#### MASTER OF PUBLIC HEALTH HEALTH POLICY AND MANAGEMENT

Program code: 1920

#### **INTRODUCTION**

The Department of Health Policy and Management (Faculty of Public Health) offers an MPH program of Public Health in "Health Policy and Management". This program will be a premier postgraduate program that is internationally recognized, meets accreditation standards, and produces leaders that have the skills, knowledge and attitudes required to lead multidisciplinary teams for the improvement of health systems and health policy in Kuwait and the Region. The program feature both thesis and non-thesis options.

According to the University Council decision dated 4/2/2007, Thesis students admitted with effect from September 2007 are exempted from the comprehensive examination.

## **PROGRAM REQUIREMENTS** (Non-thesis option in parenthesis) **45 (45) TOTAL CREDITS**

#### 18 (21) COMPULSORY COURSES(Credits in parenthesis)

1900-501	Public Health Biology*	(2)
1910-501	Introduction to Public Health Practice and Ethics	(3)
1920-501	Principles of Health Policy and Management	(3)
1920-593	Capstone Project (Non-thesis option)	(3)
1930-501	Epidemiology & Biostatistics I	(3)
1930-502	Epidemiology & Biostatistics II	(3)
1940-501	Social and Behavioral Foundations of Public Health	(3)
1950-501	Introduction to Environmental and Occupational Health	(3)
	<b>Equivalent to</b> (0566-539)	

<sup>\*</sup> A compulsory course for students with bachelor's degree in areas other than medicine, dentistry, pharmacy, allied health sciences or nursing. For those students, the course substitutes a 2-credit elective course.

9(9)	CONCEN	TRATION COURSES (credits in parenthesis)	
	1920-502	Health Economics and Financing	(3)
	1920-503	Human Resource Management in Healthcare	(3)
	1920-504	Health Planning and Evaluation	(3)
5(5)	APPLIED COMPULSORY COURSES (credits in parenthesis)		
	1900-591	Research Project Design	(1)
	1910-581	Public Health Practicum	(4)

#### FACULTY OF PUBLIC HEALTH

4(10)	ELECTIVE COURSES (credits in parenthesis)			
, ,	1910-530	Issues in Global Health	(3)	
	1910-531	Case Studies in Public Health Communication	(3)	
	1920-530	Advanced Health Economic Evaluation	(2)	
	1920-531	Casemix System for Quality and Efficiency	(3)	
	1920-532	Managing Quality Assurance in Health Care	(2)	
	1920-533	Seminar in Health Policy and Management	(2)	
	1930-530	Qualitative Research	(2)	
	1930-531	Data Management and Informatics	(3)	
	1940-530	Mental Health Promotion	(2)	
	1940-531	Understanding Stress and Health	(2)	
	1950-502	Environmental and Occupational Health Risk Assessment	(3)	
	1950-503	Environmental Health Management	(3)	
	1950-504	Worker's Health and Safety	(3)	
	1950-530	Health Impacts of Land Soil Water and Air Pollution	(3)	
	1950-531	Injury Epidemiology and Prevention	(3)	
	1950-532	Exposure Assessment for Environmental & Occupational		
		Epidemiology	(3)	
	1950-533	Public Health Aspects of Foodborne Diseases	(3)	
	1950-534	Environmental and Health Impact Assessment	(3)	
	1950-535	Fundamentals of Industrial Hygiene	(3)	
	1950-536	Environmental and Occupational Epidemiology	(3)	
)	COMPUL	LSORY COURSES		
	1920-597	Thesis (0)		
	1920-598	Thesis (0)		
	2000-599	Thesis (9)		

#### **COURSE DESCRIPTION**

### 1900-501: PUBLIC HEALTH BIOLOGY CR: 2

This course, designed for MPH students without a background in a health profession, will examine the concept of 'health' and how it is defined and operationalized in the public health context, and will provide students with the necessary foundations to understand the biological basis of disease. The key issues to be examined are: What is a 'disease'? What is health and is it more than

'absence of disease'? Using a biological systems approach, the course will integrate biological concepts as they relate to public health. There is an emphasis on protecting physical and mental function and health, especially at the interface with the environment, as well as understanding the vulnerabilities and susceptibilities that can disrupt it.

