

# **Postgraduate Diploma in Health Service Management - PGDip (Hlth Serv Mgt)**

## **1. Description**

In all countries of the world, increasing pressures on scarce resources have meant that all investments, inside and outside the health sector, have come under closer scrutiny. This is especially true for the healthcare sector and in turn, has led to an increased interest in healthcare management strategies based on an economic and improving quality perspective. The integration of health systems and their capacity to affect the quality of life for everyone means leaders and managers in these systems need the education, knowledge and research to support their contributions.

The Postgraduate Diploma in Health Service Management is ideal for professionals looking to progress their careers in health policy, planning and management. The skills, a student gains from the degree, will enable him/her to integrate management and planning skills into every day of health planning, service reorientation and implementation. Graduates will have a high level of professional skills and knowledge across the fields of health services management and will be well prepared for rewarding careers in a range of sectors nationally and internationally. The health services management degree will get the candidate ready for health sector job opportunities in quality management, project management, change management, health informatics and risk management.

## **Relevance of proposed degree program to society**

This course, offered by the Faculty of Graduate Studies is designed for health professionals currently in, or seeking to be in middle and senior health care management positions. This course has been developed to enhance the knowledge and skills of professionals and academics in the management of health services. This includes medical or general hospital administrators and clinicians within the health care system. Sri Lanka is a lower-middle-income country with scarce resources. Lack of financial resources magnifies the need for health care while shrinking the capacity to finance it. Hence healthcare management and decision-making must be evidenced-based to improve quality and efficiency. The current program is designed to provide specialization in the related fields of health services and health care management with a particular focus on Sri Lankan health systems. This training will build the capacity to design

health reform programs, perform economic evaluations of healthcare interventions, and be able to contribute to healthcare delivery in Sri Lanka. Participating in this course and gaining more in-depth knowledge in Health Service Management and interaction with the faculty will facilitate to acquire experience in planning, analysis research and programme management especially related to Health Service Management.

## **2. Programme Outcomes**

These course outcomes are aligned with the Sri Lanka Qualifications Framework Level 8

Upon successful completion of this course, it is expected that students will be able to:

- apply the principles of financial and information management to a health care organization
- appreciate the economic and political influences and their relationships to health policy
- analyze the basic elements of health care systems and compare recent health care reforms
- critically appraise the interface between health care management theory and practice
- develop the epidemiological and statistical skills necessary for evidence-based Healthcare, quality improvement and program evaluations
- use international comparisons of health care systems and recent reforms to analyze the various models of funding, delivering, co-coordinating, and developing health care systems
- demonstrate an understanding of medico-legal issues and business law as applied to the management of health services
- develop skills in health care quality measurement, quality assurance, and quality improvement
- analyze complex workplace management problems and appropriate problem-solving techniques
- demonstrate interpersonal, communication and leadership skills appropriate for health care managers, skills in the literature review, report writing, oral presentations, verbal and visual communications and the basic use of a spreadsheet, database, statistical and word-processing computer software.

## **3. Target Group**

The program is designed for those who are already employed and interested in further studies in the multi-disciplinary studies related to health.

#### **4. Entry Requirements**

In order to be eligible for entry to the study program for the Postgraduate Diploma in Health Service Management, students must fulfil the following requirements:

- (i) A medical degree or a dental degree recognized by the Sri Lanka Medical Council.

**OR**

- (ii) An Honors/Special Degree in the field of Commerce, Management, Science, Economics or any other relevant discipline.

**OR**

- (iii) Any other equivalent qualification accepted by the Senate.

#### **5. Admission Process**

- Selection test/ Interview

#### **6. Program Duration and Credits**

- Duration: **one year**
- Number of Credits: **25 Credits**

#### **7. Medium of Instruction**

- English

#### **8. Course Structure**

The Postgraduate Diploma in health service management is offered for one year consists of two semesters with 25 credits.

### 1<sup>st</sup> Semester

| Course code          | Title of the course unit                 | Course Status | Credit Value |
|----------------------|--|---------------|--------------|
| MHSM 51012           | Basic Epidemiology                       | C             | 2            |
| MHSM 51023           | Basic Statistics                         | C             | 3            |
| MHSM 51032           | Law for Health Service Management        | C             | 2            |
| MHSM 51043           | Introduction to Business Management      | C             | 3            |
| MHSM 51051           | Data Organization and Management         | C             | 1            |
| MHSM 51061           | Health Economics                         | C             | 1            |
| MHSM 51073           | Accounting and Finance for Professionals | C             | 3            |
| <b>Total Credits</b> |  |               | <b>15</b>    |

### 2<sup>nd</sup> Semester

| Course code                         | Title of the course unit                  | Course Status | Credit Value |
|-------------------------------------|---|---------------|--------------|
| MHSM 52082                          | Principles of Health Care Quality         | C             | 2            |
| MHSM 52092                          | Foundations of Health Policy              | C             | 2            |
| MHSM 52102                          | Reform and Development of Health Services | C             | 2            |
| MHSM 52113                          | Managerial Economics                      | C             | 2            |
| MHSM 52122                          | Forecasting & Statistical Process Control | O             | 2            |
| MHSM 52132                          | Organization Behavior                     | O             | 2            |
| MHSM 52142                          | Economic Evaluation                       | O             | 2            |
| <b>Total Credits</b>                |   |               | <b>10</b>    |
| <b>Total Credits for the Course</b> |   |               | <b>25</b>    |

**C – Compulsory; O – Optional**

## 9. Teaching Methods and Evaluation Criteria

### 9.1 Teaching Methods

Lectures/ Group discussions/ Role plays/ Workshops/Field visits

## 9.2 Evaluation Criteria

### ➤ End Semester Assessment (ESA)

The written examination will be conducted for each course unit at the end of the semester.

### ➤ Continuous Assessment (CA)

The evaluation criteria of each course unit will be announced by the relevant lecturer at the commencement of each course unit.

## 9.3 Grading System

The table below shows the twelve-tier grading system recommended by University Grant Commission in Sri Lanka. “Grade” shall be awarded for a course unit by aggregating the marks obtained for CA and the ESA. The Grade Point Average (GPA) of each student is calculated based on the Grade Point Value (GPA) assigned to each grade as indicated in the table below. GPA is calculated by considering all the course units attempted by a student in order to award a master’s degree.

Table 2: Twelve-tier grading system

| Range of marks | Grade | Grade Point Value |
|----------------|-------|-------------------|
| 85-100         | A+    | 4.00              |
| 70-84          | A     | 4.00              |
| 65-69          | A-    | 3.70              |
| 60-64          | B     | 3.30              |
| 55-59          | B     | 3.00              |
| 50-54          | B-    | 2.70              |
| 45-49          | C+    | 2.30              |
| 40-44          | C     | 2.00              |
| 35--39         | C-    | 1.70              |
| 30-34          | D+    | 1.30              |
| 25-29          | D     | 1.00              |
| 00-24          | E     | 0.00              |

## 9.4 Grade Point average

Grade Point Average (GPA) is the credit-weighted arithmetic means of the Grade point values. GPA is calculated by dividing the total credit-weighted 'Grade Point Value' by the total number of credits. GPA shall be computed to the second decimal place.

