WELREN, IMPERIAL COLLEGE LONDON, OPEN UNIVERSITY OF MAURITIUS, UNIVERSITY OF TECHNOLOGY, MAURITIUS

# Master of Public Health

# Syllabus outline

WELREN

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# **Master of Public Health**

This course aims to enable students to understand health and the determinants of health and disease, from the perspective of the population. It provides learners with a strong foundation of knowledge and skills across a broad spectrum of public health practice to promote, protect, and restore health through collective action, preparing them to play leadership roles in promoting global public health through improved practice, policy-making, system response and research. The course is set within the geopolitical context of the Southern African Development Community, but addresses contemporary strategic, operational and academic issues in public health at national, regional and international level.

# After completing the course, a student should be able to:

- Understand the principles of ethical and professional public health practice.
- Possess the core knowledge and skills, such as epidemiology and biostatistics to undertake public health practice.
- Undertake an assessment of the population's health and well-being and its surveillance.
- Assess the evidence of effectiveness of health and healthcare interventions, programmes and services.
- Understand the principles of policy development and implementation
- Understand the need for strategic leadership and collaborative working for health.
- Understand the underlying factors for Health Improvement.
- Understand the importance of Health Protection and control of communicable disease.
- Monitor and assess health and the determinants of health.
- Monitor the quality of health services.
- Interpret intelligence about health outcomes.

# **Program requirements**

A Bachelor's degree with at least second class honours in life sciences in the following topic areas from a University recognised by both the Open University of Mauritius (OU) and University of Technology, Mauritius (UTM) or a Medical Degree or Degree in Dentistry recognised by the aforesaid institutions:

- $\circ$  Medicine
- Nursing and allied health professionals
- Veterinary medicine

- Environmental sciences
- o Biology
- o Chemistry
- $\circ$  Statistics
- o Economics
- Social Sciences
- o Pharmacy
- Nutrition

Candidates must have a good mastery of the English language. The OU and UTM may consider prior learning and prior experiential learning for admission to this program.

#### **Program duration**

	Minimum (ODL)	Maximum (ODL)
Master's degree	21 months	39 months
Postgraduate diploma	18 months	36 months

#### Minimum credits required for the awards

Master's degree	180 credits	1800 hours
Postgraduate diploma	130 credits - excludes	
	Dissertation	

**One credit** is equivalent to a minimum of **10 hours of study.** 180 credits are required to complete the Masters programme. This accounts for **ALL** learning activity: reading printed material or listening to radio clips or watching video; attending tutorials/counselling sessions; writing assignment responses; and preparation for examinations. Thus, a 15 credit module involves a minimum study of 150 hours and a 10 credit module involves a minimum study of 100 hours.

#### **Course structure**

The Open Distance Learning course consists of FOUR semesters set over TWO years with the following structure:

- During year 1 (Semesters 1 & 2), students will be expected to complete **SIX CORE** modules; 15 credits each.
- During year 2 (Semesters 3&4), students will have the opportunity to select **FOUR OPTIONAL** modules; two modules from group A and group B.

#### Open University of Mauritius/University of Technology, Mauritius

- Each optional module is 10 credits each; the equivalent to 100 hours of learning activity.
- Semester 4 is devoted to completion of a master's dissertation.

The following outlines the core modules that students are required to take:

### YEAR 1 (Semesters 1 & 2)

Module Number	Core modules	Semester 1	Semester 2
C1	Public health and global health	$\checkmark$	
C2	Clinical epidemiology	$\checkmark$	
C3	Research methods	$\checkmark$	
C4	Communicable disease control and		$\checkmark$
	health protection		
C5	Biostatistics		$\checkmark$
C6	Promotion, prevention and		$\checkmark$
	management of long term		
	conditions		
Total			90
credit			

At the beginning of Semester 1, we strongly advice learners to complete 'Public Health and Global Health' module before starting the Clinical epidemiology and Research Methods modules. Students will be required to complete a formative essay, which will to help them get early feedback and will not contribute to final exams. For Semester 2 learners can work in parallel for the three core modules.

Module	Optional modules *	Semester 3	Semester 4
Number			
Group A			
OA1	Mental health and public health	$\checkmark$	
OA2	Drug, tobacco and alcohol control: a public health approach	$\checkmark$	
OA3	Public health ethics	$\checkmark$	
OA4	Organisational management in health	$\checkmark$	
Group B			
OB1	Health economics	$\checkmark$	
OB2	Health improvement	$\checkmark$	
OB3	Health policy and practice	$\checkmark$	
OB4	Public health nutrition	$\checkmark$	
Total credit			40
	Dissertation		$\checkmark$
Total credit			50

#### YEAR 2 (Semesters 3 & 4)

\*Choice of two modules from Group A and two modules from Group B.

# Total credit = 180

# Dissertation

Learners are required to complete their dissertation during semester 4. The area of study for their dissertation may be work-based, of interest to the student, and or their employer, but it must be relevant to the public health sector. Each student will be allocated an academic supervisor for the period of their dissertation and are required to submit an initial dissertation proposal for approval.

The dissertation will consist of a report up to a maximum of 10,000 words that will be marked out of 100 with the following awards made:

Distinction:	≥ 70%
Merit:	$60\% \le to < 70\%$
Pass:	50% ≤ to < 60%
Fail:	<50%

# Assessment regulations and grading

#### Assessment for the six core modules will be:

By a combination of a written examination (70%) and continuous assessment (30%). The written exam (three hours) will take place at the end of semesters 1 and 2. Continuous assessment will be based on assignment(s), portfolios and mini-projects. Each module will carry 100 marks. To pass any module the learner should score a minimum of 50 marks (50%). Learners are required to achieve a minimum of 50% in each component; continuous assessment and end of semester examination. Learners may re-sit up to a maximum of two failed modules per semester of the program.

Assessment for the four chosen optional modules will be:

By assessment during semester 3 in the form of an assignment(s), portfolio and miniproject essay or written work. The pass rate the learner must achieve 50% for each optional module.

Percentage range	Description	Grade	Grade point
≥ 70.0	Excellent	А	5
60.0 - 69.9	Very Good	В	4
50.0 - 59.9	Satisfactory	С	3
<50	Ungraded	U	None

#### Grading

#### Award

No Master's degree award will be made if achievement is < 50%. The learner will be required to repeat the entire academic course, retaking modules as and when offered. However, s/he will not be required, if s/he wishes, to retake module(s) for which Grade C or above has been obtained. Learners are allowed to repeat twice once over the entire duration of the program of studies. A learner who fails the Master's dissertation and then subsequently passes will only be eligible for the award of a Master's degree at a pass level.

≥ 70%
60% - 69.9%
50% - 59.9%
<50%

# YEAR 1, SEMESTER 1

# C1: Public health and global health

This module will introduce you to the key concepts in public health; its study, research and practice. You will examine what is meant by global health and learn about the different health systems in both industrialised and developing countries; their funding, organisation and operations with the aim of improving the health of the population worldwide.

#### Module learning outcomes

At the end of the module, you should be able to:

- Define public health and global health.
- Critically appraise health issues globally; examining the challenges of globalisation.
- Critically examine the health and healthcare trends across the world and the key issues for the future.
- Critically assess health systems across the world, especially primary care.
- Be familiar with the inter-relationship between culture, behaviour and health and the moral dilemmas in public health.

