FACULTY OF HEALTH SCIENCES

MISSION STATEMENT

The mission of the Faculty of Health Sciences is to nurture a lively collegial learning environment that would enable students to become caring and capable healthcare professionals and citizens ready to engage effective roles within healthcare systems, families and communities. This entails the continuous development of academic, co-academic, research, and service programs that are integrated, scientifically sound, socially appropriate, multidisciplinary, and impact-directed.

Guided by the principles and policies of the University of Balamand, and working in partnership with St. George Hospital University Medical Center, the Faculty seeks excellence, fosters professionalism, rewards commitment, encourages service, emphasizes professional ethics, nurtures partnerships, values research, and respects intellectual property.

FACULTY LIST

OFFICERS OF THE FACULTY

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

FACULTY STAFF

Atallah, David	IT Assistant
Chaddad, Rita	Secretary
Constantine, Catherine	Secretary
Khalil, Mayssa	Secretary
Khamis, Youssef	Office Assistant
Kharrat, Rita	Associate Librarian
Khater, Paul	IT Assistant
Lahoud, Cecile	Secretary
Najjar, Rami	Secretary
Nseir, Micheline	Administrative Assistant

FACULTY MEMBERS

Abboud, Johnny	M.D., Cardiology. Saint Joseph University, Lebanon.
Abdallah, Bahia	M.P.H., Health Services Administration, American University of Beirut, Lebanon.
Abdel Rahman, Abeer	M.P.H., Health Services Administration, American University of Beirut, Lebanon.
Abi Habib, Laurie	Ph.D., Social Anthropology, Manchester University, U.K.
Abi Rached, Roger	B.A., Law, Sagesse University, Lebanon.
Abou Arrage, Jad	Ph.D., Technological Innovation for Food and, Environmental Sciences, University of Milan, Italy.
Abou Chawareb, Maha	DEA, Gerontology, University of Malta, Malta.
Abou Chdid, Liliane	Ph.D., French Literature, Université Paris III, France.
Abou Jaoude, Rita	B.S., Public Health and Development Sciences, University of Balamand, Lebanon.
Abou Mrad, Jean	M.S., International Business, Point Park College, U.S.A.

Afif, Claude	M.D., Infectious Diseases, Saint Joseph University, Lebanon.
Allouch, Ahmad	Ph.D, Chemistry, Université Aix Marseille I, France.
Aoun, Habbouba	M.S., Population Studies, American University of Beirut, Lebanon.
Azar, Mathil	D.E.A., Nursing, St. Joseph University, Lebanon.
Baboudjian Nayiri	M.A., English Literature, American University of Beirut, Lebanon.
Barbour, Jessy	Midwife, Lebanese University, Lebanon.
Bassil, Marcel	Doctorate in Physiology, CCRP, University of Montreal, Canada.
Berro, Abdo	Ph.D., Medical Microbiology and Immunology, Creighton University, U.S.A.
Bitar, Ziad	B.S., Computer Sciences, Notre Dame University, Lebanon.
Bou Khozam, Rola	Ph.D., Analytical Chemistry, University of Pau et Pays de l'Adour, France.
Boutros, William	M.S., Food Production Management, Nottingham University, U.K.
Chabbani, Sana	B.A., Elementary Education, Lebanese American University, Lebanon.
Chalhoub, Elias	Ph.D., Molecular Genetics, Université de Montpellier II, France.
Daher, Zeina	Ph.D., Biochemistry, University of Burgundy.
Dhaini, Hassan	Ph.D., Toxicology, University of Michigan Ann Arbor, U.S.A.
El Assaad, Chafica	Ph.D., Physiology, American University of Beirut, Lebanon.
El Chaar, Mira	Ph.D., Molecular Microbiology, University of Cambridge, U.K.
El Hajj, Hiba	Ph.D., Molecular Parasitology, University of Montpellier II, France.
El Kattar, Rabih	M.S., Computer Sciences, Holy Spirit University, Lebanon.
El Khoury, Afdokia	B.S., Public Health and Development Sciences, University of Balamand, Lebanon.
El Khoury, Sally	M.S., Neurophysiology and neurobiology, Université Aix Marseille, France.
Farhat, Ghada	Ph.D., Epidemiology, University of Pittsburgh, U.S.A.
Gebran, Najat	M.D., Nephrology, Internal Medicine, Lebanese University, Lebanon.
Geha, Mirna	Maitrise en "Lettres Françaises", St. Joseph University, Lebanon.