**Example:** A student who has completed a **one-course unit** two credits, **three-course units** each of three credits and **two course units** each of one credit with grades A,C,B,D,C+ and A+ respectively would have a GPA of 2.48 as calculated below.

$$\text{GPA} = \frac{(4.0 * 2 + 2.0 * 3 + 3.0 * 3 + 1.0 * 3 + 2.3 * 1 + 4.0 * 1)}{(2 + 3 + 3 + 3 + 1 + 1)}$$

$$\text{GPA} = 2.4846 = 2.48$$

### **Minimum eligibility criteria for the award of PGDip (Hlth Serv Mgt)**

- (i) For the award of PGDip (Hlth Serv Mgt) students should
  - (a) Accumulate grades of B- (B minus) or better in course units aggregating at least 25 credits.
  - (b) Obtain a GPA of 2.70 or greater, and
  - (c) Complete the relevant requirements within a period of three consecutive academic years'
- (ii) For the award of a PGDip (Hlth Serv Mgt) with course work with Merit a student must obtain
  - (a) Accumulate grades of B- (B minus) or better in course units aggregating at least 25 credits
  - (b) a GPA of 3.70 or greater
  - (c) Obtain grades of A or better in course units aggregating to at least 50% of total credits for the course units considered.
- (d) Complete the relevant requirements within a period of one academic year
- (iii) For the award of a PGDip (Hlth Serv Mgt) with course work with Distinction a student must obtain
  - (a) Accumulate grades of A or A+ in course units aggregating at least 25 credits
  - (b) a GPA of 4.00
  - (c) Complete the relevant requirements within a period of one academic year

## 10. Course Units of the Postgraduate Diploma in Health Service Management

|  |                           |           |                      |
|--|---------------------------|-----------|----------------------|
| <b>Semester 1</b>  |                           |           |                      |
| Course Code:   | <b>MHSM 51012</b>         |           |                      |
| Course Name:   | <b>Basic Epidemiology</b> |           |                      |
| Credit Value:  | <b>2</b>                  |           |                      |
| Core/Optional  | <b>Core</b>               |           |                      |
| Hourly Breakdown   | Theory                    | Practical | Independent Learning |
|  | 30                        |           | 70                   |
| Course Aim/Intended Learning Outcomes:   |                           |           |                      |
| Upon successful completion of this unit, students should be able to:   |                           |           |                      |
| <ul style="list-style-type: none"> <li>➤ describe and be able to compute measures of disease frequency</li> <li>➤ explain and contextualize the purposes of descriptive and analytical epidemiology;</li> <li>➤ analyze the strengths and weaknesses of different epidemiological study designs;</li> <li>➤ interpret and communicate the results of epidemiological studies</li> <li>➤ solve complex problems relating to the use of epidemiological concepts and study designs.</li> <li>➤ discuss probable sources of error and methods of minimizing errors in such data</li> <li>➤ describe and calculate measures of risk of exposure</li> <li>➤ critically analyze epidemiological papers from the medical research</li> <li>➤ Argue for and against the different methods of data collection in survey research</li> </ul> |                           |           |                      |
| Contrast the processes commonly used to collect data   |                           |           |                      |
| <b>Course Contents</b>   |                           |           |                      |
| Rates, Prevalence, Cumulative incidence, Incidence density, Proportionate Mortality & Proportionate Mortality Ratio, Survival rates: five-year survival. Descriptive & analytical epidemiology, epidemiological study designs, Questionnaire design, sample and data collection methods, Odds Ratio, Relative Risk (RR), Attributable Risk (AR), Attributable Risk Percent, Random error, Systematic errors – Bias: Selection, Information &   |                           |           |                      |

|   |                       |                             |                               |
|---|-----------------------|-----------------------------|-------------------------------|
| Confounding: Measures to overcome confounding, Matching, restriction & randomization, Stratified and multivariate analysis, interpretation of systematic reviews & meta-analysis.   |                       |                             |                               |
| Teaching /Learning Methods:<br><b>Lectures, interactive contacts, and discussions</b>   |                       |                             |                               |
| Assessment Strategy:<br>CA (Case studies, assignments, reports, presentations, tests) and ESA.  |                       |                             |                               |
| Continuous Assessment<br><br>40%  |                       | Final Assessment<br><br>60% |                               |
| Details:<br>Quizzes- 20, mid-term – 20  | Theory (%)<br><br>60% | Practical (%)<br><br>NA     | Other (%) (specify)<br><br>NA |
| References/Reading Materials:   |                       |                             |                               |
| <ul style="list-style-type: none"> <li>➤ Hennekens, C.H., Buring, J.E. (2006). Epidemiology In Medicine, Brown and Company, Boston.</li> <li>➤ Rothman, K.J. Epidemiology-An introduction. Oxford University Press.</li> <li>➤ Basic epidemiology, R Bonita, R Beaglehole, T Kjellstrom 2nd edition, 2006. World Health Organization.</li> <li>➤ Beaglehole, D.R., Lasang, M.A., Gulliford, M.(Eds.). Oxford Text Book of Public Health. Volume 2.</li> <li>➤ Grimes, D. A., Schulz, K.F. (2002). Epidemiology Series An overview of clinical research: the lay of the land. Lancet, 359, 57-61.</li> <li>➤ Lucas, R. M., McMichael, A. J. (2005 October). Association of causation: evaluating links between “environment and disease”. Public Health Classics. Bulletin of the World Health Organization, 83(10), 792-795.</li> <li>➤ Sackett, D. L. (1979). Bias in Analytical Research. J. Chron. Dis., 32, 51-63.</li> </ul> |                       |                             |                               |

|                   |  |
|-------------------|--|
| <b>Semester 1</b> |  |
|-------------------|--|



|  |                         |                  |                      |
|--|-------------------------|------------------|----------------------|
| Course Code:   | <b>MHSM 51023</b>       |                  |                      |
| Course Name:   | <b>Basic Statistics</b> |                  |                      |
| Credit Value:  | <b>3</b>                |                  |                      |
| Core/Optional  | <b>Core</b>             |                  |                      |
| Hourly Breakdown   | Theory                  | Practical        | Independent Learning |
|  | 45                      |                  | 105                  |
| <p>Course Aim/Intended Learning Outcomes:</p> <p>Upon successful completion of this unit, students should be able to:</p> <ul style="list-style-type: none"> <li>➤ Classify data into appropriate measurement types.</li> <li>➤ Present data using relevant tables, graphical displays, and summary statistics, quantify uncertainty in study results.</li> <li>➤ Formulate research hypotheses into a statistical context in public health studies.</li> <li>➤ Estimate quantities of interest and evaluate hypothesis with appropriate statistical methods.</li> <li>➤ Accurately interpret statistical methods and results reported in health publications.</li> <li>➤ Analyse data using a specific software package.</li> </ul> |                         |                  |                      |
| <p><b>Course Contents</b></p> <p>Classifying health data; summarizing data using simple statistical methods and graphical presentation; sampling distributions; quantifying uncertainty in results from a sample; working with statistical distributions; comparing two or more groups/methods using confidence intervals and hypothesis tests (p - values); assessing the association between an outcome and several exposure variables, interpretation of multiple regression.</p>   |                         |                  |                      |
| <p>Teaching /Learning Methods:</p> <p><b>Lectures, interactive contacts, and discussions</b></p>   |                         |                  |                      |
| <p>Assessment Strategy:</p> <p>CA (Case studies, assignments, reports, presentations, tests) and ESA.</p>  |                         |                  |                      |
| Continuous Assessment  |                         | Final Assessment |                      |
| 30%  |                         | 70%              |                      |

