

Community Medicine



**Faculty of Medical Sciences
University of Sri Jayewardenepura**



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Department of Community Medicine
Faculty of Medical Sciences
University of Sri Jayewardenepura

3rd Edition

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Community Medicine Implementation Committee

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Mission

The graduates will have the necessary knowledge, skills and attitudes to promote health and well-being of the individual, the family and the community as a whole with other health care professionals and community agencies. They will have the skills to use the factors and resources available to integrate this knowledge effectively in providing health care in any part of Sri Lanka.

General Objectives

At the end of the course

1. the graduate should be able to demonstrate an understanding of ;
 - demography and vital statistics
 - basic and applied epidemiology
 - basic statistics as applied to medicine/research
 - health promotion and prevention of disease (communicable/ non communicable)
 - the impact of environment on health
 - the organization of curative and preventive health services in the country
 - needs assessment and health care planning
 - health care management and health economics
 - the quality of health care provided
 - the concept of quality of life
 - health care provision in disaster situations
 - concepts and trends of international health
 - care of the marginalized and the differently-abled

2. the graduate should be able to possess the knowledge, attitude and skills necessary to;
 - formulate relevant research questions and/or hypotheses
 - use appropriate methods in collecting, analyzing and interpreting data
 - should have skills in using a statistical package in entering data and analysing
 - write references using acceptable method
 - write a research report critically discussing the results
 - read critically medical literature and determine its relevance to practice within one's own working environment

3. the graduate should have knowledge on
 - health care services available to pregnant women, infants, pre-school children, school children, adolescents and elders in a MOH area and the personnel involved in delivery of these services
 - the activities carried out carried out to ensure safe and healthy environment (housing, work place, water, air, excreta and waste disposal)
 - basic health care facilities available for special groups and their needs

Preamble

The course for Community Medicine is of 6 terms duration from 6th to 11th academic terms. Community Medicine subject will be assessed at the end of 11th term and is a component of the MBBS Second examination part II.

According to the By-Laws made by the Council of the University of Sri Jayewardenepura under section 135 of the Universities Act, in order to be eligible to sit this examination, students should have a minimum of 80% attendance at tutorials, practical's and any other teaching learning activity indicated by this document.

If the absence above is not covered by a valid excuse acceptable to the Senate the candidate will be eligible to sit only for the next scheduled examination after completion of 80% attendance for tutorials, practicals other teaching learning activities indicated as essential in this document. If this scheduled examination is the candidates 1st attempt he/she will be eligible for Distinctions and Honours.

Subject Areas in Community Medicine

	Content Areas	Duration in Phase II (No. of slots)
A	Components in the Community Medicine Lecture Series	
	1. Introduction to Community Medicine	14
	2. Epidemiology	15
	3. Statistics	15
	4. Demography	8
	5. Health Information System	3
	6. Occupational Health	7
	7. Environmental Health	8
	8. Health Promotion	4
	9. Health Care System Planning and Management	21
	10. Non Communicable Diseases (NCD)	6
B	Research	
	1. Research Methodology	24
	Total lecture hours	
		125
C	Components covered in other modules	
	1. Multisystem Infectious Diseases	
	2. Growth, Development and Nutrition Module	
	3. Reproductive Module	
	4. Respiratory Module	
	5. Cardiovascular Module	
D	Community Medicine Field Attachment	
		One Month Appointment

1. Introduction to Community Medicine

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
Introduction to Community Medicine	Describe the discipline of Community Medicine and the broad content areas	1 slot
To describe the concepts of health and the determinants of health	Define health - A Describe, - concepts of health and disease - A - determinants of health-A - global trends and patterns- A - strengths and weaknesses of the definition - B	1 slot
To describe the concept of quality of life and well-being and factors affecting quality of life and well-being	Define well-being - A Define quality of life - A Describe, - methods of measurement of quality of life and well-being - A - factors influencing well-being - A - factors associated with quality of life - A	2 slots
To describe the structure of health services and the human resources for health	Describe, - concept of health care and levels of health care provision- A - the organizational structure of health care provision at the - central level - A - provincial level - A - strengths and weakness of health care institutions - A - types of available human resources - A - types of training and resources for health care workers - A	2 slots