# Syllabus outline

# Unit 1: Introduction to public health

During this unit, you will be introduced to definitions of what public health is, and its historical development and controversies. You will learn about health transition and explore the determinants of health including the political and socio-economic environment.

# Unit 2: Globalisation, health, public health and policy

During this unit, you will be introduced to the definition of global health, and the differences between public health and global health. You will assess current and future global health trends. You will learn how global health policies are developed and reviewed, and the future role of public health in the context of globalisation and health.

#### Unit 3: Populations, environment and global health

During this unit, you will gain an understanding of the effect of globalisation on clean air, abundant and safe food and water, and climate change. You will examine the impact of

population growth and resource constraints in combination with climate change and its effect on health.

# Unit 4: Public and private healthcare systems in global health

During this unit, you will review public and private healthcare systems across the world, examining their strengths and weaknesses, and the challenges of developing global health policy within these systems.

# Unit 5: Health systems and financing

During this unit, you will be introduced to the basics of supply and demand in microeconomics and how this is applied to health care markets. You will learn about the different methods of resource allocation and the move to universal health coverage.

# Unit 6: Decentralising primary care in global health

During this unit, you will learn about primary care systems across the world and the challenges of developing health policy regarding primary care, and examine the global implication for the primary care workforce.

#### Unit 7: Maternal and child health issues

During this unit, you will examine the key maternal and child health issues across the globe and assess the differences that exist between developed and developing countries, and the challenges of developing maternal and child health global health policy. You will examine issues around maternal and infant mortality and prevention.

#### **Unit 8: Public health ethics**

During this unit, you will be introduced to the moral dilemmas in public health, the need for ethical reflection and you will examine the implications of this for policy and practice. The unit will be an introduction on the distinct nature of public health ethics and the differences between 'ethics in public health' and the 'ethics of public health'.

#### Unit 9: Culture, behaviour and health

During this unit, you will examine the relationship between culture, behaviour and health and the impact of this for global health.

# Unit 10: Management and planning for global health

During this unit, you will learn about why we should manage and plan for global health and how different countries undertake this, and what challenges they face.

# YEAR 1, SEMESTER 1

# **C2: Clinical epidemiology**

This module describes the history and role of epidemiology and clinical epidemiology. You will learn about the main types of epidemiological studies including their strengths and weaknesses, and explore how appropriate study designs are used to address specific epidemiological questions. This will include a description of the major potential sources of error, bias and confounding in studies and will discuss strategies to minimise them. You will learn how to calculate measures of disease frequency, measures of effect and impact. The module will cover the importance of disease prevention and concepts of sensitivity, specificity, positive and negative predictive values of clinical tests and evaluation of screening programmes.

#### Module learning outcomes

At the end of the module you should be able to:

- Critically understand the key concepts of disease incidence, prevalence and risk.
- Critically understand the main issues in the design of epidemiological studies and critically assess the appropriateness of particular study designs.
- Develop a critical appreciation of the key issues in the analysis and interpretation of epidemiological results including consideration of bias, confounding, association and causation.
- Understand the importance of disease prevention and evaluation of screening programmes.

# Syllabus outline

# Unit 1: Introduction to clinical epidemiology

During this unit, you will be introduced to the concept and field of epidemiology and clinical epidemiology, its applications in public health and some of the key historical developments and milestones in this field.

# **Unit 2: Descriptive observational studies**

During this unit, you will gain a critical understanding of what observational studies are and their importance and usefulness in clinical epidemiology, descriptive vs analytical studies, and some of the key types of observational studies. You will examine and reflect upon examples of observational studies including those that are clinically focused.

#### **Unit 3: Analytical observational studies**

During this unit, you will focus on the various types of analytical studies and their use in clinical epidemiology and will examine and reflect on their strengths and weaknesses.

### **Unit 4: Intervention studies**

During this unit, you will gain a critical understanding of what randomised controlled trials are, their importance and usefulness in clinical epidemiology, types of other interventional studies such as case-control, how they are conducted, and some of the methodological concerns such as choice of control group, which epidemiologists need to focus upon to ensure rigour. You will examine and reflect upon examples of peer-reviewed interventional studies.

# Unit 5: Interpretation of clinical data

During this unit, you will learn about some of the key principles involved in the interpretation of clinical data. This includes the meaning and importance of bias and error and how to deal with potential confounders. You will also learn about making assessments of claims of disease causation and how this can be complex and socially embedded.

# Unit 6: Routine sources of epidemiological data and analysis

During this unit, you will learn about the different types of routine data relating to health status and health utilisation in low middle income and industrialised countries. You will learn of the importance of standardisation as a means of comparing different populations, how to calculate age-standardised mortality rates and when to use direct and indirect standardisation methods. You will also learn about crude incidence rates, the different types of disease measures of effect, cumulative incidence, life expectancy and Quality-Adjusted Life Years, and Standard Mortality Ratios.

# Unit 7: Systematic reviews and meta- analyses

During this unit, you will gain a critical understanding of what systematic reviews and meta-analyses are, and their importance and usefulness in clinical epidemiology. You will learn about how they are conducted, the key steps that are involved and the methodological concerns that epidemiologists must focus upon to ensure rigour. You will examine and reflect upon examples of studies of systematic reviews and meta-analyses.

# Unit 8: Disease prevention and public health

During this unit, you will gain a critical understanding of what prevention means, the terms primordial, primary, secondary and tertiary prevention, and the public health challenges in preventative medicine. You will understand and become familiar with

using concepts of relative and attributable risk, and be able to anticipate the potential benefit of interventions for individuals and populations. You will appreciate the different strategies aimed at targeting high risk individuals or the whole population for primary prevention activity.

# Unit 9: Disease prevention and public health II

During this unit, you will understand the implications of undertaking screening and public health policy. You will learn to calculate measures such as sensitivity, specificity and thresholds and be able to evaluate existing or proposed screening programmes using established criteria.

# Unit 10: Communicable diseases and outbreak investigations

During this unit, you will gain a critical understanding of communicable disease epidemics including definitions and how they occur. You will learn about the types of studies employed to undertake and investigate outbreaks.

# YEAR 1, SEMESTER 1

# C3: Research methods

This module is about the practice and experience of doing research and is designed to enable you to have experiential exposure to do research. In particular, how to use social research methodology to investigate problems that affect public health. It uses issues of alcohol and drugs, a major concern for the region, as an exemplar. The course takes into consideration that you may have had very little or no experience of research. It is flexible and challenging.

The module is organised in three parts namely (a) an introduction to research (b) a guidebook for your project; you will need to consult often in the course of your research and (c) practice units – to enable you to understand sampling methods, types of research methods and analyses. This is an innovative approach to help you to understand the principles of social research and their applications to public health problems. It also helps you plan, conduct and report a research project of their choice.

#### Module learning outcomes

At the end of this module you should be able to:

- Describe various research styles and methods that are used to address public health matters using a specific problem as exemplar.
- Discuss research dilemmas and debates in research.
- Demonstrate a critical knowledge of research methods both quantitative and qualitative design.
- Identify key issues that assist a critical assessment of published social research including access to subjects, consent and confidentiality.
- Compare and contrast the advantages and disadvantages of different research approaches.
- Describe the relationship between data collection and analysis.
- Develop a researchable question and select a method for design.
- Make use of methods and data collection techniques to conduct primary and secondary studies.
- Critique a research report or published report.
- Know how to structure your research dissertation.