|  |                      |                         |                               |
|--|----------------------|-------------------------|-------------------------------|
| Details:<br>Quizzes- 15, mid-term -15  | Theory (%)<br><br>70 | Practical (%)<br><br>NA | Other (%) (specify)<br><br>NA |
| References/Reading Materials:  |                      |                         |                               |
| <ul style="list-style-type: none"> <li>➤ Heiman, Gary W. Basic Statistics for the Behavioral Sciences. 4th ed. Boston, MA: Houghton Mifflin Company, July 2002. ISBN: 0618220178</li> <li>➤ Robert W. Broyles. Fundamentals of Statistics in Health Administration Jones &amp; Bartlett Learning, 2006 - Business &amp; Economics - 374 pages</li> <li>➤ Bernard Rosner, Fundamentals of Biostatistics, Cengage Learning, ISBN-13: 978-0538733496.</li> <li>➤ Basic Statistical Analysis. Richard C. Sprinthall</li> <li>➤ Medical Statistics. Betty R Kirkwood and Jonathan A. C. Sterne</li> <li>➤ A Short Book of Medical Statistics. Sir Austin Bradford Hill</li> <li>➤ Using and Understanding Medical Statistics. David E. Matthews and Vernon T. Farewell</li> </ul> |                      |                         |                               |

|                   |  |           |                      |
|-------------------|--|-----------|----------------------|
| <b>Semester 1</b> |  |           |                      |
| Course Code:      | <b>MHSM 51032</b>                        |           |                      |
| Course Name:      | <b>Law for Health Service Management</b> |           |                      |
| Credit Value:     | <b>2</b>                                 |           |                      |
| Core/Optional     | <b>Core</b>                              |           |                      |
| Hourly Breakdown  | Theory                                   | Practical | Independent Learning |
|                   | 30                                       |           | 70                   |

Course Aim/Intended Learning Outcomes:

Upon successful completion of this unit, students should be able to:

- Demonstrate an understanding of the sources of law and of the legal systems in Sri Lanka
- Describe the breadth of law impacting upon the delivery of health services.
- Demonstrate an understanding of some key areas of medical law, such as negligence, informed consent, confidentiality, clinical research, abortion, tobacco, health service law, mental health act, Quarantine & Prevention of Infectious Diseases Ordinance and health complaints law
- Demonstrate an understanding of other areas of law and legal policy as they apply to the health care system including trade practices, contract law, professional registration and malpractice, National Medicines Regulatory Authority Act & related regulations
- Examine the current means of resolving consumer dissatisfaction and debate the merits of alternative methods.
- Demonstrate basic skills in legal argument; and
- Demonstrate basic skills in working in a team for the advancement of a legal argument

**Course Contents**

Review of legal management principles related to health care by examining common law principles and statutes. Examination of the Sri Lankan legal system, including the coroner's court. Focus on key areas of medical and health law such as negligence consent, the privacy of health information, clinical research, abortion, tobacco control, mental health, infectious diseases and health complaints. Food act, Factories ordinance, Workmen's compensation ordinance, Maternity benefits ordinance, National Medicines Regulatory Authority Act & related regulations, Nuisance Ordinance and Housing & Town Improvement Ordinance and UDA Act, Municipal Councils Ordinance, Urban Councils Ordinance, Pradeshiya Saba Act & By-laws related to MC/UC/PS, Quarantine & Prevention of Infectious Diseases Ordinance and Other General Acts and Ordinances, National Environmental Act, Mental Health Act, Prevention of Domestic Violence Act, International Human Rights Law, Humanitarian Law.

|  |                      |                             |                               |
|--|----------------------|-----------------------------|-------------------------------|
| Teaching /Learning Methods:<br><b>Lectures, interactive contacts, and discussions</b>              |                      |                             |                               |
| Assessment Strategy:<br>CA (Case studies, assignments, reports, presentations, tests) and ESA.     |                      |                             |                               |
| Continuous Assessment<br><br>30%   |                      | Final Assessment<br><br>70% |                               |
| Details:<br>Quizzes- 15, mid-term -15  | Theory (%)<br><br>70 | Practical (%)<br><br>NA     | Other (%) (specify)<br><br>NA |
| References/Reading Materials:<br>➤ Acts, Ordinance and regulations related to health in Sri Lanka. |                      |                             |                               |

|   |  |           |                      |
|---|--|-----------|----------------------|
| <b>Semester 1</b>   |  |           |                      |
| Course Code:  | <b>MHSM 52043</b>                          |           |                      |
| Course Name:  | <b>Introduction to Business Management</b> |           |                      |
| Credit Value:   | <b>3</b>                                   |           |                      |
| Core/Optional   | <b>Core</b>                                |           |                      |
| Hourly Breakdown  | Theory                                     | Practical | Independent Learning |
|   | 45   |           | 105                  |
| Course Aim/Intended Learning Outcomes:<br>Upon successful completion of this unit, students should be able to:<br>➤ describe the nature of management and managers<br>➤ identify the nature and components of organizational environment<br>➤ identify and explain four basic functions of management |  |           |                      |

- apply the learned theoretical concepts into practice

### Course Contents

Understanding key functional areas of a business; Human Resource, Operations and Marketing, Entrepreneurship, Management Functions, Planning, Organizing, Leadership, Motivation, Controlling, Introduction to HRM, HR Planning, Job Design, Recruitment and selection, Induction, Training and development, Performance evaluation, Welfare management, Health and safety, Introduction to Marketing, Satisfaction, Market segmentation, Targeting and positioning, Product, Price, Place, Promotion, New Product development

Teaching /Learning Methods:

**Lectures, interactive contacts, Practical classes and discussions**

Assessment Strategy:

CA (Case studies, assignments, reports, presentations, tests) and ESA.

| Continuous Assessment     | Final Assessment |               |                     |
|---------------------------|------------------|---------------|---------------------|
| 30%                       | 70%              |               |                     |
| Details:                  | Theory (%)       | Practical (%) | Other (%) (specify) |
| Quizzes- 15, mid-term -15 | 70%              | NA            | NA                  |

References/Reading Materials:

- Certo Samuel C, and Certo Strevis (2012), Modern Management, Prentice Hall of India New Delhi. ISBN-9780132176316.
- Robbins, Stephen P., (2012), Management, 11th Edition Prentice Hall of India, New Delhi.
- Stoner J. A.F., Freeman R E., and Gilber D. R., (1996) Management, Prentice Hall of India, New Delhi.
- Kotler, P., & Keller, K. L. (2016). Marketing management. New York: Pearson.

- Opatha, HHDNP. (2009). Human Resource Management. , Nugegoda: Department of Human Resource Management, USJhrm\_book\_front\_pages.pdfchapter\_1-human\_resource\_mgt.pdf

|  |   |           |                      |
|--|---|-----------|----------------------|
| <b>Semester 1</b>  |   |           |                      |
| Course Code:   | <b>MMST 51041</b>                       |           |                      |
| Course Name:   | <b>Data Organization and Management</b> |           |                      |
| Credit Value:  | <b>1</b>                                |           |                      |
| Core/Optional  | <b>Core</b>                             |           |                      |
| Hourly Breakdown   | Theory                                  | Practical | Independent Learning |
|  |   | 45        | 55                   |
| Course Aim/Intended Learning Outcomes:   |   |           |                      |
| On successful completion of this module, students will be able to:   |   |           |                      |
| <ul style="list-style-type: none"> <li>➤ Explore a dataset in a number of ways</li> <li>➤ Identify the data type for each variable in a dataset and create new variables with a</li> </ul> |   |           |                      |

