmental, economic and commercial determinants that shape health outcomes in complex humanitarian settings.
- Apply ethical reasoning in humanitarian public health practice.

Eligibility to Apply

Students must be enrolled in any MPH concentration or MS program at FHS and have a demonstrated interest in improving public health in humanitarian emergencies. A minimum cumulative GPA of 3.7 at the time of application submission is required.

Certificate Requirements

Students must complete the application form, attach an updated CV, and provide the name of their academic adviser and one additional reference (academic or professional). All documents should be sent to Ms. Sawsan Awada at sa175@aub.edu.lb. Before applying to the certificate program, students should consult with their registration advisers to understand enrollment process.

The certificate is composed of 12 credits that include:

Two Required Courses

- **An online course - "Building a Better Response"; 0 cr.**
  BBR Certificate is an online self-paced course that aims to enhance the effectiveness of NGOs and other humanitarian actors in international humanitarian coordination systems. The curriculum is designed to fill knowledge gaps and strengthen the capacity of humanitarian professionals to engage more effectively in coordination efforts, thereby improving responses to the needs of affected populations.
- **PBHL 308 - Research Methods in Humanitarian Settings; 0 cr.**
  The workshop will aim to: 1) introduce students to the definition, types, and management of humanitarian emergencies; 2) enhance their methodological skills to conduct research and evaluation in complex humanitarian and disease outbreak settings; 3) prepare them to identify and discuss solutions to practical, conceptual, and ethical challenges in humanitarian response. Prerequisites: PBHL 310 and (PBHL 312 or PBHL 312A).

One 3 credit course from the selection below:

- **HPCH 343 - Forced Migration and the Humanitarian Relief System; 3 cr.**
  This course provides: 1) an introduction to key legal and theoretical frameworks on forced migration (internal and cross-border) and the meanings of the term refugee as a political and social construct; 2) a survey of global actors in the vast field of refugee humanitarian relief; and 3) a description and critique of the refugee "humanitarian relief industry." The course addresses forced migration as a global phenomenon, but synthesizes conceptual and legal writings on the subject with refugee experiences in the Arab region. It incorporates readings from multiple disciplines (including literature), invited talks by practitioners and activists, and learning opportunities outside the classroom. The course's thematic focus is health, broadly conceived, and its philosophical orientation is embedded in demands for human rights and justice for all refugees.
- **HEHI 201/301 - Foundations of Humanitarian Engineering and Public Health Innovations; 3 cr.**
  This is a multidisciplinary course that covers the fundamentals of designing solutions for health challenges faced by disadvantaged populations. It introduces tools for identifying humanitarian and/or development needs and designing practical, scalable, and sustainable solutions and interventions. The course is offered to students from all majors. Students will be exposed to health and health system challenges in addition to design fundamentals including participatory needs assessment, formal multidisciplinary design processes, and relevant technologies and tools with real world applications and case studies.

A practicum, ILE, thesis, or project focused on public health in complex emergencies, tailored to the student's program:

- For MPH students, their practicum and ILE would both need to be focused on topics related to public health in complex emergencies. The practicum would need to take place at a humanitarian response site or organization engaged in emergency or crisis-related activities. The students must reinforce at least one competency of the certificate in the ILE project.

  For MS- EH students, their thesis or project would need to be focused on relevant to public health in complex emergencies. For MS-EPI, their thesis would need to focus on public health in complex emergencies.

Online Programs

Executive Master in Health Care Leadership (EMHCL)

Program Description

The executive master in health care leadership (EMHCL) is designed for professionals who have significant responsibility in the healthcare sector, including those from healthcare delivery, pharmaceutical and product manufacturing, healthcare consulting, health management systems, insurance, patient advocacy, public health, and policy and regulatory institutions. The program seeks to identify a highly qualified and diverse student cohort. Candidates representing a broad range of experience in the healthcare sector are chosen for each cohort to ensure a rich peer-to-peer learning experience.

Program Aims and Goals

The EMHCL program's overall objective is to transform learners into leaders in the healthcare sector by expanding their knowledge in the field of healthcare management and administration. Through case-based learning, the program will enhance the capacity of participants in leadership and decision-making skills. This will help them shape local and national policies and apply their managerial skills and knowledge to tasks that range from problem solving of highly technical problems to dealing with socio-cultural complexities.

Along the journey, participants will be equipped with a wide spectrum of tools, skills and methods derived from multiple disciplines to facilitate their transformation from learner to leader. These shall include conflict management, problem-solving, decision-making, systems thinking, planning and implementation, analytical thinking, emotional Intelligence, and policy analysis, to name a few. Furthermore, it will enhance their implementation and operation of healthcare practices know-how in varying contexts, all the while ensuring the use of evidence-based practices and conforming to ethical principles.