#### **Syllabus outline**

# Unit 1 & 2: Introduction to public health and social research

During this unit, you will be introduced to the methods and practice of public health research in social settings. You will learn of the importance of developing a researchable question and how to go about this. The emphasis is how to critically appraise published research and be able to judge the value of research within a particular context; this is an essential skill in practicing evidence based practice.

#### Unit 3: Project guide

This unit prepares the student on how to plan their research. It explores how you have developed your ideas and with support from your tutor help you to do research as effectively, efficiently and safely as possible. This guide has been written to assist you in planning your project and explores you to think about the opportunities within your project and also the obstacles you will encounter along the way.

#### **Unit 4: Sampling and access**

This unit explores various sampling techniques and develop critical thinking around how to tackle the access various sources of data. It deals with statistical and theoretical sampling, random and non-random sampling techniques and community mapping,

# Unit 5: Analysis of existing information

During this unit, you will continue to learn about qualitative research methods such as sampling including purposive and snowballing and the types of recruitment strategies that are available to the researcher. You will learn about designing and conducting surveys.

#### **Unit 6: Interviews**

Interviewing is used in a wide variety of quantitative and qualitative research studies. Indeed, it is probably the most commonly used method in drug and alcohol research. This unit aims to develop your skills in understanding and managing research interviews, and analysing the data produced by them. It will help you make an informed choice about whether to use interviewing for your project, and, if so, how to go about doing it.

#### Unit 7: Focus group

The use of focus groups is an important tool in community-based research. You will learn about focus groups and when and how to undertake them. You will develop your skills in analysing data from focus groups and enable you to make informed decisions about whether and how to use this method in your project. It will raise awareness of the possibilities and problems concerned with using focus groups in social research.

### **Unit 8: Observation**

Observation may fairly be described as the classic method of scientific enquiry. The most natural and obvious way for a researcher to collect data is to simply watch, listen, and record what is happening around him or her. The aim of this unit is to improve your knowledge of observation and when and how to undertake it. You will develop your skills in analysing data from observation and make an informed decision about whether and how to use this method in your own project. It will raise awareness of the possibilities and problems with using observation in social research.

#### Unit 9: Surveys

This unit introduces the use of surveys in public health research. It describes the different types of survey, their design and use for social research and issues which are particularly pertinent for research into substance use.

#### Unit 10: Statistical analysis

This unit is concerned with the statistical analysis of quantitative data. It will specifically concentrate on primary analysis that is, an original analysis conducted by the researcher that produces findings on a specific topic. It will introduce a statistical software to allow researchers to conduct complex analyses on large data sets and has changed the nature of social research in general and of data analysis in particular.

# YEAR 1, SEMESTER 2

# C4: Communicable disease control and health protection

This module explores the role of health protection & infectious disease epidemiology; public health surveillance; outbreak investigations; international health protection agencies; hygiene and the control of communicable disease; water and sanitation; global food safety; healthcare associated infections; vaccine preventable diseases; polio eradication; epidemiology and control of vector-borne diseases; behavioural strategies; HIV and blood-borne viruses; emerging infectious diseases; tuberculosis and multidrug resistance. The will cover the impact of climate and natural disasters; emergency planning; preparing for and managing major incidents; chemical, radiological and environmental hazards; bio-terrorism; successes and on-going challenges.

#### Module learning outcomes

At the end of this module you should be able to:

- Demonstrate a critical understanding of the role of public health protection in protecting populations from infectious diseases and environmental hazards.
- Demonstrate an understanding of the principles of emergency planning and managing major incidents.
- Understand the ongoing challenges of communicable disease control and emergency planning.

# Syllabus outline

# Unit 1: An introduction to key concepts in communicable diseases and public health

During this unit, you will be introduced to some of the key interventions and disease prevention strategies behind the public health approach to controlling communicable diseases. You will review key aspects of infectious disease epidemiology, investigate the importance of effective public health surveillance systems, and gain a critical understanding of the frameworks used when investigating outbreaks of communicable diseases.

# Unit 2: The importance of hygiene in the control of communicable diseases

During this unit, you will gain a critical understanding of the importance of hygiene in the control of communicable diseases, focusing on the importance of clean water and good sanitation and global policies for food safety.

# Unit 3: Vaccine preventable diseases

During this unit, you will gain a critical understanding of vaccine development strategies and global vaccination programmes and coverage rates. The polio eradication programme will be used to illustrate the issues associated with implementing global strategies.

# Unit 4: Vector-borne diseases

During this unit, you will gain a critical understanding of the epidemiology of key vectorborne diseases. Using examples such as dengue fever and chickungunya you will investigate environmental vector control and behavioural change strategies that can be implemented to reduce rates of infection.

# Unit 5: Behavioural strategies for control of HIV and blood-borne viruses

During this unit, you will investigate the epidemiology of HIV and blood-borne viruses and gain a critical understanding of the behavioural strategies that can be used to control rates of infection.

# Unit 6: Emerging infectious diseases

During this unit, you will gain a critical understanding of emerging and re-emerging infectious diseases. You will investigate the impact of natural disasters and climate on communicable disease rates and identify recent trends.

# Unit 7: Threats to public health from globalisation and travel

During this unit, you will investigate the threats posed to public health from globalisation and travel and investigate national and international strategies, such as the International Health Regulations, designed to mitigate and control the risks to public health.

# **Unit 8: Emergency planning**

During this unit, you will gain an understanding of the basic principles of emergency planning. You will investigate frameworks that are designed to support health professionals in planning for, preventing, detecting and controlling outbreaks of communicable disease in emergency situations.

# Unit 9: Preparing for and managing major incidents

During this unit, you will gain an understanding of the potential impact that chemical, radiological and environmental incidents and acts of bio-terrorism may have on public health and will investigate frameworks that are designed to support health professionals preparing for and managing major incidents.

# Unit 10: Successes and on-going challenges

During this unit, you will critically review and summarise the strategies for communicable disease control discussed over the course of the module. You will celebrate key successes

such as immunisation, hygiene and community action, as well as consider ongoing challenges such as adaptable pathogens, developing sustainable infection prevention and control, and the persistent effects of poverty on health.

- Successes
  - Vaccination
  - Hygiene
  - Community action
- Challenges
  - Adaptable pathogens
  - Environmental challenges to pathogen control
  - Challenges to sustainable infection prevention and control
  - The persistent effects of poverty on health
  - Patterns of antibiotic resistance and hospital acquired infections
  - Communicable disease focus: Tuberculosis and multidrug resistance

# YEAR 1, SEMESTER 2

# **C5: Biostatistics**

This module provides students with an understanding of statistical methods and their use in public health, introducing important concepts and reasoning in biostatistics. Specific topics include tools for describing central tendency and variability in data; methods for performing inference on population means and proportions using sample data; statistical hypothesis testing and its application to group comparisons; issues of power and sample size in study designs; and random sampling and other study types. The emphasis is on concepts and interpretation and you will have the opportunity to use SPSS for statistical analysis.