|  |                       |                  |           |  |     |     |  |  |          |            |               |           |                           |     |    |     |
|--|-----------------------|------------------|-----------|--|-----|-----|--|--|----------|------------|---------------|-----------|---------------------------|-----|----|-----|
| <p>specific data type</p> <ul style="list-style-type: none"> <li>➤ Apply variable and value labels, check for implausible data values and duplicate observations, ascertain missing data</li> <li>➤ Reshape data between long and wide forms and merge relational datasets</li> <li>➤ Sort observations and analyze data by different subgroups</li> <li>➤ Use do files to keep track of the commands rerun analyses when required</li> <li>➤ Use automated commands and create macros</li> <li>➤ Use loops, nested loops and conditional execution within commands when required</li> </ul> |                       |                  |           |  |     |     |  |  |          |            |               |           |                           |     |    |     |
| <p><b>Course Contents</b></p> <ul style="list-style-type: none"> <li>➤ Data types, Storing and Importing Data, convert between types and set the display formats for different variables, Changing the layout of a dataset and related functions, Reshape data between long and wide forms, Merging, Appending and Collapsing datasets, Stratification and perform operations separately for subgroups, Creating do files and inserting commands, Advanced Automation, Loops and conditional execution.</li> </ul>   |                       |                  |           |  |     |     |  |  |          |            |               |           |                           |     |    |     |
| <p>Teaching /Learning Methods:</p> <p><b>Lectures, interactive contacts, Practical classes and discussions</b></p>   |                       |                  |           |  |     |     |  |  |          |            |               |           |                           |     |    |     |
| <p>Assessment Strategy:</p> <p>CA (Case studies, assignments, reports, presentations, tests) and ESA.</p>  |                       |                  |           |  |     |     |  |  |          |            |               |           |                           |     |    |     |
| <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 50%;">Continuous Assessment</td> <td colspan="3">Final Assessment</td> </tr> <tr> <td>40%</td> <td colspan="3">60%</td> </tr> <tr> <td>Details:</td> <td>Theory (%)</td> <td>Practical (%)</td> <td>Other (%)</td> </tr> <tr> <td>Quizzes- 20, mid-term -20</td> <td>N/A</td> <td>60</td> <td>N/A</td> </tr> </table>   | Continuous Assessment | Final Assessment |           |  | 40% | 60% |  |  | Details: | Theory (%) | Practical (%) | Other (%) | Quizzes- 20, mid-term -20 | N/A | 60 | N/A |
| Continuous Assessment  | Final Assessment      |                  |           |  |     |     |  |  |          |            |               |           |                           |     |    |     |
| 40%  | 60%                   |                  |           |  |     |     |  |  |          |            |               |           |                           |     |    |     |
| Details:   | Theory (%)            | Practical (%)    | Other (%) |  |     |     |  |  |          |            |               |           |                           |     |    |     |
| Quizzes- 20, mid-term -20  | N/A                   | 60               | N/A       |  |     |     |  |  |          |            |               |           |                           |     |    |     |
| <p>References/Reading Materials:</p> <ul style="list-style-type: none"> <li>➤ Armitage P, Berry G, Matthews JNS. Statistical Methods in Medical Research (4thedition). 2008; Wiley-Blackwell, London.</li> </ul>   |                       |                  |           |  |     |     |  |  |          |            |               |           |                           |     |    |     |

|                   |                   |
|-------------------|-------------------|
| <b>Semester 1</b> |                   |
| Course Code:      | <b>MHSM 52061</b> |

|   |                         |                  |                      |
|---|-------------------------|------------------|----------------------|
| Course Name:  | <b>Health Economics</b> |                  |                      |
| Credit Value:   | <b>1</b>                |                  |                      |
| Core/Optional   | <b>Core</b>             |                  |                      |
| Hourly Breakdown  | Theory                  | Practical        | Independent Learning |
|   | 15                      |                  | 35                   |
| <p>Course Aim/Intended Learning Outcomes:</p> <p>On successful completion of this module, students will be able to:</p> <ul style="list-style-type: none"> <li>➤ develop an understanding of the relevance of economic concepts to the health care sector.</li> <li>➤ describe the system of health care financing and delivery arrangements in the health care sector</li> <li>➤ Impart an understanding of the role of economic factors in the development of public policy concerning health and health care.</li> </ul> |                         |                  |                      |
| <p><b>Course Contents</b></p> <p>An Overview of the Health Care Industry. Health, Measures of Health, Medical Care, and Medical Spending. Demand for Medical Services. Medical Care Production and Costs. The Demand for Medical Insurance. The Private Health Insurance Industry. Government Provision of Health Insurance. Nature of insurance contracts. The Physician Market. The Pharmaceutical Industry. Government Regulation and Intervention. Health and development.</p>  |                         |                  |                      |
| <p>Teaching /Learning Methods:</p> <p><b>Lectures, interactive contacts, and discussions</b></p>  |                         |                  |                      |
| <p>Assessment Strategy:</p> <p>CA (Case studies, assignments, reports, presentations, tests) and ESA.</p>   |                         |                  |                      |
| Continuous Assessment   |                         | Final Assessment |                      |
| 30%   |                         | 70%              |                      |
| Details:  | Theory (%)              | Practical (%)    | Other (%) (specify)  |
| Quizzes- 15, mid-term -15   | 70%                     | NA               |                      |



|  |  |  |    |
|--|--|--|----|
|  |  |  | NA |
| <p>References/Reading Materials:</p> <ul style="list-style-type: none"> <li>➤ Culyer AJ, Newhouse JP. Handbook of health economics. 1st ed. Burlington: Elsevier Science; 2007.</li> <li>➤ Culyer AJ. The dictionary of health economics. 2nd ed. Cheltenham, UK: Edward Elgar; 2010.</li> <li>➤ Glied S, Smith P. The Oxford handbook of health economics. 1st ed. New York: Oxford University Press; 2011.</li> <li>➤ Feldstein PJ. Health care economics. 7th ed. New York: Delmar Publishers; 2012.</li> <li>➤ Jacobs P. The Economics of Health and Medical Care; Aspen Publishers, Inc. Gaithersburg, Maryland. 1991</li> <li>➤ Mills A. and Gilson L. 1988, Health Economics for Developing Countries: A Survival Kit; EPC Publication no. 17, Health Policy Unit, LSHTM.</li> <li>➤ Zschock D. K. Health Care Financing in Developing Countries, 1983</li> <li>➤ Culyer A.J. and Newhouse J.P. 2000, North-Holland Handbook of Health Economics, Elsevier.</li> <li>➤ Santerre R.E. and Neun S.P. Health Economics, Theories, Insights and Industry Studies, 5th Edition South-Western Cengage Learning, 2010</li> </ul> |  |  |    |

|   |   |           |                      |
|---|---|-----------|----------------------|
| <b>Semester 1</b>   |   |           |                      |
| Course Code:  | <b>MHSM 52073</b>                               |           |                      |
| Course Name:  | <b>Accounting and Finance for Professionals</b> |           |                      |
| Credit Value:   | <b>3</b>  |           |                      |
| Core/Optional   | <b>Core</b>                                     |           |                      |
| Hourly Breakdown  | Theory  | Practical | Independent Learning |
|   | 45  |           | 105                  |
| <p>Course Aim/Intended Learning Outcomes:</p> <p>On successful completion of this module, students will be able to:</p> <ul style="list-style-type: none"> <li>➤ Recognize key accounting terms and language.</li> <li>➤ Illustrate how transactions that affect the financial position of a health care</li> </ul> |   |           |                      |

- organization are recorded.
- Explain the construction of basic financial statements including balance sheets, income statements, and statements of cash flows.
  - Analyze and interpret the information contained in basic financial statements.
  - Demonstrate an understanding of different models for financing health services and the cost-containment incentives and disincentives associated with each type of payment method.
  - Relate the principles of management control systems to financial issues in health care.
  - Demonstrate skills in building, analyzing, and using a budget.
  - Explain how to best optimize resource use, and appreciate the role of cost containment strategies

