

**CDPH, IOM, TU**

**Teaching Assistant Vacancy (1/2078/12/17)**

**Selection guidelines for Public Health Teaching Assistant**

**Written Examination: 100 marks**

Full marks=100,

Pass marks: 50% on both papers

Paper 1. MCQs= (1 X 50=50 marks),

Paper 2. SAQs= (5 X 6=30 marks) and Essay questions= (10 X 2=20 marks)

Examination duration for paper 1: MCQs (1 hour)

Examination duration for paper 2: SAQ and essay (2 hours)

Curriculum for examination: Following 4 papers from MPH curriculum of IOM (contents only)

Paper I: Public Health Theory and Practices and International Health

Paper II: Health System Management and Health Economics Part A: Health System Management

Paper IX: Advanced Public Health

Paper X: Applied Health System Management and Health Care Financing

**Interview: 10 Marks**

Top three candidates who passed on written examination will be called for the interview

**Academic Qualification: 10 Marks**

Masters' degree: 5 [First division: 5, Second division and division not declared:4]

Mphil: 2, PhD or (Mphil and PhD): 5

[Note: Candidate who obtained highest marks combining all; written examinations, interview and academic qualifications will be the principal candidate and other subsequent candidates will be in the waiting list.]

*For further information or clarity, contact academic section, Central Department of Public Health, IOM, TU*

<b>Paper I</b>		
<b>Course Title</b>	<b>Public Health Theory and Practices and International Health</b>	
<b>Hours: 120</b>	<b>Full Mark: 100</b>	<b>Pass Mark: 50</b>

### **Unit 1: Public Health Theory and Practices**

**Full Mark 50**

**Total hrs: 60**

#### **1. Course description**

This course will examine the theoretical and philosophical dimensions public health and impact of global relations in public health. The course helps the learners analyze determinants of health both at the micro and macro level. The course enables the student to conceptualize health disparity and underlying causes of health disparity within and between the countries. It is attempted to bring the discussion in the course about a long time debate about the concept of public health practice and its relationship with different internal and external factors and concept, evolution and dilemma in public health education. The course focuses on role of international relation and global events in shaping health policies and priorities.

#### **2. Aim of the course**

The aim of the course is to help students to understand philosophical and theoretical basis to understand public health and International relations as influencing factors to public health policies and priorities and evolution in public health education.

#### **3. Objectives**

At the end of the course students will be able to:

- a. Explain philosophical and theoretical basis of public health
- b. Describe concept of public health practice
- c. Analyze underlying causes of health disparities in the population
- d. Appreciate interdisciplinary approach in public health
- e. Discuss concept, evolution and dilemma in public health education
- f. Explain historical background of Primary Health Care and its relevance in the present context.
- g. Describe concept an relevance of International Health
- h. Explain the implication of present day globalization in public health

#### **4. Course contents**

Unit 1: Public Health Theory and Practices

##### 1.1 Overview of Public Health

10hrs

- a. Historical development of public health, future of public health
- b. Concept of public health as science and practice
- c. Sources of theories in public health

- d. Principles of public health
  - e. Factors influencing public health practice
  - f. Ethical dilemma in Public Health
- 1.2 Health disparities and public health 25hrs
- a. Determinants of health and disease
  - b. Cost, equity and access to public health services
  - c. Medical care and public health: systems and services
  - d. Concept of health disparity
  - e. Underlying causes of health disparity
  - f. Health disparities and vulnerable population
  - g. Opportunities and challenges in health services in relation to population health
  - h. Revitalization of primary health care  
Issues in public Health- Poverty, Non communicable diseases, natural and human made disaster and other relevant emerging issues.
- 1.3 Interdisciplinary approach in public health 10hrs
- a. Concept of Health in All Policies (HiAP)
  - b. Importance of multi-sector collaboration in public health
  - c. Challenges in implementation of multi-sector collaboration in public health
- Unit 2: Public Health Education 15hrs
- a. Concept of public health education
  - b. Current situation of public health education in Nepal
  - c. Role of professional Councils in public health education
  - d. Dilemma in public health education
- Unit 3: International health and Primary Health Care
- 3.1 Primary health care 10 hrs
- a. Historical background of primary health care
  - b. Vision of Primary Health Care and Health for all
  - c. Global experiences of success and failure of primary health care
  - d. Relevance of primary health care in present day context
  - e. Revitalization of PHC in Nepal
  - f. Health Care Reform- Concept, reforms strategies
  - g. MDGs, Beyond MDGs and Sustainable Development Goals
- 3.2 International health 10 hrs
- a. Introduction to International Health: Concept, background, scope and methods of international health
  - b. Relevance of International Health in Public Health
  - c. Partners in International Health