1. Introduction to Community Medicine (Cont...)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe the alternate health care systems	To describe the basic principles of alternate health care system practiced in Sri Lanka - B - Ayurvedha, Homeopathy, Acupuncture, Traditional system, Siddha, Unani, Acupressure, Reflexology, Yoga, Aroma therapy	2 slots
To describe the health policies in Sri Lanka and identify the contribution of the other sectors in health policy	Describe - health policies in Sri Lanka - A - the sectors associated with health care provision - B	1 slot
To describe the role of the state/ national NGOs/ international partners in health care provision	Describe, - the functions of governmental, national and international health care providers - B - the functions of non-governmental and governmental organizations - B	1 slot
To describe the levels of prevention	Describe - Primordial prevention - A - Primary prevention - A - Secondary prevention - A - Tertiary prevention - A	1 slot

1. Introduction to Community Medicine (Cont...)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe Global Health , its trends, primary health care (PHC) , millennium goals (MDG) and sustainable development goals (SDG)	Describe, <ul style="list-style-type: none"> - global health & trends in mortality and morbidity – A - the Millennium goals - A - the Sustainable Development goals in relation to health- A 	2 slot
To describe Universal Health Coverage (UHC)	Describe Universal Health Coverage with special emphasis on equity and equality – A	1 slot
Total		14 slots

2. Epidemiology

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe epidemiology and its uses	Define the terms, - epidemiology, epidemic, endemic and pandemic - A Describe, - types of epidemics - A - incubation and communicable periods - A - epidemiological transition - A - emerging diseases and patterns - A	1 slot
To measure the burden of disease in a community To define, calculate and interpret measures of morbidity and mortality	Describe, - measures of morbidity - A - measures of mortality - A - prevalence - period and point - A	1 slot
To describe principles of surveillance and the difference between surveys and surveillance	Understand surveillance principles - A Surveillance system in Sri Lanka - A	1 slot
To describe different epidemiological study designs and their uses and limitations	Classification of study designs - A 1. Observational studies - descriptive studies - case report - case series - cross sectional studies - analytical studies - case control studies - cohort studies - cross sectional studies 2. Experimental studies - randomized clinical trials, community trials, quasi experimental studies	4 slots

2. Epidemiology (Contd.)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe, calculate and interpret measures of effect and association	Interpret, - odds ratio, relative risk and attributable risk - A	2 slots
To describe factors considered to determine causation	Understand causality and associations - A	2 slots
To describe concepts of screening and evaluation of a screening test	Describe, - screening principles - A - validity – sensitivity, specificity and predictive values - A - reliability – A - criteria for evaluation of a screening test - A	1 slot
To describe methods in clinical epidemiology	Describe, - risk assessment and prognosis- A - prevention- A - clinical decision analysis- A	1 slot
To apply epidemiological measures and practices in a practical setting	Describe, - steps in an investigation of an epidemic - A	2 slots
Total		15 slots

3. Statistics

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
Introduce computer statistical package	To analyse an interpretation of computer statistical data	1 slot
To describe and summarize a set of data using appropriate summary statistics and graphical methods	<p>Describe, - types of variables and scales of measurement – A</p> <p>Descriptive statistics Describe how to Present data; Tables and Graphs : Histograms, Stem & Leaf plots, Box plots, Bar charts (simple, compound and component), Pie charts, Pictograms, Scatter diagrams, Line graphs – A</p> <p>Describe how to Summarizing data; Measures of central tendency Average – mean, median, mode – A Measure of dispersion: Range, Quartiles, Standard deviation – A Normal distribution: properties and uses, probability limits, 95% reference levels - A</p>	3 slots
To explain confidence intervals and perform statistical (significance) tests	<p>Interpret;</p> <ul style="list-style-type: none"> -standard error of mean - A -standard error of percentage/proportion - A -SE of difference between two means - A -SE of difference between two proportions - A -null hypotheses and alternate hypotheses - A -normal test / Z test, t test, Chi square test - A -type I error and type II error - A 	4 slots