**Course Contents**

An introduction to basic accounting principles for non-accountants. Fundamentals of finance financial planning controlling and decision-making issues, financial statement analysis, budgeting, Cash flows analysis. Working capital management. User fees; outsourcing; social insurance; purchaser-provider splits and provider payment mechanisms; community financing. Advanced methods of cost of health care services: Activity-based costing; using cost information in decision making with empirical evidence. Challenges in costing health and healthcare. Decision making using cost criteria, Cost Minimization

Teaching /Learning Methods:

**Lectures, interactive contacts, and discussions**

Assessment Strategy:

CA (Case studies, assignments, reports, presentations, tests) and ESA.

| Continuous Assessment              | Final Assessment |               |                        |
|------------------------------------|------------------|---------------|------------------------|
| 30%                                | 70%              |               |                        |
| Details: Quizzes- 15, mid-term -15 | Theory (%)       | Practical (%) | Other (%)<br>(specify) |
|                                    | 70               | NA            | NA                     |

**References/Reading Materials:**

- Millichamp, A.H., (1997),” Foundation Accounting”, 5th edition, DP publications.
- Frank Wood, Alan Sangster (2012),” Business Accounting”, Vol. II, 12th edition, pearson education.
- Panday I.M (2015), “Financial Management “, 12th Revised Edition, Vikas Publishing House (Pvt) Ltd, New Delhi.
- Journal of Accounting & Finance

|                   |                                    |           |                      |
|-------------------|------------------------------------|-----------|----------------------|
| <b>Semester 1</b> |                                    |           |                      |
| Course Code:      | <b>MHSM 52082</b>                  |           |                      |
| Course Name:      | <b>Foundation of Health Policy</b> |           |                      |
| Credit Value:     | <b>2</b>                           |           |                      |
| Core/Optional     | <b>Core</b>                        |           |                      |
| Hourly Breakdown  | Theory                             | Practical | Independent Learning |
|                   | 30                                 |           | 70                   |

**Course Aim/Intended Learning Outcomes:**

On successful completion of this module, students will be able to:

- Understand the policy process
- Identify and analyze stakeholder interests
- Recognize key current issues on the Sri Lankan and global health policy agendas
- Locate sources of information guiding health policy content and process.
- Critically analyze policies
- Evaluate the implications of the political context of policy development
- Draw out the policy implications of research evidence and other forms of evidence
- Present well-informed, clear, and well-reasoned arguments on policy-relevant questions
- Critically reflect on their learning about health systems policy and its application and/or future development

|  |                              |                                    |                                      |
|--|------------------------------|------------------------------------|--------------------------------------|
| <ul style="list-style-type: none"> <li>➤ Describe the different types of health technologies and demonstrate the different evidence requirements for regulation</li> <li>➤ Recognize and describe the different stages of the HTA cycle (horizon scanning, prioritization, evidence assessment, policymaking, dissemination and implementation)</li> <li>➤ Demonstrate an understanding of the information and evidence requirements for healthcare policymaking in the context of new and existing health technologies.</li> </ul>  |                              |                                    |                                      |
| <p><b>Course Contents</b></p> <p>Review of policymaking processes, key challenges and major issues confronting governments and health systems around the world, and how policy can help address these. Foundation concepts in health policy, Health care delivery policies, global health and primary prevention policies. Identification of challenges and critical review of stakeholder involvement in the policy process. Policy analysis &amp; implementation. Evidence-based policy making, development of clinical practice guidelines</p> <p>The rationale underpinning the need for Health Technology Assessment (HTA); the history of the development of HTA; organizations, systems and approaches to HTA; and the differing perspectives of the role and use of HTA.</p> |                              |                                    |                                      |
| <p>Teaching /Learning Methods:</p> <p><b>Lectures, interactive contacts and discussions</b></p>  |                              |                                    |                                      |
| <p>Assessment Strategy:</p> <p>CA (Case studies, assignments, reports, presentations, tests) and ESA.</p>  |                              |                                    |                                      |
| <p>Continuous Assessment</p> <p>30%</p>  |                              | <p>Final Assessment</p> <p>70%</p> |                                      |
| <p>Details:</p> <p>Quizzes- 15, mid-term -15</p>   | <p>Theory (%)</p> <p>70%</p> | <p>Practical (%)</p> <p>NA</p>     | <p>Other (%) (specify)</p> <p>NA</p> |

References/Reading Materials:

- Understanding Health Policy, A Clinical Approach. Thomas Bodenheimer, Kevin Grumbach.
- Health Policy Issues: An Economic Perspective. Paul J. Feldstein
- Prevention and control of selected NCDs in Sri Lanka-Policy Options and Action. 2010. Michael Engelgau, Kyoko Okamoto, Kumari Vinodhani Navaratne and Sundararajan Gopalan.
- Sri Lanka Code for Promotion, Protection, and Support of Breastfeeding and marketing of designated products.
- National MCH Policy.
- Reproductive Health strategy – WHO Geneva.
- Community emergency preparedness: a manual for managers and policy-makers – WHO.
- Mental health policy of Sri Lanka, 2005-2015, Ministry of Health,
- Sri Lanka National Health Promotion Policy
- National policy on disability for Sri Lanka - Ministry of Social Services
- National Migration Health Policy Sri Lanka
- Website of World Trade organization- Legal text of GATS and TRIPS agreements- <http://www.wto.org/>
- Website of Third World Network- <http://twinside.org.sg/fta.archives.htm>
- Strategic plan 2016-2025 Ministry of Health

|                   |  |
|-------------------|--|
| <b>Semester 2</b> |  |
| Course Code:      | <b>MHSM 52092</b>                        |
| Course Name:      | <b>Principles of Health Care Quality</b> |
| Credit Value:     | <b>2</b>                                 |

|                  |             |           |                      |
|------------------|-------------|-----------|----------------------|
| Core/Optional    | <b>Core</b> |           |                      |
| Hourly Breakdown | Theory      | Practical | Independent Learning |
|                  | 30          |           | 70                   |

Course Aim/Intended Learning Outcomes:

On successful completion of this module, students will be able to:

- Describe the factors that have led to a greater emphasis on quality measurement and improvement in health care.
- Demonstrate an understanding of the tools that are used in quality measurement and improvement, including:
  - Clinical indicator programs
  - Adverse event monitoring
  - Satisfaction surveys
  - Benchmarking
  - Evidence-based healthcare
  - Clinical guidelines
  - Quality improvement programs
  - Accreditation programs
  - Risk management
- Apply knowledge of international quality improvement programs.
- Contribute to the debate on quality improvement issues - such as public disclosure of quality measures.
- Design and implement quality improvement programs in the clinical setting.
- In-depth knowledge and ability to compare the key approaches to measuring, monitoring and managing health care for improving quality of care and patient safety.
- In-depth knowledge of the tools, techniques, programs and strategies currently used for improving quality of care and patient safety;
- Demonstrate the skills to objectively critique the strengths and limitations of the different tools, techniques, programs or strategies for improving quality of care and patient safety.
- Understand and manage the factors that impact the selection, acceptance and