# Module learning outcomes

At the end of this module you should be able to:

- Discuss the role of statistics in public health.
- Demonstrate critical understanding of bio-statistical issues in study design.
- Evaluate time to event data and survival analysis.
- Apply hypothesis testing, measures of association, sampling variability, confidence intervals and p values.

# Syllabus outline

# **Unit 1: Introduction to biostatistics**

During this unit, you will discuss the role of statistics in public health and learn about the different sources of data, how to describe data and its interpretation.

# Unit 2: Bio Statistical issues in study design

During this unit, you will learn to quantify and compare information, understand issues of power and sample size, and random sampling. You will learn about data collection and analysis and the statistical methods most appropriate given the data collected. You will also learn to deal with variability distinguishing real patterns from random variation and noting that often important patterns in data are obscured by variability and inference and learn to make statements about the larger population of interest.

# Unit 3: Sampling variability: means, proportions and confidence intervals

During this unit, you will learn to calculate the sampling variability and standard error of a mean and understand the difference between standard error and standard deviation. You will learn to calculate confidence intervals for population means and understand what is meant by sampling error and sampling variability of proportions and how to calculate the standard error and confidence interval of a proportion.

# Unit 4: Introduction to hypothesis testing

During this unit, you will learn about the concept of hypothesis testing (null and alternative) and about tests of significance used to compare two means (including non-parametric alternatives). You will learn about the relationship between confidence intervals, how to calculate p- values and hypothesis testing.

# Unit 5: Comparing means and proportions between more than two independent populations

During this unit, you will learn how to compare means and proportions between more than two independent populations.

# Unit 6: Data analysis and presenting results

During this unit, you will learn about the summary measures that will best convey the "main messages" from the primary and secondary research questions of interest, how data can be presented and the importance of presentation in influencing decision makers. You will learn to make a simple analysis plan and construct a table from raw results and appreciate that presenting results is more than simply writing them down, and that there are problems associated with presenting too much information at once.

# Unit 7: Correlation and linear regression

During this unit, you will examine the methods for analysing the relationship between two quantitative variables and the exploration of this through the use of scatter diagrams and the understanding of correlation.

# **Unit 8: Multiple regression**

During this unit, you will gain an understanding of the different types of regression models used depending on the outcomes including about Logistic and Poisson regression.

# Unit 9: Multivariate analysis: confounding and effect modification

During this unit, you will learn about multivariate analysis and its use when there are several possible explanatory variables to explain the outcome. You will learn about the limitations in examining one explanatory variable at a time and approaches such as stratification and multiple regression modelling to overcome these. You will learn about confounding and the importance on effect modification and statistical interaction.

# Unit 10: Time to event data and survival analysis

During this unit, you will learn about Cox regression models that are widely used in clinical studies. You will learn about Kaplan Meier curves which enables two groups (one receiving treatment and other placebo) to be compared graphically and how this is used in clinical trials to summarise the likelihood of survival since entering a clinical trial. You will construct a Kaplan-Meier estimate of the survival function that describes the "survival experience" of a cohort of subjects.

# YEAR 1, SEMESTER 2

# C6: Promotion, prevention and management of long term conditions

This module looks at population-level disease trends (patterns and extent) in chosen regions (e.g. Sub-Saharan Africa) and comparative country and area analyses. You will examine the main pathophysiological and biochemical pathways and common risk factors (e.g. obesity) for major long term conditions including cardiovascular disease, diabetes mellitus and preventing them. The module will cover major environmental health risks including the occupational environment and the public health implications of climate change.

#### Module learning outcomes

At the end of this module learners should be able to:

- Critically assess the burden of long term conditions examining global and regional trends.
- Describe the role of health promotion and the interventions that can be employed to modify risk factors.
- Describe the models of care in long term condition managements.
- Critically appraise long term conditions examining the role of primary care.
- Critically examine long term conditions within a range of health conditions and the key issues for the future.

#### Syllabus outline

#### Unit 1: What is the burden of long term conditions?

During this unit, you will examine the historical and current trends in global burden of long term conditions in industrialised and low middle income countries. You will learn about its economic effect and in relation to the Millennium and Sustainable Development Goals. You will compare and contrast long term conditions with new emerging infectious diseases, such as HIV, TB and malaria.

#### Unit 2: Health promotion and risk factors

During this unit, you will examine the wider determinants of health and the 'STEPWISE' approach utilised by the World Health Organisation. You will look at the role of health promotion and interventions targeted at modifiable risk factors such as better diet, physical activity and tobacco cessation.

### Unit 3: Obesity and long term conditions

During this unit, you will examine in depth the global burden of obesity, its association with ill health and the development of long term conditions, and the current policies for prevention.

#### Unit 4: Ageing and long term conditions

During this unit, you will learn about the global burden of an ageing population and the health needs of older people and the challenges they face with multiple long term conditions.

#### Unit 5: Diabetes mellitus

During this unit, you will focus on diabetes examining its global and regional burden. You will learn about what can be done to prevent it and its treatment and care.

#### Unit 6: Cardiovascular disease

During this unit, you will focus on and examine the global burden of cardiovascular disease and stroke, its prevention and management.

#### Unit 7: Models of care

You will examine the models of care for long term conditions; what are they and how do they work. You will learn about the role of self-care and self-management programs in long term conditions and its impact on long term conditions, using examples of what works.

#### Unit 8: Respiratory disease

During this unit, you will examine the global burden of respiratory diseases, the role of prevention and management.

#### Unit 9: Primary care and long term conditions

During this unit, you will examine the role of primary care and multi-disciplinary primary care teams with respect to long term condition management, their role in pro-active care and the management of co-morbidities.

# Unit 10: Environment and long term conditions

During this unit, you will learn about the effect of the environment, including the occupational environment and will also examine the implications of climate change, on long term conditions with respect to the Millennium Development Goals and the post 2015 Sustainable Development Goals.

# YEAR 2, SEMESTER 3

# 0A1: Mental health and public health

This module examines what mental health in public health means, why and how mental health is so important, the psycho-social and cultural factors that moderate its impact, and the harmful consequences associated with poor mental health outcomes. It also examines the theoretical basis and effectiveness of a range of interventions aimed at improving outcomes, the importance and power of mental health stigma, the mental health of particularly vulnerable populations, and what has and can be done to promote mental health and wellbeing.

#### Module learning outcomes

At the end of this module learners should be able to:

- Critically understand the concept of mental health and its significance to public health.
- Develop a critical appreciation of the range of harmful consequences associated with poor mental health.
- Critically understand some of the key phenomena that moderate mental health.

# Syllabus outline

# Unit 1: Introduction to mental health and public health

In this unit, you will be introduced to a range of important concepts, such as 'mental health', 'mental illness' and 'wellbeing' including their conceptual similarities and differences, and will explore the importance of mental health with public health.

# Unit 2: Epidemiology of mental health

During this unit, you will learn about the epidemiology of mental health including key global population patterns and trends as well as focusing on several high-risk populations. You will gain critical knowledge about the presence of mental health problems at a national and international level.

#### Unit 3: Consequences of poor mental health

During this unit, you will explore the relationship and consequences of poor mental health including economic, psycho-social, behavioural and physical health consequences for the individual, families and caregivers, and society. You will take a particularly close look at the relationship between poor mental health, suicide and self-harm.