#### 1900-591: RESEARCH PROJECT DESIGN CR: 1 PR: 1930-501, 1930-502

In this research project design course the student begins the process of identifying a public health question and development of all aspects of a research project protocol, under the supervision of faculty. By the end of this course, the student will produce a research proposal to be approved by the MPH program committee, the FOPH ethics committee, and the MOH ethics committee (as appropriate). The initial draft of the data collection instrument will be included in an appendix of the research proposal. Regardless of the format, all students are required to take the online course in Protection of Human Subjects in research, designed by US National Institutes of Health Office of Extramural research and required of all NIH grant recipients.

# 1910-501: INTRODUCTION TO PUBLIC HEALTH PRACTICE AND ETHICS CR: 3

This module introduces the Master students to the field of public health practice. It provides the core concepts required of a Public Health practitioner to be able to identify issues of importance to Public Health, assess the population needs for health, plan interventions, execute the interventions, and assess the impact of the programmes. The course will focus on aspects of communication as it relates to public health practice. Issues relating to ethics in public health practice, global health, and the landmark historical achievements in public health practice will also be covered. The course will provide the conceptual framework for the incorporation and integration of the skills and knowledge presented in later modules.

### 1910-530: ISSUES IN GLOBAL HEALTH CR:3 PR: 1920-501

Global Health has emerged over the last 40 years as a complex configuration of governmental, non-governmental, national, international, industrial, commercial, and philanthropic institutions involved in projects with an estimated value of \$16 billion. This course will introduce the student to the organisational and ethical issues involved in this movement. These include the current structures involved, how they are funded and the ethical issues raised by this development.

### 1910-531: CASE STUDIES IN PUBLIC HEALTH COMMUNICATION

CR:3 PR: 1920-501

This course will extend the skills required to develop important public health communication materials, campaigns, and strategies related to a variety of topics and for diverse target populations. It will use a case-study approach for the students to critically evaluate previous interventions and create alternative visions of how they could be conducted. They will use the principles that they have learned from previous modules.

#### 1910-581: PUBLIC HEALTH PRACTICUM CR: 4

This course is a preceptor-guided experience in a public health organization, providing opportunity for MPH students to bridge the gap between theory and practice. The main purpose of this practical experience is to allow the student to apply knowledge and theory to a particular area of public health practice and demonstrate capabilities to enter the profession. The Practicum consists of a minimum of 180 hours of experience in an approved public health setting, under the guidance of a qualified preceptor. The student, Program Director, and preceptor will sign an agreement that will guide the practicum experience. The student will prepare a comprehensive portfolio to describe all activities. This portfolio will include a listing of the competencies that have been demonstrated and a paragraph describing how the practicum work supports this.

# 1920-501: PRINCIPLES OF HEALTH POLICY AND MANAGEMENT

This course introduces the basic managerial concepts as they apply to healthcare organizations, with a focus on health care structures, policy development, the roles of the healthcare manager within a health system and the main function of management. The course will provide the insight on concepts of healthcare systems the healthcare workforce, quality assurance, cost considerations, human resource management, health administration systems, and related ethical issues. The course will also cover the basic concept of health policy, the process of policy formulation and determining forces behind policy decisions, as well as health policy as a form of Health Promotion. The roles of state, political system and other public and private sector key players development of health policy will be covered in this course.

# 1920-502: HEALTH ECONOMICS AND FINANCING CR: 3 PR: 1920-501

This course is an introduction to health economics and a description of the current financial environment in which healthcare organizations function. Basic economic concepts of demand and supply and their applications in financial assessment of health organizations for critical and sound financial decisions will be covered. The course will provide the skills on economic evaluation methods in assessing new and existing technology covering both cost-effectiveness and cost-benefit analysis. The course will cover the application of financial management principles to health care organizations for effective and efficient health care administration; the health financing aspect of healthcare services; the role of public, non-profit, and private sector roles in funding; and different methods provider's payment and allocating health services.

#### 1920-503: HUMAN RESOURCE MANAGEMENT IN HEALTHCARE CR: 3 PR: 1920-501

This course will provide the foundations for all aspects of human resource management, planning and development that are crucial for effective and efficient functioning of health organizations. The challenges facing health organizations to manage human resources for delivery of high quality services to users will be explored in this course. It covers theories and practices in defining, controlling behavior evaluating and atmosphere in a health service organization. Emphasis will be given to leadership aspects, motivation, communication and group dynamics in a health organization. The course will also discuss the relationship of healthcare organization with the employee, which includes job analysis, forecasting of human resource needs, and training and development of the health workforce. The key issues in health human resources will be further studied through reviews of published journal articles, case studies and student presentations.