|  |                              |                                    |                                      |
|--|------------------------------|------------------------------------|--------------------------------------|
| <p>sustainability of initiatives for improving quality of care and patient safety. These factors include clinician behavior, organizational and health system structures.</p> <ul style="list-style-type: none"> <li>➤ An in-depth understanding of risk perception and safety culture and their impact on frontline behaviors in healthcare settings.</li> <li>➤ A knowledge and appreciation of the risks involved in poorly planned technology innovation in high-risk domains like healthcare and the role of design and risk assessment.</li> <li>➤ An appreciation of the current systems of accountability (or lack thereof) that exist in healthcare and their impact on both incident investigation and organizational learning.</li> </ul>   |                              |                                    |                                      |
| <p><b>Course Contents</b></p> <p>Historical, political &amp; social factors impacting on quality measurement in health care. Relationship of industrial &amp; health care quality monitoring. Epidemiological &amp; statistical quality measurement principles. Strength &amp; limitations of current monitoring techniques &amp; different sources of health care quality data. Principles of clinical indicator programs, adverse event monitoring, satisfaction surveys, medical audits &amp; benchmarking. Relationship between evidence-based medicine, clinical practice guidelines &amp; quality improvement. Design, implementation &amp; evaluation of quality improvement programs in clinical settings. Tools for patients' safety, human factors. Clinical governance. ISO standard, Total quality management.</p> |                              |                                    |                                      |
| <p>Teaching /Learning Methods:</p> <p><b>Lectures, interactive contacts and discussions</b></p>  |                              |                                    |                                      |
| <p>Assessment Strategy:</p> <p>CA (Case studies, assignments, reports, presentations, tests) and ESA.</p>  |                              |                                    |                                      |
| <p>Continuous Assessment</p> <p>30%</p>  |                              | <p>Final Assessment</p> <p>70%</p> |                                      |
| <p>Details:</p> <p>Quizzes- 15, mid-term -15</p>   | <p>Theory (%)</p> <p>70%</p> | <p>Practical (%)</p> <p>NA</p>     | <p>Other (%) (specify)</p> <p>NA</p> |

References/Reading Materials:

- Council of the European Union. European Council Recommendation on patient safety, including the prevention and control of healthcare associated infections, Brussels 2009 ([http://ec.europa.eu/health/ph\\_systems/docs/patient\\_rec2009\\_en.pdf](http://ec.europa.eu/health/ph_systems/docs/patient_rec2009_en.pdf)).
- OECD, Health Policy Studies Improving Value in Health Care Measuring Quality, 2010.
- The Institute of Medicine (IOM) study, To Err is Human, Building a Safer Healthcare System. Washington: National Academy Press, 1999.
- Ministry of Health, National Guidelines for Improvement of Quality and Safety of Healthcare Institutions (For Line Ministry and Provincial Hospitals) Quality Series No.1, First Edition September 2010.
- Ministry of Health, Manual for Master Trainers Healthcare Quality and Safety' in 2015.
- Health Information and Quality Authority. Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality: February 2013 (Version 1.1). Dublin: Health Information and Quality Authority; 2013.
- Patient Safety Systems (PS) - Joint Commission
- [https://www.jointcommission.org/assets/1/18/PSC\\_for\\_Web.pdf](https://www.jointcommission.org/assets/1/18/PSC_for_Web.pdf).

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|-------------------|--|-----------|----------------------|
| <b>Semester 2</b> |  |           |                      |
| Course Code:      | <b>MHSM 52102</b>                                |           |                      |
| Course Name:      | <b>Reform and Development of Health Services</b> |           |                      |
| Credit Value:     | <b>2</b>   |           |                      |
| Core/Optional     | <b>Core</b>                                      |           |                      |
| Hourly Breakdown  | Theory   | Practical | Independent Learning |
|                   | 30   |           | 70                   |



Course Aim/Intended Learning Outcomes:

On successful completion of this module, students will be able to:

- Demonstrate an understanding of some of the drivers of reform at the 'system', 'institution' and 'care delivery' levels.
- Demonstrate an understanding of some of the mechanisms or approaches used in health service reform at the 'system', 'institution' and 'care delivery' levels.
- Describe some of the international and national agencies and entities that influence health service reform.
- Apply knowledge of the structure, function and management of the health care system in Sri Lanka.
- Compare and contrast the reform agenda in a sample of developed countries.
- Apply an understanding of the role of hospitals in health service reform.
- Reflect on the complexities and challenges involved in implementing reform.
- Think critically about the application of various reform movements/models at the 'care delivery' level.

**Course Contents**

Reform and development in health services from an international, national and local perspective. Implementation of health policy reform and the multitude of issues, drivers, demands, complexities and consequent impacts related to reform. Areas of concentration include international and national governing entities, the Sri Lankan health care system, developed and developing country health systems, roles of institutions (hospitals), and various applications of reform movements/models in care delivery.

Teaching /Learning Methods:

**Lectures, interactive contacts and discussions**

Assessment Strategy:

CA (Case studies, assignments, reports, presentations, tests) and ESA.

| Continuous Assessment                 | Final Assessment |               |                        |
|---------------------------------------|------------------|---------------|------------------------|
| 30%                                   | 70%              |               |                        |
| Details:<br>Quizzes- 15, mid-term -15 | Theory (%)       | Practical (%) | Other (%)<br>(specify) |

|   |     |    |    |
|---|-----|----|----|
|   | 70% | NA | NA |
| <p>References/Reading Materials:</p> <ul style="list-style-type: none"> <li>➤ Department of Census and Statistics. (Latest Version). Sri Lanka Demographic and Health Survey (Latest Report Available).</li> <li>➤ Web sites of individual campaigns</li> <li>➤ Annual reports of special campaigns</li> <li>➤ Annual Health Bulletin</li> <li>➤ The World Bank (2012). Sri Lanka's Demographic Transition: Facing the Challenges of an Aging Population with Few Resources. . Available: <a href="http://www.worldbank.org/en/news/feature/2012/09/29/sri-lanka-demographic-transition">http://www.worldbank.org/en/news/feature/2012/09/29/sri-lanka-demographic-transition</a>. Last accessed 6th June 2013.</li> <li>➤ Health Sector Reforms - World Bank Group, <a href="http://siteresources.worldbank.org/INTPSIA/Resources/490023.../3622-02_Ch02.pdf">siteresources.worldbank.org/INTPSIA/Resources/490023.../3622-02_Ch02.pdf</a></li> <li>➤ HEALTH SECTOR REFORM: Issues and Opportunities - World Health <a href="http://www.who.int/iris/bitstream/10665/127574/.../WP_HlthSecRefm_Final%20Version.pdf">www.who.int/iris/bitstream/10665/127574/.../WP_HlthSecRefm_Final%20Version.pdf</a></li> <li>➤ Chapter 6: Principal health reforms</li> <li>➤ Health Master Plan 2016-2025, National Strategic Framework for Development of Health Services 2016 – 2025. Ministry of Health. <a href="http://www.health.gov.lk/moh_final/english/others.php?pid=104">http://www.health.gov.lk/moh_final/english/others.php?pid=104</a></li> </ul> |     |    |    |

|                   |                             |           |                      |
|-------------------|-----------------------------|-----------|----------------------|
| <b>Semester 2</b> |                             |           |                      |
| Course Code:      | <b>MHSM 52112</b>           |           |                      |
| Course Name:      | <b>Managerial Economics</b> |           |                      |
| Credit Value:     | <b>2</b>                    |           |                      |
| Core/Optional     | <b>Core</b>                 |           |                      |
| Hourly Breakdown  | Theory                      | Practical | Independent Learning |