# Unit 4: Social determinants of mental health & social interventions

In this unit, you will gain a critical understanding of the wide range of social determinants of public mental health and critically examine the evidence. Societal and community-based interventions that have been implemented to help improve public mental health will be examined and reflected upon.

# Unit 5: Stigma and discrimination

During this unit, you will learn about the stigma in public mental health. You will begin by examining the conceptual and theoretical nature of 'public stigma' and 'self-stigma'. The social and cultural factors that influence the likelihood of stigma occurring will then be examined, followed by an examination of the impact of mental health stigma including concealment, utilisation of services, disruption of treatment and recovery and discrimination. Finally, you will examine and reflect upon potential interventions for combating stigma.

# Unit 6: Severe mental illness

During this unit, you will learn more about severe mental illness including the challenges that people who experience these conditions face, and the key health and social consequences associated with them. You will learn about mental health and dementia including its risk factors, prevalence and consequences as well as the relationship between substance misuse and mental health problems.

# **Unit 7: Clinical interventions**

In this unit, you will learn about the different clinical therapies that are used to treat mental health problems such as depression, schizophrenia and drug and alcohol misuse. You will also learn about other types of interventions that promote mental wellbeing and their potential effectiveness in reducing harmful outcomes and in preventing mental illness.

# Unit 8: The roles of culture and religion in mental health

During this unit, you will examine the concepts of culture and religion and the importance of these concepts within mental health including how religious and cultural values impact upon attitudes towards mental health. You will also learn about how different cultures perceive and view mental illness.

# Unit 9: Mental health of refugees, displaced persons and victims of trafficking

In this unit, you will gain a critical understanding of the mental health status of three very vulnerable populations: refugees; internally displaced persons; and victims of trafficking. This will involve a consideration of the types and severity of mental health

problems these groups experience and also factors that further increase their risk of poor mental health.

### Unit 10: Promoting public mental health

During this unit, you will learn about mental health promotion, its importance using examples in industrialised and low and middle income countries and frameworks for health promotion including the Ottawa charter. You will also learn about the potential future of mental health including new research directions.

# YEAR 2, SEMESTER 3

# 0A2: Drug, alcohol and tobacco control – a public health approach

This module develops an understanding of the burden of disease associated with the use of alcohol, drugs and tobacco, and explores the issue of addiction from a public health perspective and develops an appreciation of the research and policies on drugs, alcohol and tobacco control at an international level.

#### Module learning outcomes

By the end of this module, you should be able to:

- Describe and compare the disease burden associated with drugs, alcohol and tobacco use.
- Explain the rationale for and the effectiveness of drugs, alcohol and tobacco control policies.
- Evaluate the effectiveness of public health interventions aimed to reduce the use of drugs, alcohol and tobacco.
- Analyse the national and international context and agreements concerning drugs, alcohol and tobacco control.
- Explain what harm reduction is and how this principle can be implemented in public health policies.
- Assess socioeconomic inequalities in the use of drugs, alcohol and tobacco.
- Evaluate research related to drugs, alcohol and tobacco.

#### Syllabus outline

# Unit 1: Introduction to drugs, alcohol and tobacco

During this unit, you will learn about the historical and socioeconomic context of substance use and abuse and the most commonly used drugs, as well as the main forms of use of tobacco and alcohol.

# Unit 2: Addiction and health

In this unit, you will learn about the physiological and psychological aspects of addiction and whether a unified model of dependence can be applied in drugs, alcohol and nicotine addiction. You will also explore the health consequences of drug, alcohol and tobacco use at an individual and population level.

# Unit 3: Epidemiology and economics of drug, alcohol and tobacco use

During this unit, you will review the epidemiology of drug, alcohol and tobacco, the trends of their use over time and the burden of disease associated with these substances. You will also have the opportunity to explore differences between regions and countries and identify epidemiological patterns and interactions. You will also investigate the economics of drugs, alcohol and tobacco and the direct and indirect costs incurred by their use.

# Unit 4: Legal, cultural and social issues

In this unit, you will gain critical understanding as to why some substances are legal and others are not and what implications this may have for public health. You will also look into cultures and traditions that may encourage or discourage the use of drugs, alcohol and or tobacco and how these may complicate efforts to address the problem. Finally, you will examine the social context and socioeconomic inequalities in drug, alcohol and tobacco use.

# **Unit 5: Individual-level interventions**

During this unit, you will gain a critical understanding of the most commonly used interventions aimed to help individuals addicted to drugs, alcohol or nicotine, such as medication and psychological support. You will evaluate their effectiveness, their limitations and potential as solutions at a public health level.

# Unit 6: Policies and prevention I

During this unit, you will describe the international experience of drug, alcohol and tobacco control policies, highlighting lessons learned and evidence-based policies. You will analyse international guidelines and treaties such as the World Health Organisation's Framework Convention on Tobacco Control and how these have shaped the fight against substance abuse. You will also evaluate the effectiveness of specific policies and compare successes and failures across different domains.

# Unit 7: Policies and prevention II

In this unit, you will analyse specific examples of successful and failed policy interventions in drug, alcohol and tobacco control from different countries. You will explore the social, political and economic context and identify factors that contributed to the success or failure of these policies.

# **Unit 8: Harm reduction**

In this unit, you will define harm reduction and apply this approach to drug, alcohol and tobacco us and identify relevant policies that have already been implemented and evaluate their risks and benefits.

# Unit 9: National policies, international treaties and big corporations: the case of tobacco control

In this unit, you will explore the interaction between policies implemented by sovereign states, the influence of international organisations, the role of treaties between countries, marketing and the power of big corporations. You will do this by analysing real cases from tobacco control.

# Unit 10: Lessons learned and challenges

In this final unit, you will review the evidence on the effectiveness of individual and population-level interventions and compare drugs, alcohol and tobacco control policy approaches with each other. You will also identify the major challenges in prevention and treatment, as well as opportunities for research and interventions in different settings globally.

# YEAR 2, SEMESTER 3

# **0A3: Public health ethics**

In studying health, it is easy to get caught up in technicalities and forget that health is grounded in values and moral norms that guide our decisions, behaviours and practice. Public health ethics is a new growing discipline, distinct from bioethics that deals with norms and values and is concerned with populations, society and the community. The aim of this module is to describe and reflect on the nature, concepts, and principles of public health ethics that is values and norms and their application and implication for the "public" and "public health" policies and practice. The module will cover concepts of health, disease and wellbeing and justifications for interventions, and describe various moral theories, tools, and frameworks and their potential applications to decision making, public health policies and practice.

#### Module learning outcomes

At the end of this module you should be able to:

- Understand the nature and role of public health ethics and its application for effective public health practice and policies in addressing public health challenges and issues.
- Demonstrate a systematic understanding of a number of major ethical theories and concepts, their limitations and implications to public health practice.
- Demonstrate a systematic understanding of the guiding public health ethical principles and values and their implication and application for public health practice and policies.
- Understand the relationship between ethical theory and public health and healthcare policy and practice.
- Reflect on appropriate tools and frameworks to systematically analyse the ethical issues that arise during the practice of public health and in particular in the development and application of interventions.
- Demonstrate a critical awareness of the potential ethical issues in public health practice, and to apply ethical theories, frameworks and tools to help resolve them.
- Apply ethical understanding in practice for example in research, public health interventions and policy making.