3. Statistics (Contd.)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To be able to interpret correlation coefficient and linear regression	Understand and interpret, correlation coefficient, linear regression, regression coefficients - A	2 slots
To have an understanding of meta analysis and its interpretation	Understand, principles of meta analysis and systematic reviews - A strengths and weaknesses of meta analysis - A	1 slot
To describe the concept of a population and the different sampling procedures.	Describe, sampling methods 1.Probability Sampling methods - A Simple Random Sampling Systematic Sampling Stratified Random Sampling Multistage Sampling Cluster sampling 2.Non Probability Sampling methods - A Snowball sampling Quota sampling Purposive sampling sample size calculation - B	2 slots
To be able to select the statistical test to a given set of data	Select and justify, appropriate statistical tests for given situations - A	2 slots
Total		15 slots

4. Demography

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe the factors that influence the size and composition of the population and demographic transition	Define and describe, -demography - A -demographic variables - A -fertility, mortality & migration – A -Issues related to migration -population growth rate - A -natural increase - A -population estimation and projections - A -demographic transition - A -dependency ratio - A	3 slots
To describe the population size of Sri Lanka and the implications of population growth To describe principles of population estimation and projection	Describe the sources of demographic data, -population census - A -demographic and health surveys - A -registration systems (Births & Deaths) and their limitations. – A Interpret, -vital statistics - A -age sex composition (Population Pyramid) – A Describe, -needs for estimation, common methods used in estimation and projection - A	3 slots
To describe the concepts of expectation of life and its applications	Understand the principle of life tables and its uses - B	2 slots
Total		8 slots

5. Health Information System

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe the information in the existing health care systems and its limitations	Describe, - what is information - A -uses of health information - Planning, monitoring, evaluation, policy decision, resource allocation, education, research – A	3 slots
To critically discuss the existing information system/s	Describe the sources of health information – -vital event registration -census -routine information system -epidemiological surveillance -special surveillance -special surveys -notifications -existing hospital information system and flow of information and its limitations - A -reliability and validity of data - A -annual Health Bulletin - A -weekly Epidemiological and quarterly epidemiological report – A	
To describe certifications of cause of death and classification of diseases	Describe, -international classification of deaths - A -certification of cause of death - A -classification of diseases and cause of death - A	-
Total		3 slots

6. Occupational Health

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To understand the concept of occupational health and health hazards	<p>Know the definition of occupational health- A</p> <p>Critically discuss the relationship between health and work giving examples- A</p> <ul style="list-style-type: none"> -Work can give rise some diseases -effects of work on health (physical, chemical, biological, psychological and ergonomic hazards) - Work promotes good health - effects of health on work - Cost of occupational injury/disease to the employer and employee 	1 slot
To understand the principles and importance of occupational health services in Srilanka	<p>Describe the aims of Occupational Health as defined by Joint Committee of WHO and ILO – 1950- A</p> <p>Describe the occupational health services in the country- A</p> <ul style="list-style-type: none"> -List available occupational health services in Sri Lanka -List Functions of Occupational Health services <p>Discuss the importance of taking occupational history among patients with cancers, lung & skin disorders, visual and hearing problems, musculoskeletal problems and psycho-social problems in clinical settings giving examples -A</p> <p style="padding-left: 40px;">To be aware of the screening procedure for applicants/workers for occupational /work related health problems and risk factors -A</p>	2 slots