|  |    |  |    |
|--|----|--|----|
|  | 30 |  | 70 |
| <p>Course Aim/Intended Learning Outcomes:</p> <p>On successful completion of this module, students will be able to:</p> <ul style="list-style-type: none"> <li>➤ understand basic microeconomic concepts and their application to the health sector</li> <li>➤ understand role, limitations and usefulness of economic analysis and economics as a way of thinking, particularly when applied to the health care sector</li> <li>➤ understand organization and delivery of health services from an economic perspective</li> <li>➤ understand the Health Care system in Sri Lanka from an economic perspective, including an analysis of the reasons for growth in expenditure.</li> <li>➤ Evaluate and appreciate the use of health economics as a tool for rational decision-making.</li> <li>➤ Critically appraise an economic analysis.</li> <li>➤ Identify the robustness of a pharmacoeconomic evaluation as viewed by decision makers.</li> </ul> |    |  |    |
| <p><b>Course Contents</b></p> <p>An introduction to basic economic theory relevant to clinicians and clinical managers, including funding health care services and economics evaluations that guide health care policy and decision making. The microeconomic approach to resource allocation, both in general and specifically, in relation to the health sector. The use of economic tools in the analysis of the 'market' for health care, in terms of efficiency and equity. An analytical framework for assessment of the Sri Lankan health care system, and health policy generally, from an economic perspective. Market structures and Market Imperfections., Methods of economic evaluation, Cost Effectiveness, Cost-benefit analysis, Socio-economic and administrative determinants of cost, Planning for cost containment.</p>  |    |  |    |
| <p>Teaching /Learning Methods:</p> <p><b>Lectures, interactive contacts and discussions</b></p>  |    |  |    |
| <p>Assessment Strategy:</p> <p>CA (Case studies, assignments (written and practical), reports, presentations, tests) and ESA.</p>  |    |  |    |

| Continuous Assessment   | Final Assessment      |                         |                               |
|---|-----------------------|-------------------------|-------------------------------|
| 30%   | 70%                   |                         |                               |
| Details:<br>Quizzes- 15, mid-term -15   | Theory (%)<br><br>70% | Practical (%)<br><br>NA | Other (%) (specify)<br><br>NA |
| References/Reading Materials:   |                       |                         |                               |
| <ul style="list-style-type: none"> <li>➤ Economics. Begg, David, Fischer, Stanley and Dornbusch, Rudiger, McGraw-Hill Publishers Inc. 2005</li> <li>➤ Economics. Samuelson, Paul A and Nordhaus, William D, Irwin-McGraw-Hill 2009 - <a href="http://www.ips.lk/talkingeconomics/2011/04">www.ips.lk/talkingeconomics/2011/04</a></li> <li>➤ Central Bank of Sri Lanka, Annual Reports</li> <li>➤ <a href="http://www.ram.com.lk/reports/0313_healthcare_final.pdf">http://www.ram.com.lk/reports/0313_healthcare_final.pdf</a> (on the private sector)</li> <li>➤ Rannan-Eliya, Ravi P., and Lankani Sikurajapathy. 2008. Sri Lanka: “Good Practice” in Expanding Health Care Coverage.” Research Studies Series, Number 3, Colombo, Institute for Health Policy.</li> <li>➤ Drummond, M.F., O’Brien, B.J., Stoddart, G.I and Torrance, G.W – Methods for the Economic</li> <li>➤ Evaluation of Health Care Programmes de Silva, Amala, Samarage, S.M and Somanathan, Aparnaa, Review of Costing Studies in Sri Lanka 1990-2004, National Macroeconomics and Health Commission publication, 2007.</li> </ul> |                       |                         |                               |

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|-------------------|--|-----------|----------------------|
| <b>Semester 2</b> |  |           |                      |
| Course Code:      | <b>MHSM 52125</b>  |           |                      |
| Course Name:      | <b>Independent Project on Health Services Management</b> |           |                      |
| Credit Value:     | <b>5</b>   |           |                      |
| Core/Optional     | <b>Core</b>  |           |                      |
| Hourly Breakdown  | Theory   | Practical | Independent Learning |
|                   |  | 150       | 350                  |

|   |                                |                                    |   |
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|   |                                |                                    |   |
| <p>Course Aim/Intended Learning Outcomes:</p> <p>On successful completion of this module, students will be able to:</p> <ul style="list-style-type: none"> <li>➤ identify an issue or a problem of health service management importance.</li> <li>➤ critically review and evaluate the literature related to an important health service management issue in their workplace.</li> <li>➤ integrate theory, knowledge and practice in their examination and appraisal of an important health service management issue in their workplace.</li> <li>➤ demonstrate an ability to reflect on issues and alternative management actions.</li> <li>➤ describe and justify appropriate health services management action.</li> <li>➤ demonstrate skills in writing up an assessment of an important health service management issue in a professional report.</li> </ul> |                                |                                    |   |
| <p><b>Course Contents</b></p> <p>The unit is designed to consolidate the theoretical and practical skills acquired in the Master of Health Services Management by exploring in detail a complex problem within their workplace or within a health care setting. Alternatively, subject to the approval of the course coordinator, students may seek a limited placement in a health service to explore a particular issue for their project.</p>  |                                |                                    |   |
| <p>Teaching /Learning Methods:</p> <p><b>Lectures, interactive contacts, Practical classes and discussions</b></p>  |                                |                                    |   |
| <p>Assessment Strategy:</p> <p>CA (Case studies, assignments (written and practical), reports, presentations, tests) and ESA.</p>   |                                |                                    |   |
| <p>Continuous Assessment</p> <p>30%</p>   |                                | <p>Final Assessment</p> <p>70%</p> |   |
| <p>Details:</p> <p>Two Progress presentations – 15 each</p>   | <p>Theory (%)</p> <p>.....</p> | <p>Practical (%)</p> <p>.....</p>  | <p>Other (%) (specify)</p> <p>Viva-voce examination %, Project Report %</p> |

|   |  |  |    |
|---|--|--|----|
|   |  |  | 70 |
| <b>References/Reading Materials:</b> <ul style="list-style-type: none"> <li>➤ JH Abramson, ZH Abramson, 1999. Survey methods in Community Medicine.</li> <li>➤ 2. Designing clinical research: an epidemiological approach, SB Hulley, SR Cummings. 1988</li> </ul> |  |  |    |

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|--|--|-----------|----------------------|
| <b>Semester 2</b>  |  |           |                      |
| Course Code:   | <b>MHSM 52132</b>                                  |           |                      |
| Course Name:   | <b>Forecasting and Statistical Process Control</b> |           |                      |
| Credit Value:  | <b>2</b>   |           |                      |
| Core/Optional  | <b>Optional</b>                                    |           |                      |
| Hourly Breakdown   | Theory   | Practical | Independent Learning |
|  | 30   |           | 70                   |
| <b>Course Aim/Intended Learning Outcomes:</b><br>On successful completion of this module, students will be able to: <ul style="list-style-type: none"> <li>➤ Plot time series and describe their characteristics.</li> <li>➤ Identify fundamental concepts in time series modelling, such as time series decomposition and stationarity.</li> <li>➤ Compute indices based on time series data.</li> <li>➤ Appraise the limitations of regression as a forecasting tool.</li> <li>➤ Interpret forecast results for a general non-statistical audience.</li> </ul> |  |           |                      |
| <b>Course Contents</b><br>Range of forecasting methods and their application to planning and decision-making. Common tools and packages used in forecasting, the use of historical data to identify appropriate forecasting model, use the final model to forecast future values. Regression Quality characteristics, Process control inspections, Acceptance inspection schemes for   |  |           |                      |

|  |                      |                             |                                  |
|--|----------------------|-----------------------------|----------------------------------|
| attributes and variables. Indifference quality level; AQL methods, Dodge and Romig LTPD designs. Description of LQAS: ROC curves, Producers' risk, Consumers' risk.  |                      |                             |                                  |
| Teaching /Learning Methods:<br><b>Lectures, interactive contacts and discussions</b>   |                      |                             |                                  |
| Assessment Strategy:<br>CA (Case studies, assignments (written and practical), reports, presentations, tests) and ESA.   |                      |                             |                                  |
| Continuous Assessment<br><br>30%   |                      | Final Assessment<br><br>70% |                                  |
| Details:<br>Quizzes- 15, mid-term -15  | Theory (%)<br><br>70 | Practical (%)<br><br>NA     | Other (%)<br>(specify)<br><br>NA |
| References/Reading Materials:<br><ul style="list-style-type: none"> <li>➤ Introduction to Statistical Quality Control, 7th Edition by Douglas C. Montgomery, 2013, John Wiley &amp; Sons, Inc., New York.</li> <li>➤ Quality Management in Health Care: Principles and Methods, By Donald Lighter, Douglas C. Fair</li> <li>➤ Brockwell and Davis, 2nd Edition, (1991), 'Time Series- Method and Forecasting', Springer.</li> <li>➤ Box and Jenkins, (1976), 'Time Series Analysis', John Willy.</li> <li>➤ DeLurgio, S.A., (1998), 'Forecasting Principles and Applications, McGraw Hill.</li> <li>➤ Chatfield, C., 2nd Edition, (1980), 'Analysis of Time Series', Chapman-Hall</li> </ul> |                      |                             |                                  |