### 1920-504: HEALTH PLANNING AND EVALUATION

CR: 3 PR: 1920-501

This course will help to develop knowledge and skills to undertake a systematic approach in the cycle of planning, implementation, monitoring and evaluation of health programmes covering promotive, preventive and curative services in health care. Both the conceptual model of programme planning as well as the pragmatic approach in undertaking the planning process will be covered in this course. The roles of the health management information system and different sources of data for health planning and evaluation will be discussed in this course, as will be the use of routinely collected morbidity and mortality data for structural, process and outcome evaluation. Both qualitative and quantitative techniques in program evaluation will be covered in this course.

### 1920-530: ADVANCED HEALTH ECONOMIC EVALUATION

CR:2 PR: 1920-501/1920-502

This course will provide the students with an understanding of the concepts, application and advanced analytical methods in conducting health economic evaluation. Students will develop handson skills to conduct economic evaluations with practical experiences in working on real health economic data. The specific areas covered in this course include economic modeling, costing analysis, budget impact analysis, cost-effectiveness analysis and cost-benefit analysis. Methods of conducting simple and complex sensitivity analysis, interpreting and presenting results of economic evaluations will be covered.

### 1920-531: CASEMIX SYSTEM FOR QUALITY AND EFFICIENCY

CR:3 PR: 1920-501/1920-502

This course is designed to introduce the concept of casemix system and its application in enhancement in quality and efficiency of healthcare services. The course will provide an overview of casemix system, its evolution from the first version introduced in 1980's to the present day where the system has been implemented in more than one hundred countries worldwide. The minimum data set for casemix systems will be discussed in detail including requirements for diagnoses procedures coding using the ICD classification system. Benefits of using Casemix System as a tool to support quality assurance programme will be discussed, as will the advantages of using it for prospective provider payment mechanisms. Students will perform hands-on exercises using the Grouper software programs available to support implementation of casemix systems worldwide. A pragmatic approach to planning for implementation of casemix system at hospitals, organizations and national level programs will be presented in this course.

## 1920-532: MANAGING QUALITY ASSURANCE IN HEALTH CARE

CR:2 PR: 1920-501

Improvement in quality of health care services is one of the expected roles of healthcare managers. In this course the technical aspect of designing and implementing effective and efficient strategies for monitoring quality and correcting deficiencies in health delivery systems will be covered. Methods to ensure optimal delivery of quality services through comprehensive use of human and financial resources will be discussed. Students attending this course will have the understanding the overall concept of quality assurance in health care services including various dimensions of quality, quality assurance process and development of indicators to measure and monitor quality of care in healthcare Topics covered include organization. management, total quality management and the methods to ensure patient safety. Aspects of planning, implementing and evaluation of quality assurance programme will be covered in detail in this course.

# 1920-533: SEMINAR IN HEALTH POLICY AND MANAGEMENT CR:2 PR: 1920-501

Health policy and management issues evolve depending on the current challenges and changes in the health system. The main emphasis of this course is to expose MPH students to the debates regarding the contemporary issues which affect local and international health systems. In this selflearning course, the students are required to prepare a seminar that will be presented at the end of the course. Students will be required to work in a group to select a topic of their interest, search for information from local and international literatures on the proposed topic for the content of the seminar. Following the Seminar, the students are required to submit a written report taking into accounts comments and feedback given by academic staff.

### 1920-593: CAPSTONE PROJECT CR: 3

The Capstone Project (non-Thesis option) serves as the culminating experience and the final assessment of the public health competencies required of MPH graduates. The comprehensive paper is a synthesis of the student's practicum or work experience and knowledge and skills gained through coursework. The Capstone project can take on many different formats, including, but not

limited to 1) A standard public health research project in a human population, 2) Health situation analysis of a specific public health problem, 3) A health policy analysis of a public health problem, implications and recommendations, systematic review and meta-analysis of a public health problem or intervention. The report will include a description of the public health problem they are working on, a literature review including current peer reviewed research, and a description of the products or data that have resulted from their work, and an analysis of the public health significance and recommendations based on the findings. The capstone project should provide evidence that the MPH graduate can prepare a substantial and rigorous contribution to a field of public health.