Georges, Vicky	Master in Nursing, St. Joseph University, Lebanon.
Gerges, Zeina	M.D., Family Medicine, American University of Beirut, Lebanon.
Germanos, Peggy	M.S., Nursing. Saint Joseph University, Lebanon.
Ghanem, Noha	Ph.D., Organic Chemistry, Université de Montpellier II, France.
Ghosn, Nada	M.D., D.E.S. Public Health, Université Lille II, France.
Habib, Hiba	Master in Nursing, St. Joseph University, Lebanon.
Habib, Sami	Ph.D., Material Chemistry & Catalysis, Pierre et Marie Curie University, Paris VI, France.
Hankir, Samer	M.S., Public Administration, American University of Beirut, Lebanon.
Hatjian, Berj	Ph.D., Environmental & Occupational Hygiene, University of Newcastle-Upon-Tyne, U.K.
Haydamous, Krystel	M.S., Nutrition, Université de Moncton, Canada.
Hokayem, Jihad	D.E.A., Finance, Saint Joseph University, Lebanon.
Hokayem, Najate	M.S., Marketing of Services, Université Francois-Rabelais, France.
Irani, Jihad	M.D., M.P.H. University of Pittsburgh, U.S.A.
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Karam, Nadim	M.D., American University of Beirut, Lebanon. M.P.H. Johns Hopkins University, USA.
Karhily, Roubina	M.P.H., Health Management and Policy, American University of Beirut, Lebanon.
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Khoury, Maya	B.S., Nutrition, M.B.A., Ecole Supérieure des Affaires, Lebanon.
Khoury, Tony	Ph.D., Chemistry, The University of Sydney, Australia.
Kmeid, Rita	M.S., Medical Molecular Microbiology, University of East London, U.K.
Koura, Jessica	M.S., Food Science and Technology, University of Balamand, Lebanon.
Lteif, Arlette	Ph.D., Renewable Resources, McGill University, Canada.
Maalouf, Sana'a	M.P.H., Health Management and Policy, American University of Beirut, Lebanon.
Maalouf, Wafa	M.A., Educational Psychology, American University of Beirut, Lebanon.

Maarawi, Thérèse	M.S., Chemestry University of Balamand, Lebanon.
Madi, Bashayer	M.S., Environmental Sciences, Americain University of Beirut, Lebanon.
Mady, Christine	Ph.D., City and Regional Planning, Cardiff University, U.K.
Makoukji, Joelle	M.S., Cellular Biology, Physiology and Pathology, Paris Diderot University, France.
Mattar, Nevine	M.A., Education in Psychology, American University of Beirut.
Megeurian, Zarouhie	M.D., Pathology, St. Joseph University, Lebanon.
Mounzer, Caroll	M.S., Human Nutrition, Saint Joseph University, Lebanon.
Muallem, Hind	Ph.D., Molecular and Cellular Pathology, University of North Carolina and Chapel Hill, U.S.A.
Nader, Nayla	B.S. Pharmacy, M.P.H. American University of Beirut, Lebanon.
Najjar, Amal	Ph.D., Microbiology & Biotechnologies for Sustainable Development, University of the Mediterranean Sea - Aix-Marseille II, France.
Nakhlé, Pascale	M.A., Psychology, American University of Beirut, Lebanon.
Nassif, Rana	M.S., Biochemistry, Molecular and Cellular Biology , University of Brussels, Belgium.
Obeid, Cecile	M.S., Human Nutrition, Saint Joseph University, Lebanon.
Ouaijan, Krystel	M.S., Nutrition, American University of Beirut, Lebanon.
Rabaa, Sally	M.P.H., Health Services Administration, American University of Beirut, Lebanon.
Rassam, Paul	M.D., Gastro-Enterology, Medical College of Wisconsin, U.S.A.
Restikian, Garabeth	Ph.D., Chemical Engineering, University of Technology of Compiegne, France.
Rihan, Mohamad	Ph.D., Middle Eastern and Asian Studies, University of Cambridge, U.K.
Rizk, Ursula	M.P.H., Health Services Administration, American University of Beirut, Lebanon.
Saade, Maria	B.A., Social Work, Saint Joseph University, Lebanon.
Sabbagh, Marie Thérèse	B.S.N, Ph.D., Education, Charles De Gaulle University, France.
Sailian, Silva	B.S., Nursing, M.P.H. American University of Beirut, Lebanon.
Salem, Suhaila	M.A., English Literature, American University of Beirut, Lebanon.
Salibi, Joseph	M.B.A., Webster University, U.S.A.