6. Occupational Health (Contd.)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
Describe the available Occupational Health Service in a country	<p>Describe Employee Health Screening Pre-employment screening, Pre placement screening, Periodic screening, executive Health screening, Post illness Employee screening, Pre retirement Health screening</p> <p>Learn the legal provisions available for the workers' safety. -A</p> <ul style="list-style-type: none"> - Occupational Safety & Health Legislations- - Factories Ordinance (Act No. 45 of 1942) - Workmen's Compensation Ordinance (Act no 19 Of 1934) - Sexual harassment at work place <p>Describe the benefits and/or rights</p> <ul style="list-style-type: none"> - for females under the Factories Ordinance - for women under Maternity Benefits Ordinance (Act No. 32 of 1939) - of the FI Engineers under the Factories Ordinance <p>Describe the Notification of Industrial Accidents and Diseases, Describe the pathway of notification</p>	2 slots
To be able to describe prevention and management of occupational and work related health problems	<p>Understand,</p> <ul style="list-style-type: none"> -Common occupational health problems- A <p>Describe the hazards in workplaces giving examples -eg. chemical, physical, biological and ergonomics</p> <p>Know the principles of hazard control -A</p> <ul style="list-style-type: none"> -engineering control -administrative control <p>How do you apply those principles to control workplace hazards- A</p> <p>Describe the factory inspection conducted by range PHI - A</p>	2 slots
Total		7 slots

7. Environmental Health

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
Describe the provision of measures adopted for, Water, air [including Green House effect], refuse disposal and waste management in Sri Lanka	<p>Air pollution -A</p> <ul style="list-style-type: none"> - Define and describe sources of air pollution and its effects in general and for health of living being - Describe indoor air pollution (biological, tobacco ,chemicals, pesticides etc) and its health effects -Describe prevention of indoor and outdoor air pollution 	3 slots
	<p>Water pollution -A</p> <ul style="list-style-type: none"> - Describe water pollution and the health effects of consumption of unsafe polluted water (i.e. Diarrhoea, typhoid, CKDu) - List the strategic interventions to ensure the quality of drinking water - List the stakeholders in environmental health services - Describe steps to ensure safe drinking water at household level <ul style="list-style-type: none"> - protected well in rural area - urban water supply scheme - Describe the steps of water purification process - Describe the role of PHI <ul style="list-style-type: none"> -for ensure safe water to the community - water quality surveillance <ul style="list-style-type: none"> - water testing for bacteriological contamination and resource - laboratories available for water testing 	
	<p>Waste management -A</p> <ul style="list-style-type: none"> - Explain the excreta disposal systems in Sri Lanka indicating advantages and disadvantages - Describe the types of solid waste and their health effects - Explain waste management hierarchy and management steps - Describe waste disposal techniques indicating advantages and disadvantages - Describe the health care waste and waste management in the hospital, prevention of chemical pollution and radiation 	

7. Environmental Health (Cont.)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe the housing environment and practices in improving the housing environment	<p>Describe the Housing environment- A</p> <ul style="list-style-type: none"> - with linkage of health and housing environment - on Housing and Related Legislation (Improvement Ordinance (H&TI)] - building application and commencement <ul style="list-style-type: none"> - requirements of sanitary housing - inspection by the PHI - certificate of conformity 	3 slots
To describe the food safety and hygienic practices to improve the health in the community	<p>Describe Food safety and hygiene- A</p> <ul style="list-style-type: none"> - Food act(Food Act No.26 of 1980"& amended in 1991) - Prohibitions under the food act and registration of food handling establishments - Consumer protection act - Food labelling - Implementing authority and food advisory committee. <ul style="list-style-type: none"> - levels of food control activities carried out in the country - authorized officers for implementing food act in a MOH area - main functions of authorized officers - Sanitary requirements of eating places, glossaries etc. (environment, utensils, food storage, preparation and handling and personal hygiene of food handlers) and genetically modified food <p>Explain the role and responsibilities of PHI on food safety</p> <ul style="list-style-type: none"> - inspection of Food Handling Establishments - grading of trades and frequency of inspection - formal and informal food sampling 	

7. Environmental Health (Cont.)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe the health related regulations	<p>Describe</p> <ul style="list-style-type: none"> -National health regulations- A -Nuisance ordinance, -Act by National authority on Tobacco & Alcohol prevention -Prevention of mosquito breeding Act <p>Describe International health regulations - A</p> <ul style="list-style-type: none"> -Port health -Quarantine -Vaccines - Deratting 	1 slot
To describe and assess the provision of healthcare needs in disaster situations	<p>Describe disaster management- A</p> <ul style="list-style-type: none"> -Learn the definition of disaster and list common disaster situations in the country -Learn how disaster affect the community -Describe health effects in disaster situation and most vulnerable -How MOH team members plan with other sectors to manage the situation.(emergency medical services, temporary shelter, collection of information, excreta disposal, provision of water and food, waster water and solid waste management, hygiene promotion, prevention of nutritional deficiencies and abuse among refugees) 	1 slot
To describe the environmental health related practices at festivals	Describe the health management, before during and after the festivals.	
Total		8 slots