# Syllabus outline

# Unit 1: What is philosophical (public health) ethics?

During this introductory unit, you will learn about the moral dilemmas that appear in public health and the need for ethical reflection and how this impacts on policy and practice. You will reflect on the discipline of philosophical ethics in providing an important opportunity for critical and systematic reflection and understanding of essential decision making criteria. You will learn about the distinct nature of public health ethics and the differences between 'ethics in public health' and the 'ethics of public health'.

# Unit 2: Philosophical perspectives on the concepts of health and disease

In this unit, you will reflect on concepts of health and disease and the need for critical understanding of the concepts and how they relate to moral reasoning and ethical discussions. You will consider descriptive or normative concepts, as well as reflect on subjective, objective and relational aspects of health and disease. You will gain an understanding of the often cryptic and hidden normative character of health and disease and its implications for public health practice.

# Unit 3: Philosophical perspectives on the concept of "public" and "public health"

In this unit, you will consider several definitions and core concepts of 'public health' and reflect on related terms, such as 'population health', 'community health' and the 'public's health'. What is public health and its mission? Who is the public? Who are the providers and recipients of health interventions? What is the key role of values and its implication for policy and practice? You will learn about emerging public health values of solidarity, knowledge, justice and service with interdependence or interconnectedness as a core underlying issue, as outlined by work by the UK Faculty of Public Health and other partners.

# **Unit 4: Community and Communitarianism**

During this unit, you will explore in greater depth the key role and nature of community in public health. You will examine Communitarian reasoning as a means to explore the relationship between individuals, communities and institutions that serve them and the interrelationships between these key protagonists for health and their moral values, norms or virtues. You will learn about the differences between Communitarian reasoning with other theories and approaches.

# Unit 5: Consequentialist approaches, especially utilitarianism

During this unit, you will consider consequentialist approaches in public health in particular utilitarianism, which appears to be a dominant theory in public health. You will examine and critique utilitarianism and related approaches in public health policy development, research and practice, such as in considering health inequalities and other activities. The implications of the critiques of utilitarianism and other emerging theories and implications for practice will be outlined.

# Unit 6: Libertarian theories, autonomy and paternalism

During this unit, you will examine libertarianism and will contrast it with utilitarianism. You will reflect on implications for policy and practice in considering "liberty", the individual and his or her autonomy as absolute normative benchmark in ethical reflection in public health. You will consider the role of state regulation, and introduction to concepts of paternalism and the nanny state, "libertarian paternalism" ("nudging") and other emerging issues in public health policies.

# Unit 7: Theories of health justice

In this unit, you will examine further theories of social ethics and political philosophy which combine insights, norms and values of both utilitarianism and libertarianism, in particular consideration of theories of social justice and implications for public health. The health justice theory of Norman Daniels will be explored in depth as it is one of the most influential liberal theories.

# Unit 8: Cosmopolitism, altruism, nationalism, egoism and global public health

During this unit, you will examine issues of global justice and global public health ethics and consider the growing global public health challenges, such as violence, war, conflict, health inequalities and climate change using questions such as:

- How much does one owe to people who are more distant than compatriots?
- Does proximity have a moral value?
- Are there ethical obligations to assist the health of people in a global perspective?

You will reflect on approaches such as cosmopolitism or effective altruism and their fundamental conviction for ethical deliberation - the universal moral obligation to avoid pain and suffering, which does not halt at one's own national boundaries and considers "mankind" as members of our planet and its implications for global health.

# Unit 9: Ethical tools and frameworks for public health

During this unit, you will explore some of the various ethical tools and frameworks for public health: their strengths and limitations; and potential use and application in practice. Given that ethical theories are complex and many, it is often difficult to convincingly and directly apply ethical theory to moral challenges of public health. You will examine various specific frameworks and tools, such as those from the Public Health Leadership Society, the Stewardship Model of the Nuffield Council on Bioethics, and the latest emerging thinking on approaches. You will gain an understanding on the strengths and weaknesses, uses, abuses and dangers of such frameworks and tools.

# Unit 10: Case discussions from public health practice including research

During this unit, you will examine and reflect on specific in depth case studies across the various domains in public health to further practically apply the various concepts, theories and tools. You will learn to develop, examine and reflect on your own case study.

# YEAR 2, SEMESTER 3

# 0A4: Key concepts in healthcare management

This module introduces principles of health management -commonalities and differences between management in health and non-health settings; allocation of resources to health programs and projects; and control and measurement of performance in health institutions. It considers the setting of mission, vision and objectives of health institutions; effective leadership styles; managerial roles and responsibilities of health professionals; and building relationships among managers, teams, and individuals. It covers the application of motivational theories in the health sector; ethical approaches in managing health institutions. It also explores effective time management; communication and presentation skills; management at times of turbulence (crisis management); managing conflicts and complaints in health institutions; and application of the stakeholder theory in the health sector.

#### Module learning outcomes

At the end of the module the learner should be able to:

- Demonstrate a critical knowledge of the key concepts in healthcare management as well as the variety of roles, synergies and conflicts in healthcare organisations.
- Demonstrate a critical knowledge of effective team working, leadership and evidence based practice.
- Critically examine systems of care delivery including integrated care and evaluate their impact.

#### Syllabus outline

#### Unit 1: Introduction to health management

During this unit, you will examine the principles of health management in health and non-health settings and how resources are allocated to health programs and projects. You will learn about the control and measurement of performance in health institutions.

#### Unit 2: Managing organisations and people

During this unit, you will examine the setting of mission and vision of health institutions. You will reflect on and examine the function of managerial roles and responsibilities of health professionals; and building relationships among individuals and managers.

#### Unit 3: Leadership in healthcare

During this unit, you will explore some of the theoretical approaches to leadership that make most sense in terms of today's healthcare context. Leadership is often found in people who have little or no power status within organisations; indeed, this is the premise on which this unit has been developed.

#### Unit 4: Effective team working

Almost everyone working in the current world of health and social care will be involved in one or more teams, whether or not these are explicitly defined as such. Teams frequently seem to have lives of their own, which often brings different challenges to practice situations. In this unit, you will explore what enables effective team working and what can compromise it.

#### Unit 5: Effective time management and communication skills

During this unit, you will explore and reflect on effective time management skills including setting goals and prioritisation, and the importance of communication skills in the health sector.

#### Unit 6: Evidence-based practice

In this unit, you will look at what 'evidence' is, and why it matters in health care. This is designed to help you understand how reliable evidence can inform and improve practice.

#### Unit 7: Risk management in healthcare

Healthcare can only be delivered effectively when there is a process of assessment. This is a continuous process that begins as soon as a person is referred to a service, and ends with the person's discharge. During this unit, you will explore the fundamental importance of ensuring a safe environment to support person-centred practice and effective healthcare delivery that does not put anyone – service users, carers, colleagues, the organisation and not least you – at avoidable risk. You will be considering the policy context of promoting a safe environment, practitioner interventions to ensure a safe environment and what actions should be taken when there is potential risk to individuals through a systematic and cyclical process.

#### **Unit 8: Managing conflicts and complaints**

During this unit, you will learn about sources of conflicts in health both organisational and individual conflicts and how these, if resolved can improve outcomes. You will investigate the differing types of models of conflict management. You will also explore the importance of complaint handling and principles of good complaint handling.