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|-------------------|---------------------------------|
| <b>Semester 2</b> |                                 |
| Course Code:      | <b>MHSM 52142</b>               |
| Course Name:      | <b>Organizational Behaviour</b> |
| Credit Value:     | <b>2</b>                        |

|  |                 |                  |                      |
|--|-----------------|------------------|----------------------|
| Core/Optional  | <b>Optional</b> |                  |                      |
| Hourly Breakdown   | Theory          | Practical        | Independent Learning |
|  | 30              |                  | 70                   |
| <p>Course Aim/Intended Learning Outcomes:</p> <p>On successful completion of this module, students will be able to:</p> <ul style="list-style-type: none"> <li>➤ provide a basic knowledge of main ideas and key theories relating to organizational behavior,</li> <li>➤ think about themselves from several different behavioral aspects,</li> <li>➤ develop skills in diagnosis and problem solving by applying the learned concepts to given situations,</li> <li>➤ develop an interest in, and appreciation of, and a positive attitude toward the many aspects of the subject matter of management.</li> </ul> |                 |                  |                      |
| <p><b>Course Contents</b></p> <p>Introduction Organizational Behaviour. Organizational Behaviour and Management. Personality and Learning. Perception. Attribution and Judgment of Others. Values. Attitudes and Work Behaviour. Work Motivation in Practice. Groups and Teamwork. Leadership. Managing work Conflict and Stress. Organizational culture.</p>  |                 |                  |                      |
| <p>Teaching /Learning Methods:</p> <p><b>Lectures, interactive contacts and discussions</b></p>  |                 |                  |                      |
| <p>Assessment Strategy:</p> <p>CA (Case studies, assignments (written and practical), reports, presentations, tests) and ESA.</p>  |                 |                  |                      |
| Continuous Assessment  |                 | Final Assessment |                      |
| 30%  |                 | 70%              |                      |
| Details: Quizzes- 15, mid-term -15   | Theory (%)      | Practical (%)    | Other (%) (specify)  |
|  | 70              | NA               | NA                   |



References/Reading Materials:

- Fred Luthans, (2011), Organizational Behavior, 12th edition, McGraw Hill Inc; Singapore.
- Levy, P.A., (2010), Industrial-Organizational psychology: Understanding the workplace, 3rd edition, Worth Publishers, New York.
- Stephen P. Robbins, (2011), Organizational Behavior, 14th edition, Prentice-Hall, New Jersey.
- Stephen P. Robbins, Judge T., (2008), Essentials of Organizational Behavior, 9th Edition, Prentice-Hall.
- Journal of Organizational Behavior

|                   |                            |           |                      |
|-------------------|----------------------------|-----------|----------------------|
| <b>Semester 2</b> |                            |           |                      |
| Course Code:      | <b>MHSM 52152</b>          |           |                      |
| Course Name:      | <b>Economic Evaluation</b> |           |                      |
| Credit Value:     | <b>2</b>                   |           |                      |
| Core/Optional     | <b>Optional</b>            |           |                      |
| Hourly Breakdown  | Theory                     | Practical | Independent Learning |
|                   | 30                         |           | 70                   |

Course Aim/Intended Learning Outcomes:

On successful completion of this module, students will be able to:

- Demonstrate an understanding of the relevant issues associated with the appropriate collection and analysis of cost and outcome data
- Demonstrate an understanding of the importance of discounting issues and the controversy surrounding the appropriate discount rate to use for costs and benefits within an economic evaluation
- Critically appraise a number of alternative frameworks and modelling approaches that are used in economic evaluation and understand the appropriate presentation of results
- Critically review alternative methods to outcome evaluation and their relevance to

|  |                             |                                    |                                      |
|--|-----------------------------|------------------------------------|--------------------------------------|
| <p>alternative evaluation approaches</p> <ul style="list-style-type: none"> <li>➤ Recognise the policy implications that may result from economic evaluations Plot time series and describe their characteristics.</li> <li>➤ Identify fundamental concepts in time series modellings, such as time series decomposition and stationarity.</li> <li>➤ Compute indices based on time series data.</li> <li>➤ Appraise the limitations of regression as a forecasting tool.</li> </ul> <p>Interpret forecast results for a general non-statistical audience</p>                    |                             |                                    |                                      |
| <p><b>Course Contents</b></p> <p>Importance of Economic Evaluation of Health Care. Measuring status of health and cost of illness. Different Techniques of Economic Evaluation; Cost-benefit analysis, cost-effectiveness analysis, cost-utility analysis.</p> <p>Practical modelling session: probabilistic sensitivity analysis and cost-effectiveness acceptability curves; valuing the broader benefits of health care.</p> <p>A systematic review of economic evaluations; missing data analysis; critical appraisal of economic evaluation papers (group preparation).</p> |                             |                                    |                                      |
| <p>Teaching /Learning Methods:</p> <p><b>Lectures, interactive contacts and discussions</b></p>  |                             |                                    |                                      |
| <p>Assessment Strategy:</p>  |                             |                                    |                                      |
| <p>Continuous Assessment</p> <p>30%</p>  |                             | <p>Final Assessment</p> <p>70%</p> |                                      |
| <p>Details: Quizzes- 15, mid-term -15</p>  | <p>Theory (%)</p> <p>70</p> | <p>Practical (%)</p> <p>NA</p>     | <p>Other (%) (specify)</p> <p>NA</p> |
| <p>References/Reading Materials:</p> <ul style="list-style-type: none"> <li>➤ Drummond M. F., Stoddart G. L. and Torrance (2015), Methods for the Economic Evaluation of Health Care Programmes; Oxford University Press.</li> <li>➤ Sloan F. A. (1995), Valuing Health Care; Cambridge University Press.</li> <li>➤ Gold M. R., Seigel J. E., Russell L. B., and Weinstein M. C. (1996), Cost-effectiveness in Health and Medicine, Oxford University Press.</li> <li>➤ Arrow K. (1975), Social Choice and Individual Values</li> </ul>   |                             |                                    |                                      |

➤ Morris S., Appleby J. and Parkin D., Economic Analysis in Health Care.

### **Contributors to the development of the curriculum**

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Recommended by the BoS on: .....

Meeting No. ....

Date : .....

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Recommended by the Faculty Board of Graduate Studies on: ..... Meeting No. ....

Date : .....

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Dean of the Faculty of Graduate Studies

Recommendation of IQAU Director of the University

Date : .....

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Director- IQAU, University of Kelaniya

Approval of the Vice-Chancellor

Date : .....

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Vice-Chancellor -University of Kelaniya