Program Mission

The EMHCL is an innovative academic program to enhance the knowledge and skills of current and future generations of healthcare leaders. The program is tailored to the needs of the healthcare sectors in the Middle East and North Africa region, with the aim of advancing public health knowledge and practice.

Format and Credits

The EMHCL is an online program designed to provide learners with a comprehensive curriculum, emphasizing group work as central to many of the activities and assessments. It offers a flexible yet interactive curriculum delivery, where courses are built through a mix of engaging asynchronous self-contained modules, providing learners the flexibility to adapt their learning process to their busy schedule.

Healthcare entrepreneurs/consultants and non-healthcare providers who wish to acquire the skills and knowledge needed for a career change into the healthcare sector can join the program. Enrollees in the Health Management and Leadership (HML) have the opportunity to transfer their credits towards the EMHCL program. The program requires 18 months to complete; on average, a 1-credit course demands 8-10 hours per week, including time spent reviewing lectures and learning materials. Learners are expected to attend one Q&A synchronous session per week, although this session is optional and will be recorded.

Interactive Learning Experience

The online courses are strategically designed to build an interactive space for both the learners and the course facilitator. The LMS (Moodle) plays an integral role in providing this space through its offered tools. A prominent example would be the discussion forums that operate as the main area for general messaging and announcements, for instructor-student support on course deliverables, and a reference for all course materials and submissions dues.

Program Features

The following are key features of our EMHCL program at AUB:

- Regional and international focus: The program is tailored to the needs of the healthcare sectors internationally while focusing on the Middle East and North Africa region. It aims to advance public health knowledge and practice to enhance and improve healthcare outcomes.
- Significant topics: The EMHCL covers topics that are essential for executives to enhance their skills learners and for learners looking for developing leadership skills.
- Interactive learning experience: The program consists of a series of modules that cover a range of topics related to EHCL. These modules will include case studies, problem-solving assignments, group and individual projects, and experiential learning.
- Capstone: Integrated capstone in healthcare leadership.
- Experienced instructors: The FHS faculty members have intimate knowledge of the challenges and opportunities for change and improvement in health systems in the region. The experienced instructors will provide participants with personalized feedback and support throughout the program.
- Flexible schedule: The modules are delivered online in a specific sequence and can be completed at the participant's own pace asynchronously.
- Learner Assessments: Assignments throughout the modules to evaluate learners.

Admission Requirements

Applicants are considered for admission to the program if they meet the minimum admission requirements outlined under the Admissions section of this catalogue. Applicants to the program will be evaluated based on their academic and professional achievements with a minimum of a bachelor's degree recognized by AUB, record of previous professional experience (a minimum of three years), two letters of recommendation (academic and professional), and a personal statement. Applicants must be currently employed in a managerial post and demonstrate leadership potential and prospects for academic and professional success. They must also meet the Readiness for University Studies in English (RUSE) as stipulated in the Admissions section of this catalogue.

Applicants who fail to meet the RUSE may be eligible to take the university preparatory program (UPP) graduate course or enroll in other intensive English courses depending on their test scores. Their enrolment will be contingent upon passing these courses. Furthermore, applicants might be interviewed as part of the selection process. The decision about admission to the program will be based on a thorough review of student applications, supporting documents and the interview.

Probation

Students are evaluated for potential placement or removal of probation upon their completion of every 9 credit hours (minimum) in the program.

Placement on Probation

Students are placed on probation if one of the following occurs:

- They fail any graduate course taken for credit (passing grade is C+).
- They fail to obtain a minimum GPA of 3.3 on at least 9 credit hours.

Students with an admission score (cumulative and major averages) between GPA 3.0 and 3.3 will be admitted on probation.

Removal of Probation

- Students placed on probation due to GPA must remove the probation at the end of the following term by attainment of a cumulative GPA of at least 3.3.
- Students placed on probation due to course failure should retake the course the next time it is offered and achieve a minimum passing grade of C+. In case this condition cannot be met, students in consultation with the adviser must petition the faculty/school Graduate Studies Committee to retake the course.

Graduation Requirements

To be eligible for graduation from the EMHCL program, students must accomplish the following:

- Pass all required courses with a minimum grade of 70 (C+).
- Must have attained a cumulative course GPA of 3.3 or above.
- Must not be on probation by the time the coursework is completed.
- Must have completed the minimum credit hours of coursework designated by the specific program (45 credits).
- Must have completed project (capstone) requirements for the non-thesis option degrees.

Curriculum

The EMHCL curriculum consists of 21 courses, totaling 45 credit hours, distributed across three healthcare themes which include foundation, advanced managerial functioning, and health systems policy and reform.