#### **Unit 9: Crisis management**

During this unit, you will learn about how organisations in the health sector deal with a major event that may threaten the organisation and the public. You will learn about different types of crisis and the necessary techniques to assess and deal with them from the beginning to the end.

#### Unit 10: Motivational and stakeholder theories

It covers the application of motivational theories in the health sector; ethical approaches in managing health institutions and stakeholder theories.

# YEAR 2, SEMESTER 3

# **0B1: Health economics**

This module explores the concepts and principles of modern health economics; the supply and demand in the health care market; the health system and the financing framework; methods in health econometrics to conduct policy evaluation; methods in cost-effectiveness analysis in economic evaluation and health technology assessment, and to introduce ideals in behaviour economics and economics of prevention.

#### Module learning outcomes

At the end of this module you should be able to:

- Have a good understanding of how economic theory and methods are applied in the health care sector.
- Critically understand the toolkits of health economics discipline including health econometrics and economic evaluation of health interventions.
- Critically understand some of the key topics in modern health economics including pay-for-performance, behaviour economics, equity in health care, and universal health coverage in low and middle income countries.

#### **Syllabus Outline**

#### Unit 1: Supply and demand in health

During this unit, you will be introduced to basic micro-economic theory of supply and demand in health markets. You will learn about how individuals and health care providers make their choice in the health care market to maximise their utility and profits.

#### Unit 2: Microeconomic analysis of health market

During this unit, you will gain a critical understanding of basic micro-economic concepts applied in the health care market. You will learn about what market equilibrium means and the role of government in market failure.

#### **Unit 3: Health insurance**

During this unit, you will gain a critical understanding of the concept of health insurance. You will learn how patients respond to cost sharing, and the adverse selection of health insurance.

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# Unit 4: Health system and financing

During this unit, you will gain a critical understanding of what is a health system, health care financing, and different methods of resources allocation. In addition, you will learn about the recent progress of universal health coverage in low middle income countries.

# Unit 5: Performance measurement in health care

During this unit, you will learn about frameworks to compare health system performance. In addition, you will be introduced how to measure efficiency in health care including variation in health care costs. You will be introduced index for measuring equity in health care.

# **Unit 6: Introduction of health econometrics**

During this unit, you will gain understanding of the important health econometrics tools in cross-sectional and longitudinal data analysis. You will learn about how to analyse cost data, methods for binary and multinomial outcomes, panel data analysis, and quasiexperimental study design.

# Unit 7: Utility data for Health Technology Assessment

During this unit, you will gain understanding of concepts and methods in measuring health outcomes particularly on Quality Adjusted Life Year and Disability Adjusted Life Year. You will be introduced the concept of willingness to pay, and methods for discrete choice experiment and conjoint analysis.

# Unit 8: Economic evaluation

During this unit, you will gain understanding of the concept and methods in economic evaluation. You will learn about methods to conduct economic evaluation within a trial, and decision analytic models for cost-effectiveness analysis.

#### **Unit 9: Physician incentives**

During this unit, you will gain understanding of incentives in healthcare. You will learn about different payment methods for healthcare providers including prospective and retrospective payment. You will understand the implication of pay-for-performance on physician's behaviour.

# Unit 10: Economics of prevention and behaviour economics

During this unit, you will gain understanding of behaviour economics. You will learn how to use nudging and financial incentives to promote healthy behaviour and improve public health.

# YEAR 2, SEMESTER 3

# **0B2: Health improvement**

The modules focuses on approaches to preventing the common risk factors for chronic diseases; the different models of health behaviour & behavioural change; national and international approaches to addressing health inequalities; strategies for tobacco control at local, national and international level; approaches to health programme evaluation and health impact assessment; the context of health promotion within the wider determinants of health; key sources of evidence for health interventions; key international initiatives in health promotion; media and health promotion.

#### Module learning outcomes

At the end of the module the learner should be able to:

- Demonstrate a critical understanding of health improvement and the difference between this and prevention of illness.
- Understand the different behavioural change theories and how they have influenced policy and practice.
- Critically examine health behaviour and how it affects clinical outcomes.
- Understand how inequalities influences health and relationships and communities.
- Understand the challenges facing policy makers.
- Demonstrate an understanding of health needs assessment and impact.

#### Syllabus outline

#### **Unit 1: Determinants of health**

In this unit you will be introduced to the concept of health improvement and its key concepts and the distinction between this and prevention. You will explore the determinants of health and will learn about the Ottawa Charter for public health.

#### Unit 2: Understanding and tackling health inequalities

During this unit, you will explore the disparities within populations that leads to inequalities and why this is important to public health planners. You will reflect on terms such as equity and equality and the impact on policy. You will critically understand how the social context contributes to health inequities and the influence on individual health across the life course and the evidence based interventions for reducing social inequalities in health.

# Unit 3: Health challenges in developing countries

During this unit, you will examine the health challenges in developing societies. You will examine issues such as nutrition, family planning and in detail the effect of Tobacco and HIV and how this has virtually taken the form of an epidemic in all societies.

# Unit 4: Social capital and community approaches

During this unit, you will explore the concept of social capital, what this means and its links with health and its use in strengthening communities and increasing life chances of local populations. You will learn about the different community approaches available in improving health.

# Unit 5: Community led approach to health improvement

During this unit, you will learn about the community led model to health, its evidence and practice and the rationale for its approach in reducing health inequalities.

# Unit 6: Improving health through behavioural change

During this unit, you will gain a high level understanding of behavioural change theories. You will explore the evidence and impact of interventions that are aimed at changing behaviours of individuals, but also groups and communities and will gain critical knowledge about the use of the above theories in practice.

# Unit 7: Challenges to changing health behaviours

During this unit, you will examine the challenges faced by developing countries in changing health behaviours, through a series of case examples.

# **Unit 8: Public health policy**

During this unit, you will learn about the policy making process in public health, the factors that influence policy at a national and international level and you will understand how to analyse and influence the policy process, and evaluate the impact on society and health systems.

# Unit 9: Assessing population health needs

During this unit, you will learn about assessing need in the population alongside the use of health impact assessments. You will gain practical understanding of these methodologies using different case studies.

# Unit 10: Summary and on-going challenges

During this unit, you will consider how to undertake surveillance and monitoring of specific diseases and risk factors as a key part of health improvement and examine its ongoing challenges.

# YEAR 2, SEMESTER 3

# **OB3: Health policy and practice**

This module takes a historical perspective regarding the evolution of public health and its influence on modern public health practice. The aim is to enable you to develop your ideas regarding the complexities of public health issues and to link them to political initiatives globally and public health interventions. It also explores the issues of inequality in health and deals with contemporary determinants of health. The contribution of other sectors' policies on health will also be assessed. The contribution of other sectors' policies on health will also be assessed. It is intended that the module will enable you to put your personal and vocational experience into the context of your country's health policies, healthcare provision and social philosophy.

#### Module learning outcomes

At the end of the module you should be able to:

- Critically analyse the concept of public health and its emergence as a key health strategy.
- Critically appraise the development of evidence-based policy, including needs assessment and examine how policies have been put into practice to improve population health.
- Demonstrate a comprehensive understanding of the political, social and economic influences on health and evaluate health policy to address inequalities in your country and globally.
- Apply findings from statistics and other sources of health information, for example health needs assessment, to make recommendations for public health interventions.