### 3.3 Globalization and Health

10 hrs

- a. Globalization – concept, historical background
- b. Characteristics of present day globalization (privatization, liberalization, market orientation)
- c. Key players of globalization
- d. Impact of globalization on public health, framework of analysis of impact
- e. Mitigation of adverse impact of globalization on health of people

### 3.4 Global events

30 hrs

- a. Concept of Global Events: Convention, Conferences, Commissions
- b. Outcome of global events: Convention protocol, charter, declaration, reports
- c. Implication of global events in public health policy and strategy at the national, regional and global levels
- d. Major global events : Geneva Convention, ICPD, Bamako Initiative, FCTC, Paris Declaration on Aid Effectiveness and International Health Partnership (IHP)
- e. Commission on Macroeconomics and Health
- f. People’s Health Movement
- g. Global crisis for human resource for health
- h. Other relevant global events

## 5. Teaching learning methods and materials

- a. Interactive lectures: relevant topics, particularly conceptual and theoretical issues, will be delivered through the didactic lectures.
- b. Group discussion: Some topics will be discussed in the group facilitated by the faculty. The group discussion may also take place as self-learning without the presence of faculty.
- c. Student presentation: Each of the students will be assigned certain topics for the presentation in the class. Relevant resource materials will be provided to the students when necessary. Students will collect most of the materials.
- d. Faculty supplements the information during presentation
- e. Guest lecturers: Relevant experts will be invited to deliver lectures on some of the topics
- f. Participation in journal clubs, seminars, organizational visits
- g. LCD projector, power-point slides and flip charts etc.

## 6. Evaluation

- a. Internal assessment in different forms 20%  
(This is a formative evaluation based on participation in the class, presentation, accomplishment of assignments. Self and peer evaluation can be used)
- b. Final examination 80%

## 7. References

1. Joel B (2013). Teitelbaun, Sara E. Wilensky: Essentials of Health Policy and Law:2<sup>nd</sup>edn: JONES AND BARTLETT PUBLISHER;(web:<http://books.google.com.np/books?id=IPKvY5MKBXIC&printsec=frontcover#v=onepage&q&f=false> ).
2. HMG/Nepal. National Health Policy. 1991. Ministry of Health. Kathmandu.
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5. Nepal Policy Research Network. Nepal Policy Documents. (web:<http://www.nepalpolicy.net.com/new/nepal-policy-documents/periodic-plan-1/>)
6. Bryant T. (2009). An Introduction to Health Policy, Canadian Scholar's Press Inc. (web:<http://www.cspi.org/books/an-introduction-to-health-policy>)
7. Reisman D (2007). Health Care and Public Policy. Edward Elgar Publishing Limited;.(web: [http://www.e-elgar.com/bookentry\\_mainUS.lasso?id=4240](http://www.e-elgar.com/bookentry_mainUS.lasso?id=4240))
8. Boylan M (2004). Public Health Policy and Ethics, Lluwer Academic Publishers;.(web: [http://www.springer.com/public+health/book/978-1-4020-1762-9?token=gbgen&wt\\_mc=Google\\_-Book+Search\\_-Springer\\_-EN&otherVersion=978-1-4020-2207-4](http://www.springer.com/public+health/book/978-1-4020-1762-9?token=gbgen&wt_mc=Google_-Book+Search_-Springer_-EN&otherVersion=978-1-4020-2207-4) )
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10. Daniel Strech, Irene Hirschberg, Georg Marckmann (2013). Ethics in Public Health and
11. Health Policy- Concept, Methods, Case Studies, Springer, Germany;. (web: [http://www.springer.com/social+sciences/applied+ethics/book/978-94-007-6373-9?cm\\_mmc=Google\\_-Book+Search\\_-Springer\\_-0&otherVersion=978-94-007-6374-6](http://www.springer.com/social+sciences/applied+ethics/book/978-94-007-6373-9?cm_mmc=Google_-Book+Search_-Springer_-0&otherVersion=978-94-007-6374-6))
12. Powers M, Faden R (2006). Social Justice- the moral foundations of public health and health policy, Oxford University Press, New York; (web: [http://books.google.com.np/books?id=F5IyijgYcpYC&pg=PA80&dq=public+policy+and+health+policy&hl=en&sa=X&ei=Dr5NU\\_jc8m68gXPuYJY&ved=0CEUQ6AEwBjgU#v=onepage&q=public%20policy%20and%20health%20policy&f=false](http://books.google.com.np/books?id=F5IyijgYcpYC&pg=PA80&dq=public+policy+and+health+policy&hl=en&sa=X&ei=Dr5NU_jc8m68gXPuYJY&ved=0CEUQ6AEwBjgU#v=onepage&q=public%20policy%20and%20health%20policy&f=false))
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  - a. Geneva Conventions
  - b. Bamako Initiative
  - c. International Conference on Population and Development (ICPD)
  - d. World Summit for Children
  - e. Convention on Elimination of Discrimination against Women (CEDAW)
  - f. Millennium Development Goals
  - g. Sustainable Development Goals
  - h. Commission on Macro Economics and Health (CMEH)
  - i. Framework Convention on Tobacco Control (FCTC)
  - j. Other relevant web pages