Theme I: Foundation

- EHCL 300 Managing Healthcare Organizations (3 credits)
- EHCL 301 Communication and Behavioral Change for Health (2 credits)
- EHCL 302 Epidemiology in Health Care (1.5 credits)
- EHCL 303 Health Economics (2 credits)
- EHCL 304 Statistical Tools and Analysis (2 credits)
- EHCL 305 Research Methods and Application (3 credits)
- EHCL 306 Evidence Based Management (1.5 credits)

Theme II: Advanced Managerial Functioning

- EHCL 307 Leadership (3 credits)
- EHCL 308 Marketing in Healthcare (1.5 credits)
- EHCL 309 Financial Accounting and Management (2 credits)
- EHCL 310 Health Informatics and Information Technology (2.5 credits)
- EHCL 311 Human Resources Management (2 credits)
- EHCL 312 Performance Improvement and Innovation (1.5 credits)
- EHCL 313 Data and Decision Making (Use of IT) (1.5 credits)
- EHCL 314 Advanced Program Planning and Evaluation (2 credits)
- EHCL 315 Strategic Planning and Management (2 credits)

Theme III: Health Systems Policy and Reform

- EHCL 316 Organizational Restructure and Reform (1.5 credits)
- EHCL 317 Ethics and Law (1.5 credits)
- EHCL 318 Policy, Politics, and Decision Making (2 credits)
- EHCL 319 Communicating with Policy Makers (3 credits)
- EHCL 320 Capstone in Leadership (4 credits)

Healthcare Management and Leadership (HML) Online Diploma

Program Description

The health management and leadership (HML) is an online graduate academic diploma that provides a unique perspective on healthcare leadership by integrating best global practices with region-specific challenges. The program equips current and future healthcare leaders with the skills and knowledge required to navigate complex challenges and drive innovation, resulting in improved healthcare outcomes and the delivery of high-quality care. Provide distinctive education to prepare learners for leadership roles across a variety of healthcare settings, including hospitals, clinics, health systems, healthcare enterprises/ consultancies and other healthcare organizations.

Program Aims and Goals

- Address the shortage of skilled healthcare leaders in the industry and provide a pipeline of talented and skilled healthcare leaders.
- Prepare individuals to lead healthcare organizations.
- Consider all the challenges of the healthcare industry and incorporate regional experiences.
- Provide professional networking opportunities.
- Implement the program at an opportune time to address market needs.

Program Learning Outcomes

- Apply systems thinking, program planning, and ethical leadership principles to resolve organizational problems and promote healthcare equity and social justice.
- Demonstrate leadership skills by understanding leadership perspectives and tools, applying leadership insights in simulated settings, and utilizing team-building skills to facilitate group dynamics.
- Apply conflict resolution theories and techniques to resolve conflicts and disputes in healthcare organizations and community initiatives.
- Analyze institutional values and culture and how these impact key institutional functions.
- Apply marketing, finance, and human resources principles in the decision-making process.
- Apply quality and performance improvement concepts to address organizational performance issues.
- Plan and promote institutional development and change, and utilize health information systems to successfully manage and lead healthcare organizations.
- Integrate the knowledge, analytical and problem-solving skills gained through the program into a comprehensive operational capstone project, that demonstrates innovative leadership approaches in changing and reforming health systems.

Program Features

The following are key features of our HML online academic diploma program at AUB:

- Regional and international focus: The program is tailored to the needs of the healthcare sectors internationally while focusing on the Middle East and North Africa region. It aims to advance public health knowledge and practice to enhance and improve healthcare outcomes.
- Significant topics: The HML Diploma covers topics that are essential for learners looking for developing leadership skills. These topics include: healthcare systems, strategic management, human resource management, information and material management, performance improvement and innovation, marketing, and leadership.
- Interactive learning experience: The program consists of a series of modules that cover a range of topics related to HML. These modules will include case studies, problem-solving assignments, group and individual projects, and experiential learning through a Q&A interactive session per week.
- Experienced instructors: The program will be delivered by experienced instructors who will provide participants with personalized feedback and support throughout the program.
- Multi-lingual faculty: The program's language of instruction is English but faculty are fluent in Arabic or French other than English which may cater to learners whose native language is not English.

- Flexible schedule: The modules are delivered online in a specific sequence and can be completed at the participant's own pace asynchronously.
- Learner assessments: Assignments throughout the modules to evaluate learners with an integrated practicum and capstone in leadership.

Courses

This program consists of 6 courses with a total of 12 credits:

- EHCL 300 Managing Healthcare Organizations (3 credits) EHCL 307 Leadership (3 credits)
- EHCL 308 Marketing in Healthcare (1.5 credits)
- EHCL 311 Human Resources Management (2 credits) EHCL 312 Performance Improvement and Innovation (1.5 credits).
- EHCL 320A- Capstone (1 credit)

Admission Requirements

Admission to the program follows the university's policy on graduate academic diploma programs. Admitted learners should have the following:

- An undergraduate bachelor's degree or its equivalent from AUB or other recognized institutions of higher learning, with a GPA of at least 3.0 (or standardized equivalent from other institutions of higher learning).
- The approval of the Faculty Graduate Studies Committee (FGSC).
- At least two years of experience working in the related field.
- Demonstrate leadership potential and prospects for academic and professional success.
- Demonstrate proficiency in the English language following the university's requirements for graduate diplomas.
- Candidates will be considered based on their undergraduate education performance, English proficiency, work experience, and recommendation from their supervisors. It will focus on their capacity in advanced managerial functioning areas as well as in leadership, decision making and innovation.