# Syllabus outline

#### Unit 1: Introduction to the module

In the first unit, you will be introduced to a range of important concepts and dimensions of health and health determinants and public health.

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#### Unit 2: Heath determinants overview

Material conditions are key social determinants of health. This unit considers the wide range of influences upon health by drawing on Dahlgren and Whitehead's (1991) determinant of health rainbow model and Barton and Grant's (2006) Health Map. Several of the main factors determining population health will be highlighted such as:

- Individual characteristics.
- Contemporary determinants of health.
- Physical environmental factors.
- Social and community networks.
- Social policy.

# Unit 3: Exploring the concept of public health

In this unit, you will explore the concept of public health and how public health can promote health and well-being, prevent illness or spread of disease and empower clients to adopt a healthy lifestyle. You will gain a critical understanding of the core values of public health, and the key domains of public health practice (health Improvement, Improving services, Health Protection), which are inter-linked with each other. You will also consider the scope of public health and reflect on how this translates into practice, for example health surveillance and monitoring disease outbreaks.

### Unit 4: Historical perspective and public health achievements

This unit will briefly explore the historical perspective of public health and within this context examine some major public health achievements (below). You will explore how related policies and interventions impacted on global life expectancy:

- Smoking ban in public spaces.
- Reductions in child mortality.
- Vaccine-preventable diseases.
- Access to safe water and sanitation.
- Malaria prevention and control.
- Prevention and control of HIV/AIDS.
- Tuberculosis control

# Unit 5: Inequalities in health

Health inequalities are a prominent feature on the public health agenda. In this unit, you will reflect on the overall health of a population, the disparities within a population that give rise to inequalities and why this is important for public health planners. You will consider:

- Equality, Equity and Policy
- Inequalities based on income, age, gender, ethnicity, disability and sexual orientation

- Global health inequalities
- Actions to tackle inequalities
- The Millennium Development Goals and post 2015 Sustainable Development Goals

#### **Unit 6: Public health policy**

Health policy refers to decisions, plans, and actions that are undertaken to achieve specific health care goals within a society. Health needs assessment (HNA), a systematic method for reviewing the health issues facing a population is a recommended public health tool to provide evidence about a population on which to plan services and address health inequalities. This unit will explore the policy-making process and influences on current public health policy, the use of HNA to provide evidence about a population on which to plan policy and services.

# Unit 7: Political ideologies, values and beliefs

This unit will consider the impact of political ideologies on the policy making process. Social policy-making is inextricably bound up with the analysis and use of political ideologies. In social policy, the term ideology is used to refer to a relatively coherent 'package of ideas' and values that affect how people define social welfare issues and formulate social policy responses to them. Different political ideologies give rise to certain types of policy interventions. Political ideologies are identified along a spectrum ranging from those advocating a free market economy with minimum state intervention, to those advocating a planned economy with maximum state intervention.

# Unit 8: World Health Organisation (WHO) International Health Regulation

The WHO was founded as a specialist agency of the United Nation. In this unit, you will explore its main functions which are to provide scientific advice on health matters, set international standards, and prevent disease and promote health. The main reasons for adopting an international dimension of public health will be considered.

#### Unit 9: Health impact assessment

Numerous government policies unrelated to health can have a negative impact on the health of the public. According to Lock (2000) health impact assessment aims to "influence decision-makers so that policies, projects and programmes in all areas lead to improved public health, or do no harm to population health". This unit discusses health impact assessment (HIA) and its concern with the consequences of health decisions.

- Describes the key elements of HIA process.
- How it helps decision-makers identify potential health impact of policy.
- Outlines the application of HIA to policies from the non-health sector, illustrated by examples of HIA worldwide.

# Unit 10: Conclusion and summary of module

In summary the new public health distances itself from traditional hospital curative medicine by positioning itself as preventative, non-institutional and taking place in many locations. You will critically review earlier readings and reflect on how public health work involves a different way of working including the following:

- A wide understanding of health and how people, communities and organisations contribute to health.
- Better communication and coordination between partners involved in promoting public health.
- An increase in the capacities and capabilities of professionals from a range of backgrounds to deliver public health.
- Recognition of the importance of sustained development so that public health gains are built upon.
- Recognition of the importance of effective joint-working.

# YEAR 2, SEMESTER 3

# **0B4: Public health nutrition**

This module addresses the major nutritional problems that influence health, survival, and developmental capacity of populations in societies and the role of nutrition education in addressing these problems. The content covers the epidemiological approaches to investigating diet and disease, and nutrition education approached programmes implemented at the household, community, national, and international levels to improve nutritional status.

#### Module learning outcomes

At the end of this module you should be able to:

- Explain how diet can affect health.
- Demonstrate an understanding the epidemiological approaches to investigating diet and disease.
- Describe the importance of nutritional education and the roles of nutrition educators in the community.
- Demonstrate sound knowledge of different theories and models related to behavioural action and behaviour change.
- Develop an appreciation of environmental factors in supporting appropriate behavioural action and change.
- Design, implement and evaluate nutrition education programmes for different target groups in a systematic manner and using relevant theories and models.

#### Syllabus outline

#### Unit 1: Introduction to nutritional epidemiology

During this unit, you will learn about how diet can affect health and the major diseases in developing societies. You will be introduced to the epidemiological approaches to diet and disease and the multivariate relationships that exist, and how such epidemiological data can be interpreted and used.

#### **Unit 2: Nutrition education**

During this unit, you will gain understanding of the importance of nutrition education, its policies and practices, and you will explore the roles of nutrition educators and the ethics of nutrition education.

# Unit 3: Theories and models of behaviour and behaviour change I

During this unit, you will gain a critical understanding of the selected theories, processes and phases of behavioural change. You will explore the health belief model and the theory of planned behaviour.

# Unit 4: Theories and models of behaviour and behaviour change II

During this unit, you will gain further critical understanding of models including social cognitive theory, self-regulation models and trans-theoretical models.

# Unit 5: Environmental support for behaviour change

During this unit, you will investigate the environmental mediators of action and behavioural change and working with decision makers and policy makers. You will explore organisational policy and community level activities. You will learn about aspects of community development and community participatory aspects of practice.

# Unit 6: Designing nutrition education programmes

During this unit, you will analyse needs and behaviour and identify potential mediators of action and behavioural change. You will learn how to select theories to create a conceptual model. You will learn to define educational goals and objectives, and design theory-derived educational strategies.

# Unit 7: Implementing nutrition education programmes I

During this unit, you will learn about the communication of messages, learning styles and the development and use of nutrition educational materials, mass media and social marketing activities with practical exercises and examples.

# Unit 8: Implementing nutrition education programmes II

During this unit, you will continue to explore the issues of working with different target groups and the importance of cultural sensitivity and cultural competence in the implementation of programmes.

# Unit 9: Evaluating nutrition educational programmes I

During this unit, you will gain an understanding of the importance of evaluating educational programmes, appropriate methods of evaluation and understanding issues of process and outcomes.

# Unit 10: Evaluating nutritional educational programmes II

During this unit, you will examine examples of successful educational programmes and enabling and disabling factors that contributed to the success or failure of these programmes.