Samaha, Hanady	M.D., Oncology, St. Joseph University, Lebanon.
Shaker, Linda	M.S., Nutrition, American University of Beirut, Lebanon.
Shoucair, Gretta	M.S., Food Technology, American University of Beirut, Lebanon.
Serhan, Mireille	Ph.D., Food Engineering and Biotechnology, National Polytechnic Institute of Lorraine, France.
Stéphan, Joumana	M.S., Biostatistics, John Hopkins University, U.S.A.
Tannous, Tony	Ph.D., Physical Optics, Sydney University, Australia.
Tlais, Sami	Ph.D., Organic Chemistry, Florida State University, U.S.A.

PROGRAMS OF STUDIES

The Faculty of Health Sciences encompasses the following academic programs:

- MS in Clinical Laboratory Sciences 2 years
  - o Clinical Microbiology
  - o Diagnostic Molecular Biology

- Professional Masters in Laboratory Sciences 2 years
  - o Laboratory Management

- MPH Master in Public Health 2 years

The Academic Programs are supported by a wide range of Co-Academic Programs.

COURSE CODES

Each course is assigned a number of credit hours normally equivalent to the number of hours of classroom teaching per week. The letters preceding the course number indicate the area or subject of study to which the course belongs.

CODE	DESCRIPTION
CLAS	Clinical Laboratory Sciences Courses
PDHP	Public Health Courses

GRADUATE PROGRAM

To earn a Master of Science Degree, a student must successfully complete 30 credits of coursework (including the completion of a 6 credits-thesis) approved by the program.

To earn a Professional Master Degree, a student must successfully complete 34 credits of coursework (including the completion of 4 credits-internship) approved by the program.

To earn a Master of Public Health degree, a student must successfully complete 42 credits including a practicum.

1. ADMISSION REQUIREMENTS

Applicants to the graduate program must hold a Bachelor of Science degree from a recognized institution of higher learning with a minimum cumulative average as evaluated by the departement. Applicants should present the following documents:

- A completed official application form
- A certified copy of the Lebanese Baccalaureate or its equivalent
- Two letters of recommendations
- Three recent passport-size photographs
- A non-refundable application fee.
- Proof of English Proficiency (a minimum score of 600 on the paper-based TOEFL exam or 100 on the student-based TOEFL exam.
- Statement of interest

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

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

Students admitted on probation due to unsatisfactory undergraduate achievements may be allowed to enroll in remedial courses to improve their undergraduate cumulative average and reapply for admission to the graduate program.

2. ACADEMIC RULES & REGULATIONS

Refer to the University rules and regulations.

MASTER OF SCIENCE IN CLINICAL LABORATORY SCIENCES

CLINICAL MICROBIOLOGY CONCENTRATION

SEMESTER 1

Course Code	Course Title	Credit
CLAS 301	Laboratory Organization, Management, and Quality Assurance	3
CLAS 303	Applied Molecular Biology	3
CLAS 321	Medical Microbiology	3
Total		**9**

SEMESTER 2

Course Code	Course Title	Credit
CLAS 304	Research Methods	3
CLAS 306	Fundamentals of Pathology & Laboratory Diagnostics	4
CLAS 322	Antimicrobial Agents & Mechanisms of Resistance	3
Total		**10**

SEMESTER 3

Course Code	Course Title	Credit
CLAS 399	Master's Thesis	6
	Electives	3
Total		**9**

SEMESTER 4

Course Code	Course Title	Credit
CLAS 323	Infection Control in Clinical Practics	2
CLAS 399	Thesis Continued	-
Total		**2**