Graduation Requirements

To be eligible for graduation from the HML program, the following must be accomplished:

- Passing all required courses with a minimum grade of 70 (C+).
- Earning a cumulative GPA of at least 3.3.
- Successfully completing the required 12 credits.

Healthcare Financing and Management (HFM) Online Diploma

Program Description

The online diploma in healthcare financing and management (HFM) provides learners with a comprehensive understanding of healthcare financing and management to navigate the complex financial and managerial challenges facing healthcare organizations today. The curriculum is built on the foundations of the executive master in health care leadership (EMHCL) and its established courses and bundled in a diploma for those who are interested in gaining a thorough understanding of health economics, health systems financing, and management as well as the skills necessary to apply this knowledge to reforming health systems. The program is designed to provide learners with a comprehensive understanding of healthcare financing, including where the money comes from, how it is pooled, and the payment mechanisms for healthcare providers. This knowledge will be integrated with the specifics of managing healthcare organizations, to prepare learners for leading health systems reform.

Program Aims and Goals

- Develop refined healthcare financing skills in individuals who are capable of handling confidently the most challenging situations presented by contemporary health systems.
- Enhance the knowledge of learners in financial resources, reduce waste, and allocate resources more efficiently across service delivery units leading to better health outcomes.
- Consider the various financing and economical challenges of the healthcare industry and incorporate regional experiences in the planning and implementation of programs.
- Provide professional networking opportunities.
- Implement the program at an opportune time to address market needs.

Program Learning Outcomes

- Distinguish organizational structures and explore the dynamics in healthcare settings and alternative financing mechanisms.
- Apply microeconomic principles in healthcare, including cost analysis and projections.
- Apply financing principles and best practices to enhance the efficient delivery of health services.
- Utilize reliable data for informed decision-making in healthcare strategies.
- Develop and manage strategic goals for healthcare organizations.
- Apply systems thinking to policy development and healthcare analysis.
- Demonstrate leadership and healthcare financing skills through practical project execution.

Program Features

The following are key features of our HFM online academic diploma program at AUB:

- Regional and international focus: The program offers and encourages the exploration of regional and global health policy and financial trends, enabling learners to develop solutions applicable to diverse health contexts.
- Significant topics: The HFM diploma covers topics that are essential for learners looking for developing healthcare financing and management skills. These topics include: health economics, strategic planning and management, financial accounting and management, data and decision making (use of IT), organizational restructuring and reform, and policy, politics and decision making.
- Interactive learning experience: The program consists of a series of modules that cover a range of topics related to HFM. These modules will include case studies, problem-solving assignments, group and individual projects, and experiential learning through one interactive Q&A session per week.
- Experienced instructors: The program will be delivered by experienced instructors who will provide participants with personalized feedback and support throughout the program.
- Multi-lingual faculty: The program's language of instruction is English but faculty are fluent in Arabic and/or French which may cater to learners whose native language is not English.
- Flexible schedule: The courses are delivered online in a specific sequence and can be completed at the participant's own pace asynchronously.
- Learner assessments: Assignments throughout the modules to evaluate learners with an integrated capstone in healthcare financing.

Courses

This program consists of the following courses:

- EHCL 303- Health Economics (2 credits)
- EHCL 309- Financial Accounting and Management (2 credits)
- EHCL 313- Data and Decision Making (Use of IT) (1.5 credits)
- EHCL 315- Strategic Planning and Management (2 credits)
- EHCL 316- Organizational Restructure and Reform (1.5 credits)
- EHCL 318- Policy, Politics and Decision Making (2 credits)
- EHCL 320B- Capstone (1 credit)

Admission Requirements

Admission to the program follows the university's policy on graduate academic diploma programs. Admitted learners should have the following:

- An undergraduate bachelor's degree or its equivalent from AUB or other recognized institutions of higher learning, with an GPA of at least 3.3.
- The approval of the Faculty Graduate Studies Committee (FGSC).
- At least two years of experience working in the related field.
- Demonstrate leadership potential and prospects for academic and professional success.

- Demonstrate proficiency in the English language following the university's requirements for graduate diplomas.
- Candidates will be considered based on their undergraduate education performance, English proficiency, work experience, and recommendation from their supervisors. It will focus on their capacity in advanced managerial functioning areas as well as in leadership, decision making and innovation.