8. Health promotion

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe the relevance of health promotion in health care provision and principles of health education	Describe, -definition of health promotion - A -principles of health promotion - A -definition of 'knowledge', 'beliefs', 'attitudes', and 'values' and their relationship to health - A	1 slot
To describe factors affecting behaviour and ways of influence behaviour change	Describe, - pre-disposing factors - A - enabling factors - A - re-enforcing factors - A	
To describe methods of health education, identification of behaviour related health problems, identification of appropriate health messages, steps in planning and evaluation of a health education programme	Describe currently available methods of health education - A Identification of health problems for intervention - A Identification of appropriate messages/tools - A Describe steps involved in planning a health education program - A Evaluation of a health education program - A	2 slots
To describe the planning of IEC / BCC programme for Health Promotion and prevention of diseases in community setting (IEC – Information, Education and Communication) (BCC – Behavioural Change and Communication)	Describe, - identification of behaviour related problems - A - identify appropriate messages - A - teaching learning techniques - A - teaching aid - A - implementation of IEC / BCC programme – A - evaluating IEC / BCC programme - A	1 slot
Total		4 slots

9. Health Care System Planning and Management

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe the health policies in Sri Lanka and the standards for health care	Describe, -health policies in Sri Lanka - A -sectors associated with health care provision - B Understand, -national policy statement- A -strengths and weaknesses- A	2 slots
To describe the role of the state/ national NGO's/ International partners in health care provision	Describe, -the functions of governmental, national and international health care providers- B -the functions of non-governmental and governmental organizations- B	
To describe the Millennium Development Goals (MDG), Sustainable Development Goals (SDG) in terms of in terms of indicators on Sri Lankan achievements	Describe, -global trends in health, mortality and morbidity- A -MDG and SDG - Sri Lankan situation, strategies and targets	2 slots

9. Health Care System Planning and Management (contd.)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
<p>To describe the health planning for</p> <ul style="list-style-type: none"> - Community needs - Emergency needs 	<p>Describe,</p> <p>Health Care planning – A</p> <p>Private and public sector planning – B</p> <p>Information for planning - B</p> <ul style="list-style-type: none"> - mortality and morbidity - disability (DALY) - sources of information <p>Situation analyses - A</p> <ul style="list-style-type: none"> - health needs assessment - community appraisal - emergency needs assessment - health and demographic situation - services and resources - policy and political environment - methods of analysis <p>Describe the rationale for health planning - B</p> <ul style="list-style-type: none"> -activity planning -allocation <p>State’s responsibility in health sector – B</p> <p>Planning models – B</p> <p>Describe the Financing health Care - B</p> <ul style="list-style-type: none"> - state funding - insurance scheme – compulsory & voluntary - user fees - aid funds(NGOO and INGOO contribution) 	<p>2 slots</p>
<p>To describe briefly the public health interventions locally and internationally</p>	<p>Types of interventions - A</p> <p>Target groups - A</p>	<p>2 slots</p>

9. Health Care System Planning and Management (*contd.*)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe monitoring and evaluation of public health interventions	Describe, -indication for monitoring - B -methods of evaluation- B	1 slot
To describe the essentials of health economics	Introduction to health economics - A Indicators relevant to health economics - A Financing health care- B Methods of economic evaluation; - A -Cost benefit analysis -Cost effectiveness analysis -Cost minimization analysis -Cost utilization analysis	2 slots
To assess quality of health care	Describe, -dimensions of quality - A -equity and equality, efficiency, effectiveness - A -5 S concept- clearing, organizing, cleaning, standardizing, training and self discipline - A	2 slots
To describe the extent of the problem of differently-abled persons and other marginalized sub groups in Sri Lanka and the services available	Describe, - types of differently-abled persons, marginalized sub groups and elderly - A -health care needs and services - A	1 slot