Total credits **30**

DIAGNOSTIC MOLECULAR BIOLOGY CONCENTRATION

SEMESTER 1

Course Code	Course Title	Credit
CLAS 301	Laboratory Organization, Management, and Quality Assurance	3
CLAS 303	Applied Molecular Biology	3
CLAS 338	Clinical Genetics	3
Total		**9**

SEMESTER 2

Course Code	Course Title	Credit
CLAS 304	Research Methods	3
CLAS 306	Fundamentals of Pathology & laboratory diagnostics	4
CLAS 336	Genomics	3
Total		**10**

SEMESTER 3

Course Code	Course Title	Credit
CLAS 399	Master's Thesis	6
	Electives	3
Total		**9**

SEMESTER 4

Course Code	Course Title	Credit
CLAS 337	Proteomics	2
CLAS 399	Thesis Continued	-
Total		**2**

Total credits **30**

PROFESSIONAL MASTER IN LABORATORY SCIENCES

LABORATORY MANAGEMENT

SEMESTER 1

Course Code	Course Title	Credit
CLAS 301	Laboratory Organization, Management, and Quality Assurance	3
CLAS 303	Applied Molecular Biology	3
CLAS 351	Database management & Laboratory Information Systems	3
Total		9

SEMESTER 2

Course Code	Course Title	Credit
CLAS 306	Fundamental of Pathology and laboratory diagnostics	4
CLAS 323	Infection Control in Clinical Practices	2
CLAS 353	Laboratory Human Resource Management	3
Total		9

SEMESTER 3

Course Code	Course Title	Credit
CLAS 352	Laboratory Quality management systems	3
	Elective	3
Total		**6**

SEMESTER 4

Course Code	Course Title	Credit
CLAS 354	Laboratory Budgeting and Finance	3
CLAS 355	Laboratory Marketing Strategies	3
Total		6

SEMESTER 5

Course Code	Course Title	Credit
CLAS 350	Internship	4
Total		**4**
Total credits		**34**

COURSE DESCRIPTIONS

CLAS 301 LABORATORY ORGANIZATION, MANAGEMENT, AND QUALITY ASSURANCE
3.0: 3 cr. E

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

CLAS 303 APPLIED MOLECULAR BIOLOGY **3.0: 3 cr. E**

This course is designed to introduce major molecular biology techniques used in diagnosis and prediction of risk in clinical laboratories. In addition to an overview of the basic techniques in molecular diagnostics, the course examines advanced techniques in areas such as DNA identity, applications in hematology, applications in infectious diseases, and other diagnostic tools in a number of common genetic disorders. The course includes 1 cr. of hands-on applications of various introduced techniques.

CLAS 304 RESEARCH METHODOLOGY **3.0: 3 cr. E**

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

CLAS 306 FUNDAMENTALS OF PATHOLOGY & LABORATORY DIAGNOSTICS **4.0: 4 cr. E**

This course is divided into 2 sections. Section I covers fundamentals of pathology covering basics of disease etiology, and mechanisms of disease development. Topics covered in this section include cellular injury, cell death, inflammation, tissue repair, and neoplasia. Section II introduces pathology of select organs with a focus on laboratory diagnostic tests and clinical interpretations of Laboratory test results for corresponding diseased organs and organ systems. This sections details clinical findings in chemistry, serology, endocrinology, microbiology, genetics, and body fluid analysis.

CLAS 307 MEDICAL STATISTICS **3.0: 3 cr. E**

This course provides an introduction to the basic principles and applications of biostatistics and epidemiology, as they are applied to problems in clinical and public health settings. Topics cover a wide range from simple descriptive statistics and presentation of data, to principles of hypothesis testing, and an introduction to linear and logistic regression and non-parametrical tests. Lectures, problem sets, and computer output are used to develop these and additional concepts. Furthermore, important epidemiological concepts in evaluation of epidemiological findings such as confounding, effect measure modification, and measures of attribution of disease burden to specific exposures are also presented.