Transfer of Credits Policy

Upon successful completion of the HFM online academic diploma, participants will have the opportunity to apply for transfer of credits towards the Executive Master in Healthcare Leadership (EMHCL) program. It is important to note that the transfer to the EMHCL is contingent upon meeting the EMHCL criteria, which will serve as the basis for the transfer process. This transfer opportunity will allow participants to broaden their understanding in healthcare leadership while also benefiting from reduced financial requirements for earning a master's degree.

Graduation Requirements

To be eligible for graduation from the HFM program, the following must be accomplished:

- Apply for graduation.
- Have attained a cumulative course GPA of 3.3 or above.
- Not be on probation by the time the coursework is completed.
- Have completed the minimum credit hours of coursework designated by the specific program.
- Have completed project requirements for the non-thesis option degrees.

Course Descriptions

EHCL 300 Managing Healthcare Organizations 3 cr.
The course addresses the main components, resources, and functions of healthcare systems. It is designed for an experienced audience to identify organizational and health system problems and apply systems thinking in resolving them. Furthermore, the course introduces various management theories and management processes that pertain to the healthcare service sector. Topics covered include strategic management, human resources management, information management and material management. This course equips future leaders of healthcare organizations with the necessary managerial skills needed to reach and implement decisions about future activities.

EHCL 301 Communication and Behavior Change for Health 2 cr.
The aim of this course is to discuss the communication concepts and frameworks that healthcare executives can employ to improve communication within their institution or with both the internal and external customer in order to enhance health and wellbeing. Major emphasis will be placed on the theoretical underpinnings in the field of communication including an understanding of influences on behavior and health, as well as the critical need for attention to ethics, justice, and equity to achieve goals of communication for health.

EHCL 302 Epidemiology in Health Care 1.5 cr.
This course presents ways in which epidemiology can support the decision-making process in health services research, policies, management, and evaluation.

EHCL 303 Health Economics 2 cr.
A course that covers the application of the principles of microeconomics to the health field, utilization of the techniques of microeconomics to the study of prices and markets in the health field, and developing competence in cost analysis and cost projections.

EHCL 304 Statistical Tools and Analysis 2 cr.
This course introduces basic statistical experimentation methods in addition to general concepts of estimation and inferences. Simple and multiple regression, single factor and multifactor analysis of variance, multiple comparisons, goodness of fit tests, nonparametric procedures, and power of tests are covered. Statistical software packages, such as SPSS, are also introduced.

EHCL 305 Research Methods and Application 3 cr.
The first component of this course presents an overview of the principles of quantitative and qualitative research methods. The second component aims at imparting to students some practical research skills. By becoming familiar with the research process, future healthcare leaders are equipped to critically appraise published research and communicate their research findings.

EHCL 306 Evidence Based Management 1.5 cr.
This course acquaints participants with evidence-based approaches in healthcare organizations including how information and knowledge can cure organizational ills and dysfunctions and how to gain competitive advantage with evidence. It covers decision- making models and challenges of why leaders and managers do not use evidence in making decisions. The course provides guidance on evidence-based organizations and evidence-based leaders/managers (intuitive versus rational decision-making) and also on how to overcome decision inertia.

EHCL 307 Leadership 3 cr.
This course describes the concept of leadership in healthcare organizations, identifies traditions through which leadership has been analyzed, considers the role of organizational culture, and explains the larger set of roles leaders may play in healthcare organizations while discussing the evidence from recent research literature on leadership in healthcare organizations.

EHCL 308 Marketing in Healthcare 1.5 cr.
This course addresses the principles of marketing and their application to the healthcare sector. It also sheds light on how these marketing principles need to respond to the changing environmental forces that are shaping the healthcare service sector. Through the employment of case studies, healthcare leaders learn how to identify and prioritize marketing challenges facing their organizations and develop creative strategies for solving these problems.

EHCL 309 Financial Accounting and Management 2 cr.
This course covers the most important principles and applications of healthcare finance including both accounting and financial management. It discusses the basic foundations of financial management and demonstrates how future healthcare leaders can apply financial management theory and principles to make better decisions that promote the financial wellbeing of their organizations.

EHCL 310 Health Informatics and Information Technology 2.5 cr.
This course explores the theoretical framework of Health Informatics and Information Technology and examines critical issues and challenges within the field as well as opportunities for improving the management of healthcare through information technology. Topics include electronic health records, telemedicine, human computer interfaces, and e-Health, among others.

EHCL 311 Human Resources Management 2 cr.
This course highlights how to effectively deal with personnel management by focusing on the importance and impact of human resources on healthcare organizations. Topics to be discussed include: strategic HR management; planning, attracting and selecting human resources; placing, developing and evaluating HR; retention; HRH migration and brain drain.

EHCL 312 Performance Improvement and Innovation 1.5 cr.
This course focuses on the principles and current practices of performance improvement in healthcare settings. It incorporates human technology and service excellence in improving performance within healthcare settings and ensuring that innovative improvement is an integrated part of organizational and individual behavior. Future healthcare leaders also explore the use of various quality improvement tools including, but not limited to: FOCUS-PDCA, balanced scorecards and reengineering, among others.