9. Health Care System Planning and Management (*contd.*)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To be aware of the health and social care systems in Sri Lanka and be able to liaise with different organizations to provide health care	Be aware of, -health and social care organizations - B -mandate of organizations and services provided - B -methods of accessing- B -forming partnerships – B	1 slot
To describe the human rights issues in relation to health	Describe, -issues of human rights and health - B -gender equity - B -children’s rights- B -patients’ rights – B -child abuse- B -intimate partner violence- B -gender based violence- B	2 slots
To describe the methods of medical audit	Describe, Setting standards - A Methods - A Analysis - A Use of a measurement tool – A	1 slot
To describe Health promotions and the role of counselling in Community health	Describe the Healthy life styles and the need of counselling - B	1 slot
To describe the welfare measures available for care of the elderly	Describe the welfare measures available for the care of the elderly in state, NGO’s and paid day care and residential institutions - A	2 slots
Total		21 slots

10. Non Communicable Diseases

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To explain the magnitude of Non-communicable Diseases (NCD) burden globally and in Sri Lanka	<p>Describe:- A</p> <ul style="list-style-type: none"> - The difference between communicable & NCD - Acute and Chronic NCDs - the impact of epidemiological, health, demographic transition and globalization on NCD epidemic - Four major chronic NCDS (Cardiovascular Diseases, DM, Cancers & COPD) and the commonality of risk factors - Morbidity and mortality trends of NCDs in the world & Sri Lanka - Burden of NCDs to <ul style="list-style-type: none"> o Individual o Family o Country - Introduction of DALY as a Burden measurement 	2 slot
To describe the prevention of NCDs using public health approaches	<p>Discuss:</p> <ul style="list-style-type: none"> - Primordial ,Primary, Secondary and tertiary prevention in NCD prevention and control - 4X4X4 model for NCD prevention - Introduction of Best buys and Good buys in NCD prevention & control and Importance of multisectoral partnership - Life course approach in NCD prevention - National NCD programme and nine strategies. Implementation, monitoring and evaluation of these strategies at National, Provincial and District levels 	2 slots

10. Non Communicable Diseases (Cont..)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe the healthy life style clinic programme in Sri Lanka	Describe the Healthy life style clinic Session - A <ul style="list-style-type: none"> - Structure - Services - Use of WHO/ISH chart for risk categorization - Use of Management protocol - Life style modification - Referral system - Follow up 	2 slot
Total		6 slots

Research Methodology

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To define research and describe types of research	Introduction to research -A Types of research -basic research - A -applied research - A -health system research - A Identification of researchable problem/s - A	1 slot
To identify researchable problems and carry out a problem analysis	Problem analysis - A Formulate Conceptual framework - A	
To identify sources of literature, access literature and review	Describe, -types and sources of literature - A -accessing literature - library, internet - A -reviewing literature - A	2 slots
To formulate hypothesis/objectives	Formulate -hypotheses - A -general objective/s and specific objectives - A	2 slots
To draw up a project proposal	Describe the components of a project proposal Have the ability to write - A - introduction - A - literature review - A - methodology - A - organization of field work - training data collectors - A - data management and quality control - A - budget - A - time frame - A	2 slots

Research Methodology (Cont..)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe and design a suitable study instrument and its application	Select the best study design – A Identification of variables and operationalisation – A Data collection tools – questionnaires and qualitative data methods - A Pre-testing and pilot study – A Surveys/ qualitative studies Data analysis	2 slots
To describe the research method	Describe, -study setting - A -study instruments - A	2 slots
To identify ethical issues involved in a study and process of obtaining ethical clearance	Understand concepts related to , -voluntary participation - A -informed consent - A -subjects incapable of giving consent - A -investigations (invasive) - A -drug trials - A -ethical review committee - A -method of obtaining clearance – A	2 slots