CLAS 308 BIOTECHNOLOGY **3.0: 3 cr. E**

The course is an advanced course on biotechnology focusing on the genetic, cell transfection and recombinant DNA technology principles and processes involved in biotechnology. Included are processes involved in cell culture and the bioprocess of prokaryotic/eukaryotic cells. The course also covers important medical applications of biotechnology.

CLAS 321 MEDICAL MICROBIOLOGY **3.0: 3 cr. E**

This course introduces microbes from a medical and ecological perspective with a focus on the clinical behavior of pathogens to humans. The course is divided into 2 major sections. Section I covers principles of general microbiology with special emphasis on microbial structure, classification, and interaction with the human host. Section II offers an overview of infectious diseases classified by systemic infections, with an emphasis on mechanisms of infectious characteristics of each studied microorganism.

CLAS 322 ANTIMICROBIAL AGENTS & MECHANISMS OF MICROBIAL RESISTANCE
3.0: 3 cr. E

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

CLAS 323 INFECTION CONTROL IN CLINICAL PRACTICES **2.0: 2 cr. E**

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

CLAS 324 CASE STUDIES IN MICROBIOLOGY **3.0: 3 cr. E**

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

CLAS 335 CANCER GENETICS **1.0: 1 cr. E**

The course presents fundamentals of cancer biology and angiogenesis. Understanding of correlations of molecular biology and chromosomal change in human cancer and the role of genetic change in progression and metastasis of cancer.

CLAS 336 GENOMICS **3.0: 3 cr. E**

The course main objective is to acquire knowledge about gathering and analyzing genomic data. The course introduces research methods used to accumulate genomic data, instruct on how to access major genomic databases, how various nucleotide alignment algorithms work, and how to use such data. The course is an introduction to theory and methods used for genome-level sequence analysis. It uses public databases and software to extract, analyze and interpret DNA sequences. Topics covered include functional and structural homology, and analysis of gene expression patterns using gene chip technology.

CLAS 337 PROTEOMICS **2.0: 2 cr. E**

The course aims to introduce latest techniques used to analyze proteins and provide the student with comprehensive and practical tools used for this purpose, especially in the ever-growing list of code sequences, patterns, three dimensional structures, and the general flow of information from gene to transcript to protein. The course is designed to provide students with knowledge of bioinformatics as a tool for understanding the biological context of proteins from their structure, homology and function predictions till the experimental linking prediction to true function.

CLAS 338 CLINICAL GENETICS **3.0: 3 cr. E**

The course aims at introducing hot topics in clinical genetics such as genetic diseases, human karyotype technology, chromosomal abnormalities detection, human allelic disorders, and others. The course also includes 1 credit of clinical rotations in Cytogenetics & Molecular Biology.

CLAS 350 LABORATORY MANAGEMENT INTERNSHIP **4.0: 4 cr. E**

A supervised professional training and experience in an actual laboratory setting. The internship provides the student with hands-on training in lab finance and budgeting, implementation of quality management, database and information systems, and management skills; as well as developing personal managerial and leadership skills. Each student is expected to complete a minimum of 4 months (8 hours/day), under the supervision of a Faculty advisor. This is an essential course in the major, and students must have the permission of the student's advisor to enroll.

CLAS 351 DATABASE MANAGEMENT & LABORATORY INFORMATION SYSTEMS 3.0: 3 cr. E

This course provides student with a practical understanding of health care information systems to use and develop in a laboratory setting. The course includes analysis and discussion of actual case examples. In addition, the course emphasizes on developing and evaluating new tools to analyze clinical data resources. Case studies involving the development and assessment of databases for disease management and drug utilization will be covered. Students learn how to collect, summarize, statistically analyze, present, and interpret data.

CLAS 352 LABORATORY QUALITY MANAGEMENT SYSTEMS **3.0: 3 cr. E**

This course provides information on developing quality management systems for laboratory services. Students taking this course will learn to develop resources required for implementing a quality management system. In addition, the course focuses on developing and managing the processes required for producing and communicating examination results.

Prerequisite: CLAS 301

CLAS 353 LABORATORY HUMAN RESOURCE MANAGEMENT **3.0: 3 cr. E**

Human resource management is concerned with effective management and utilization of human resources in organizations. This course introduces concepts in management of human resources with a focus on laboratory. Topics covered include, mainly, analyzing various methods for recruitment, staffing and retention, staff development, and evaluating performance to various job levels in a laboratory.