EHCL 313 Data and Decision Making (Use of IT) 1.5 cr.
In an unstable and politically charged healthcare environment, the availability and understanding of objective and reliable data is crucial for determining healthcare needs and customer expectations as well as institutional service strategies. This course examines the generation of valid and reliable data and its functional use in decision making.

EHCL 314 Advanced Program Planning and Evaluation 2 cr.
This course aims to prepare healthcare leaders to become more competent planners and evaluators by applying the concepts and tools of planning and evaluation to real situations facing healthcare agencies, hospitals, and ministries of health. The opportunities and challenges that healthcare leaders face in planning and evaluating effective healthcare intervention programs are also covered.

EHCL 315 Strategic Planning and Management 2 cr.
This course imparts to healthcare leaders the skills needed to develop strategic plans to position their organization for long-term success. Major attention is placed on the management framework for identifying, communicating, crafting, and managing strategic goals throughout a healthcare organization.

EHCL 316 Organizational Restructure and Reform 1.5 cr.
This course is designed to help future healthcare leaders develop a deeper understanding of the differences in organizational structures and the mechanisms and processes of coordination among different structures. It helps develop the capacity to influence the behavior of others in present-day health organizations. Emphasis is placed on small group relationships, communication networks, and the human side of the organization.

EHCL 317 Ethics and Law 1.5 cr.
This course examines the ethical and legal principles which health leaders in Lebanon and the region need to take into consideration when making systems decisions. The course draws a distinction between public health ethics and medical ethics, and it provides tools for ethical decision-making in healthcare.

EHCL 318 Policy, Politics and Decision Making 2 cr.
This course provides a comprehensive perspective of 'systems thinking' with regard to policy development and analysis processes. It introduces the participants to the field of health policy analysis and relevant concepts and methods in understanding the policy development cycle. Discussion includes the relationship between policy and politics, how politics can impede reform efforts and how policy analysts can influence policy makers and politicians during the policy process. The course is based on case studies debating policy issues at the national, regional, and international levels.

EHCL 319 Communicating with Policy Makers 3 cr.
This course discusses the main tools to communicate with policy makers including evidence informed policy, priority setting and policy dialogues. It provides skills on how to prepare policy briefs and effective tips on how to communicate evidence (both published and tacit) with policy makers. Participants work on key questions that can be used to guide those preparing and using policy briefs to support evidence-informed policymaking.

EHCL 320 Capstone in Leadership 4 cr.
This course offers the healthcare leader the chance to put into practice the theories and knowledge acquired in previous courses. Students need to identify and develop a healthcare project that puts their leadership skills and competencies into practice.

EHCL 320A Capstone 1cr.
This course offers the healthcare leader the chance to put into practice the theories and knowledge acquired in previous courses. Learners need to identify and develop a healthcare project that puts their leadership skills and competencies into practice.

EHCL 320B Capstone 1cr.
This course offers the healthcare leader the chance to put into practice the theories and knowledge acquired in previous courses. Learners need to identify and develop a healthcare project that puts their healthcare financing and leadership skills and competencies into practice.

Health Data Analytics Professional Diploma (HDA)

Program Overview

The graduate professional diploma in health data analytics is an online upskilling program for health sector professionals and current graduate students. The first cohort commenced in January 2025. Health data analytics supports informed decisions to address individual, family, community, and global health challenges. Health sector professionals, from analyst through leadership levels, must analyze data, interpret findings, and present results to stakeholders. The program will prepare learners to leverage relevant data from many sources to inform healthcare facility and program management and policy at local, national, and international levels. Given demand for health data analytics skills and upskilling market on this topic, attaining enrollment to sustain the program will require marketing to employers that yields hundreds of their staff enrolled over the first five program years. Targeted employers include healthcare and social service organizations, insurance and pharmaceutical companies, professional associations, NGOs, UN agencies, and universities.

Admission Requirements

To qualify for admission, the prospective students should meet the university's minimum requirement for admission per the AUB Policy on graduate diploma programs. For this program, they also need quantitative and computer skills including basic knowledge of spreadsheet software. No specific computer programming language knowledge or experience is required, but such skills are advantageous given the course topics and exercises in this program. Students should have completed an undergraduate course

in statistics for admission to the program; however, a workshop Statistics Made Easy, offered by the AUB Faculty of Medicine Clinical Research Institute will be proposed to those that do not have this prerequisite upon applying to the diploma program. Applications are encouraged from healthcare providers that meet the above requirements, including but not limited to nurses; midwives; clinical psychologists; physicians; occupational, physical, recreation, and sports therapists; dietitians; nutritionists; and social workers.