#### 1930-501: EPIDEMIOLOGY & BIOSTATISTICS I CR:3

This course presents the basic epidemiological and biostatistical principles, concepts, and methods for health-related events. The areas of emphasis include applications of epidemiologic methods to the study of the distribution and determinants of health and diseases, measures of morbidity and mortality, descriptive epidemiology and descriptive data analyses, hypothesis testing, common study designs (cross-sectional, case-control, cohort, and randomized controlled trials) along with the biostatistics tools and analytical skills needed to manage, analyze and interpret data including chisquare, student t-test, ANOVA, Mann-Whitney-U test, Kruskal-Wallis tests and paired tests.

#### 1930-502: EPIDEMIOLOGY & BIOSTATISTICS II CR:3 PR: 1930-501

This course focuses on the application of previously-learned basics of epidemiology and biostatistics. The areas of emphasis include disease surveillance and outbreak investigation, infectious disease epidemiology, main sources of error in studies, validation of diagnostic tests, and criteria for implementation of screening programs in the population. Furthermore, the basic power and sample size calculations will be covered. Additionally, statistical skills to analyze data from the common study designs using linear, multiple and logistic regression using the statistical package STATA will be covered. Moreover, basic critical appraisal of a research publication using epidemiological study designs will be included.

### 1930-530: QUALITATIVE RESEARCH CR:2 PR: 1930-501

This course will examine the basic and advanced concepts and methods of qualitative research methods and their relationship with quantitative research methods. On completion of the course, the student will be able to conduct qualitative research using the methods and forms of analysis which are relevant to public health research. They will be able to plan and undertake collection and analyses of qualitative data. Examples and application of course content to the Kuwaiti context will be emphasized. Practical exercises in qualitative research will be included.

# 1930-531: DATA MANAGEMENT AND INFORMATICS CR:3 PR: 1930-501

This course covers basic and advanced concepts of data and information management. Students will be introduced to the dynamic field of public health informatics, the expected competencies of a public health informatics specialist, and the practical application of data management and informatics concepts in the field of public health. Students will also be introduced to the field of data mining and its application to a variety of types of healthcare data. Examples and application of course content to the Kuwaiti context will be emphasized. Practical exercises in data management and informatics will be included. Students will be required to use an anonymized dataset extracted from a health institution to identify problems, consistency issues, and data merging issues.

# 1940-501: SOCIAL AND BEHAVIORAL FOUNDATIONS OF PUBLIC HEALTH CR: 3

This module introduces MPH students to the social and behavioral factors related to human health and disease (social determinants of health) across the life course. The course covers community and individual aspects of health promotion, the principles of social epidemiology, demography and ethical issues related to the social and behavioral aspects of the human experience. It provides an introduction to the theories of behavioral and social sciences, health and illness behaviors, models of behavior change, and the social reactions to and implications of "disease." It covers health disparities, psychosocial stress, and public health issues related to different age groups. The course will enable the students to participate in health promotion planning, especially at the community level. Finally, this course focuses on mental health,

prevention of non-intentional injuries, and how to deal with violence from a public health perspective.

### 1940-530: MENTAL HEALTH PROMOTION CR:2 PR: 1940-501

This course will focus on the principles of mental health, its indicators and social determinants. It will cover the prevalence of common mental health problems across life span, and in different communities. The course will emphasize on the relationships between mental and physical health and illness, and why mental health promotion and prevention is considered as a public health priority. An account about strategies of mental health promotion, the evidence of effective interventions, and the development of sustainable programs in mental health promotion will be covered also. The course will discuss mental health from human rights perspective.

### 1940-531: UNDERSTANDING STRESS AND HEALTH

CR:2 PR: 1940-501

This course introduces Master students to stress, including its causes, the body's reactions to excessive stress, and symptoms and signs that develop following stress. The course focuses on the effects of stress on productivity, quality of life, social relationships in different situations (family, occupation, education, etc.), and health. Students will gain a perspective on the consequences of stress on cognitive, emotional and behavioral aspects of life. The course also presents different strategies of stress management and relief and how these interventions improve overall human's efficiency and quality of life.

1920-597: THESIS

CR: 0

1920-598: THESIS

CR: 0

2000-599: THESIS

CR: 9