CLAS 354 LABORATORY BUDGETING AND FINANCE **3.0: 3 cr. E**

This course introduces the student to the principles of accounting, and focuses on the use of accounting data to support managerial decision-making. Students will acquire skills in using spreadsheets to develop and monitor operating budgets in a laboratory setting. Concepts including cost allocation, personnel costs, activity based cost accounting, demand ratios, and fixed and variable costs, are all examined. Techniques for break-even analysis are presented, and budget negotiation skills and basic decision models are introduced.

CLAS 355 LABORATORY MARKETING STRATEGIES **3.0: 3 cr. E**

This course introduces the student to the principles of marketing, and focuses on the use of marketing plans. Students will acquire skills in customer service, branding and imaging. Concepts including how to develop a marketing strategy and how to organize branding value in laboratory setting are examined. The concept of organizational communication systems is introduced.

CLAS 356 STRATEGIC PLANNING **3.0: 3 cr. E**

This is a graduate course designed to prepare students to be senior managers for the increasingly competitive business world. The emphasis of this course will be on the strategic analyses, decisions, and actions that organizations take to create sustainable competitive advantages, with the consideration of both the internal condition and the external environment. Through chapters, readings, and case analyses, the course will discuss issues related to laboratory ethical decision making, corporate social responsibility, stakeholder theory, and the relationship of business & government.

CLAS 399 MASTER'S THESIS **6 cr. E**

This course consists of a thorough supervised research project whereby a student formulates a research hypothesis with specific objectives, then develops methods to demonstrate his/her hypothesis. Results from the performed study are submitted in the form of a thesis to an examination committee, and are defended in public.

MASTER DEGREE IN PUBLIC HEALTH (MPH)

The mission of the MPH Program at the Faculty of Health Sciences (FHS) is to prepare graduates and practitioners for effective engagement and leadership in promoting the health of communities, eliminating social and health disparities, and achieving health-sustaining environments in Lebanon and across the Middle East.

The MPH is a 42-credit professional (practicum-based) degree, designed to be completed within 1.5 to 2 years for full-time students, and within 4 years on a part-time basis.

* The Program is structured to have a set of core courses (21 credits), a set of concentration-specific courses (15 credits), and a practicum (6 credits).

* For a full-time Program enrollment of 2-year duration, credits are distributed as follows: 12 credits in Fall 1, 12 credits in Spring 1, 12 credits in Fall 2, and 6 credits in Spring 2.

The Program currently offers a MPH degree with one area of concentration in the field of Community Health.

Core Courses (21 credits):

Core courses are designed to provide in-depth training in the 5 core areas of public health knowledge: Biostatistics, Epidemiology, Environmental Health Sciences, Health Services Administration, and Social and Behavioral Sciences. Other courses, identified as highly important for a career in public health, are also included within the MPH core courses. The total number of "core" credits is 21. A list of the core courses is provided below.

•Epidemiology (3 credits)

•Biostatistics (3 credits)

•Environmental Health (3 credits)

•Health Care Management (3 credits)

•Social and Behavioral Determinants of Health (3 credits)

•Research Design (3 credits)

•Public Health Ethics (1 credit; topic will also be integrated across other courses)

•Public Health Policy, Law and Advocacy (2 credits)

Concentration Courses (15 credits):

These include 12 credits of coursework related to the Community Health area of concentration, in addition to a 3-credit directed elective.

•Community Health Assessment (3 credits)

•Community Program Planning, Implementation, Monitoring and Evaluation (3 credits)

•Basic Theories of Health Promotion (3 credits)

•Key issues in Community Health (3 credits)

•Directed elective (3 credits)

Practicum (6 credits):

The practicum is designed to provide students with hands-on exposure to public health practice, and to allow them to apply competencies acquired through the Program, in a field work that approximates professional practice. Students have the opportunity to apply learned theory, to contribute to addressing a public health issue while contributing to a community's resources, and to develop personal confidence, skills and ethical behavior as a public health professional.

Prerequisite: All core and concentration courses must be successfully completed before taking the practicum. The student must obtain approval of the Program before commencing.