Research Methodology (Cont..)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To describe and perform data analysis	Have the skills to, - enter data (softwares) – EXCEL, Epi data - A - data cleaning and storage - A - data analysis - A manual data organization- dummy tables computer programmes – Epi info, SPSS cross tabulation - A selection of a suitable statistical test - A arriving at inferences – A	4 slots
To describe qualitative data analysis and its uses	Describe qualitative data analysis methods - B	1 slot
To report research outcome	Have the skills to, -arrive at conclusions - A -making recommendations - A -writing a paper/report - A -writing dissertations, thesis, publishing – A Write discussion	1 slot
To write the references scientifically	Describe, -Vancouver system - A -Harvard system - A	1 slot

Research Methodology (Cont..)

Intermediate Objectives	Broad Content Areas (Lecture/Small Group Discussion/ Tutorial)	Time
To carry out a research project under supervision	Have the skills to, -write an Introduction, literature review and methodology - A -have skills on collecting data - A -analyse the data and present the results - A -critically discuss the results - A	2 slots
To critically discuss the findings and conclusions of scientific study	Critically discuss , - a scientific paper - A - limitations of a study – A - Conclusions of the study – A - Recommendations for the study - A	2 slots
Total		24 slots

A - Must Know
 B - Good to Know

Components covered in other modules

1. Multisystem Infectious Diseases

The epidemiology, control programmes and their objectives, policies, strategies and prevention are discussed in this modules for the following infectious diseases;

- a. Malaria
- b. Tuberculosis
- c. Dengue
- d. HIV/AIDS

2. Growth, Development and Nutrition Module

This module provides the knowledge to the students in relation to the nutritional requirements at different stages of the life cycle example: pregnancy, lactation, breast feeding, complementary feeding and infant feeding. The importance of growth monitoring and the charts used for the purpose of monitoring, common food beliefs and practices in Sri Lanka and their influence on nutritional status of individuals and the community, the nutritional assessment methods are taught, which are further stressed and practiced in the Community Medicine Field attachment.

Nutritional disorders of public health importance in Sri Lanka, epidemiology, life cycle approach, conceptual framework of under nutrition and the nutritional transition are also taught in this module.

The steps in planning and evaluating nutritional intervention programmes and performing nutritional education programme for different target groups are taught but are also carried out in the Community Medicine Field attachment.

3. Reproductive Health Module

This module captures the Maternal and child health in Community Medicine. From teaching the concept of reproductive health, the module takes the student down the path of the organization and delivery of maternal & child health services of Sri Lanka, how maternal & child health services are provided at the field level, the life cycle approach of care by school medical inspection, adolescent health, maternal deaths and reviews to monitoring and evaluation of maternal and child health services.

This module is further emphasized at the Community Medicine Field attachment.

4. Respiratory Module

5. Cardiovascular Module

The epidemiology and prevention of respiratory and cardiovascular diseases are discussed in the above two modules.

Assessment Methods

The structure of Community Medicine assessments will be as follows

	Component	% marks allocation
1	Research project	20
2	Community Medicine Field attachment SEQ paper and Objective Structured Practical examination (OSPE)	10
3	Continuous Assessments	05
	End of Term 7	05
	End of Term 9	
4	MBBS Second Examination Part II	
	MCQ paper at the end of 4 th year (60 questions)	30
	SEQ paper at the end of 4 th year (5 questions)	30
	Total	100

Recommended Reading Material

- Reading material, Department of Community Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura
- Text book of Preventive and Social Medicine 18th Edition
- Text book of Community Medicine – Sunder Lal, Adarsh, Pankaj
- Basic Epidemiology – R Bonita, R Beaglehole, T Kjellstrom (2nd Edition) WHO publication
- Statistics at Square One (9th Edition) - T D V Swinscow
- Oxford Textbook of Community Medicine
- Annual Health Bulletin of Sri Lanka Available in - <http://www.health.gov.lk> (Ministry of Health Sri Lanka)
- Weekly Epidemiological Report Available in - <http://www.epid.gov.lk> (Epidemiology Unit, Sri Lanka)
- Pre-reading material prepared for medical undergraduates – Available in the medical library