Policy on Transfer of Credits

Transfer of course credits from a graduate academic diploma program at AUB to a graduate degree program is allowed following the academic rules and regulations specified by the university and the faculty/school offering the graduate degree program. However, the number of course credits that can be transferred is up to 6 credits for graduate professional diplomas. In addition, only graduate-level courses in which the applicant earned an equivalent grade of 80 or above can be transferred. Approval by the department or the academic unit concerned and the GSC is required for all transfers.

Curriculum

This series of courses provides a comprehensive foundation in health data analysis, covering key aspects of epidemiology, biostatistics, healthcare informatics, data visualization, and machine learning. The first course delves into the principles of epidemiology and biostatistics, focusing on health data analysis using R programming to perform statistical methods and regression analysis. The second course explores the role of technology in healthcare, emphasizing data management, privacy, and digital health trends. The third course teaches the practical skills of managing and visualizing health data using tools like Power BI and R. Finally, the fourth course introduces machine learning techniques for health data analysis, offering hands-on experience with Python for building predictive models.

Course Name	Credits	Number of weeks
Epidemiology and Biostatistics Using R	4	8 weeks
Health Informatics and Digital Health	3	6 weeks
Data Management and Visualization	3	6 weeks
Machine Learning (ML) Models for Health-Related Data	2	4 weeks
Total	**12**	**24 weeks**

Epidemiology and Biostatistics Using R
Dive deep into the core principles of epidemiology and biostatistics, focusing on health data analysis. This course covers the distribution and determinants of diseases in populations and introduces essential methods for disease prevention. Using R programming, students will learn to perform comprehensive descriptive and inferential statistics and conduct regression analysis. The emphasis is on applying biostatistical techniques to real-world health data, equipping students with practical skills for analyzing and interpreting epidemiological studies.

Health Informatics and Digital Health

This course explores the use of technology and data in healthcare. Students will learn how to use informatics, databases, and communication technologies to gather, process, and visualize health data. Topics include hospital systems, virtual care, consumer health, and electronic health records. The course also covers data privacy and the latest trends in digital health.

Data Management and Visualization

Gain skills in managing and visualizing health data. This course teaches students how to clean and prepare datasets, perform statistical analysis, and create effective visualizations. Students will use tools like Power BI, R(GGPLOT2) to present health data clearly.

Machine Learning (ML) Models for Health-Related Data

This course introduces machine learning techniques for health data analysis. Students will learn about supervised and unsupervised learning, classification, and clustering. Using Python libraries, students will run machine and deep learning models to analyze health data.

Center for Public Health Practice (CPHP)

Director	Germani, Aline
Affiliates	Kalot, Joumana; Najem, Martine

The Center for Public Health Practice advances evidence-based public health practice in Lebanon and the region. It creates opportunities for innovation and engagement that enrich the academic experience of students and faculty. The center nurtures the culture of collective responsibility, partnership building, diversity, and social justice.

Within the framework of its mission, CPHP has adopted the following strategic goals:

- Generate and disseminate knowledge to inform public health practice, research, policy, and curriculum.
- Respond to public health priorities and emerging crisis through innovative programming and sustained partnerships for health and development.
- Lead the field of workforce development in public health locally and regionally.
- Establish platforms for meaningful community engagement of FHS students, faculty, and staff.

CPHP collaborates closely with a variety of partners including national, regional, and international entities such as academic institutions, ministries, UN agencies, NGOs, municipalities, and local communities in Lebanon and throughout the Arab world.

CPHP Tracks

- Training and Workforce Development; in person and e-courses
- Evaluation of Programs/Implementation Research
- Designing Health and Development Programs
- Documenting Best Practices/Knowledge Dissemination
- Developing Resource Material
- Organizing and Delivering Courses for Students
- Creating joint courses and programs with other faculties and universities

CPHP Themes

Youth development, refugee health, sexual and reproductive health, maternal and child health, ageing, health communication, school health and environment, tobacco, child protection and child rights, gender, and gender-based violence, NGO management, among others.

CPHP Reach

Egypt, Iraq, Jordan, Kuwait, Libya, Oman, Syria, Tunisia, Lebanon

Center for Research on Population and Health (CRPH)

Director	McCall, Stephen
Instructors of Public Health Practice	Akl, Christelle; Saad, Ghada
Assistant Research Professor	Hajj, Samar
Affiliates	Fahme, Sasha; Abi Zeid, Berthe; Jamaluddine, Zeina

The Center for Research on Population and Health (CRPH) leads and supports methodologically robust research at the intersection of population and health to improve the health and well-being of populations in Lebanon, the Arab region and globally.

CRPH is a hub for high-impact population and health research. We invest in people through training and capacity building and provide infrastructure for the conduct of rigorous research.

The center promotes interdisciplinary research and innovative approaches to research, and fosters exchanges and collaborations among AUB faculty, graduate students, and colleagues in the Arab region and beyond through conferences, workshops, and seminars.

The center hosts MPH practicum students, MS thesis projects and provides students and researchers at FHS with support in survey development and data management and analyses; access to regional data sets; and support for new areas of research. CRPH also hosts researchers who wish to visit the Faculty of Health Sciences with the goal of collaborating with FHS faculty or of pursuing innovative research or writing activities.

Knowledge to Policy Center (K2P)

Director	El-Jardali, Fadi
Instructors of Public Health Practice	Abou Samra, Clara; Bou Karroum, Lama; Fadlallah, Racha; Jamal, Diana

Knowledge to Policy (K2P) Center draws on an unparalleled breadth of synthesized evidence and context-specific knowledge by producing briefs and conducting policy dialogues to impact policy agendas and action. K2P produces high quality policy products to help policymakers and stakeholders have the clearest understanding of the most important messages, options, and recommendations to address pressing health and social system problems.

K2P harnesses the best available evidence on pressing health and social systems priorities; convenes concerned policy makers, stakeholders, thinkers, researchers, and doers; and prepares leaders to meet pressing health issues by building their capacity in public policymaking.

The K2P team comprises the director, an assistant director for operations, senior scientific officer, research manager, program manager, communication officer, project coordinators, and several specialists.

K2P Functions and Activities:

- Inform the production, packaging and sharing of research data and evidence in an objective manner and based on current and emerging policymaking priorities.
- Utilize a rapid response system to inform policymaking in an objective manner using the best available evidence that can be prepared and packaged within time and resource constraints.
- Conduct evidence informed advocacy and support implementation in policy and practice.
- Conduct policy tracing research and develop models for knowledge translation that are context-specific, culturally appropriate, relevant, and effective for the region.
- Support research networks, civil society, researchers, policy makers, and the media.
- Engage with citizens to enhance their involvement in the decision and policymaking process on high priority issues.
- Build the capacity of researchers, policymakers, and media in knowledge translation (KT) and evidence communication methods to influence policy, practice, and action.

K2P develops a diverse set of KT products including K2P Policy Briefs, K2P Briefing Notes, K2P Rapid Response, K2P Evidence Summaries, K2P Dialogue Summaries, K2P Policy Memo, K2P Citizens Consultation Summary, and K2P Media Bites. The center also published the K2P Crisis Chronicles, the K2Parliament Series and the K2P COVID19 Series Initiative in response to pressing national and global policy priorities, the center also launched the K2P Mentorship Program that supports research and policy organizations in the six regions of the World Health Organization (WHO).

Collaborations

K2P collaborates with national and international partners including Center for Systematic Reviews on Health Policy and Systems Research (SPARK) and Issam Fares Institute for Public Policy and International Affairs (IFI) at the American University of Beirut; and McMaster Health Forum in Canada and the Evidence Informed Policy Network (EVIPNet) at the World Health Organization (WHO) in Geneva.

WHO Collaborating Center for Evidence-Informed Policy and Practice

Since 2015, the World Health Organization (WHO) has designated K2P Center thrice as a WHO Collaborating Center for Evidence-Informed Policy and Practice. This designation, which has been in effect for three consecutive four-year term, is unique since the K2P Center is the only WHO Collaborating Center for Evidence-Informed Policy and Practice in Lebanon and the region, and is the second center of its kind globally after McMaster Health Forum in Canada.

The Center for Systematic Reviews on Health Policy and Systems Research (SPARK)

Co-Directors	El-Jardali, Fadi; Akl, Elie

The Center for Systematic Reviews on Health Policy and Systems Research (SPARK) at the American University of Beirut (AUB) is a joint collaboration between the Faculty of Health Sciences (FHS) and the Faculty of Medicine (FM). SPARK Center was appointed as the General Secretariat of the Global Evidence Synthesis Initiative (GESI).

SPARK specializes in the production of high-quality and timely systematic reviews and rapid reviews that respond to health policy and systems research priority issues at the national and the regional level. SPARK also invests in developing individual and institutional capacity in the region in conducting systematic reviews and rapid reviews of Health Policy and Systems Research.

SPARK Activities

- Conduct priority setting exercises with policymakers and other stakeholders, researchers, and civil society to prioritize review topics on health policy and systems research.
- Produce timely systematic reviews and rapid reviews on prioritized topics and review questions.
- Hold national and regional capacity-building workshops to develop individual and institutional capacities in conducting different types of research evidence syntheses.
- Prepare SUPPORT summaries and hold deliberative dialogues to promote the uptake of evidence from systematic reviews and rapid reviews into policies.
- Contribute to the methodology of research synthesis and knowledge production.

SPARK develops a diverse set of products including systematic reviews, rapid reviews, scoping reviews, SUPPORT summaries, and evidence gap maps.

Collaborations

SPARK collaborates with the Knowledge to Policy (K2P) Center and the AUB GRADE Center at the American University of Beirut.

AMERICAN UNIVERSITY OF BEIRUT

Faculty of Health Sciences (FHS)

Graduate