<b>Paper II</b>		
<b>Course Title</b>	<b>Health System Management and Health Economics</b> Part A: Health system management Part B: Health Economics	
<b>Hours: 120</b>	<b>Full Mark: 100</b>	<b>Pass Mark: 50</b>

## **Part A: Health System Management**

**Full mark 60**

**Hours 72 hrs**

### **1. Course description**

In the present day of globalized world, health service management has been important for the field for public health planners and managers to understand the relations and issues for effective management of public health services in a country. Theory and practice of health management with contribution of health economics is what future managers also needed. The understanding of health system management and health economics in relation to international health is indispensable. The aim of the course is to acquaint the students with the vision of different health care systems of the world, with unfolding socio-economic relationship between nations and to develop necessary managerial skills to carryout management functions at different levels of a health care organization.

### **2. Aim of the course**

Aim of the course is to enable the students to demonstrate leadership skills in management and policy formulation with thorough understanding and systems analysis, National Health System and management theory and practice; and analysis of health policy and health systems, specifically, for the survey of the organization, delivery of health services, the alternative methods of providing health care, priority setting and resource allocation.

### **3. Objectives**

At the end of the course, the students will be able to:

- a. Explain management theories
- b. Describe concept of health system management
- c. Describe concept of human resource management
- d. Identify, generate and use health management information (Service information, logistic information, human resource information and financial information) in management planning and decision – making process.
- e. Explain and apply concept of quality assurance, set priority, carryout strategic planning, logical framework analysis and prepare management plan
- f. Explain the concept of quality assurance

#### 4. Course contents

- Unit 1: Overview of Management 6hrs
- a. Describe an organization, types and functions of organization. How the concept of an organization has changed?
  - b. Define Management
  - c. Distinguish between efficiency and effectiveness
  - d. Functions of management
  - e. Explain the value of studying management.
- Unit 2: Management Theory 6hrs
- a. Scientific management theory
  - b. Classical organization theory
  - c. Transitional theories
  - d. Behavioral school
  - e. Quantitative school
  - f. General System Theory
  - g. Systems Approach
- Unit 3: Introduction to Personal and Interpersonal Skills 10hrs
- a. Team work and team development
  - b. Decision making and problem solving
  - c. Leadership and negotiation skills
  - d. Time management
  - e. Stress management
  - f. Development of managerial self-awareness
  - g. Delegation of authority
  - h. Power and influence
  - i. Conflict management
  - j. Managerial ethics and work culture
  - k. E-management
- Unit 4: Concept of health systems management 10hrs
- a. Introduction to health care system, philosophy, aims, components, building blocks, health care systems of world and Nepal.
  - b. Health care systems and its relationship with nature of state (privatized, welfare model, socialized)
  - c. Health and management planning process
  - d. Participatory approach in health planning/decentralized planning
  - e. Strategic planning approach and log frame analysis
  - f. Health planning and priority setting
  - g. Health planning and programs in health

h. National development periodic plans

Unit 5: Structure and function of health system 10hrs

- a. Components, types, functions, culture and lifecycle of health system
- b. Structure and functions Central, Regional, District and Peripheral health services
- c. Assessing and managing organizational change
- d. Leadership in learning organization
- e. The concept of a learning organization and risk analysis

Unit 6: Human Resource Management 10hrs

- a. Concept, evolution, functions, current situation, HR distribution, theories, principles and models development for Health Work Force (HWF) to meet National Health Service delivery.
- b. Evidence based HRF planning, projection, production and utilization, and evaluation for effective HRF planning in various plans of Nepal.
- c. Issues challenges of human resource management in health system management in relation to motivation, retention of health professional in various setting of health systems delivery.
- d. Theories and approaches of in-service training program for quality of care Importance of supervision, capacity building, career development and quality assurance.
- e. Critical review on present Human Resource Information System (HuRIS)
- f. Conduct need based human resource plan and implementation and evaluation strategies in specific context applying theories of human resource management during practicum project work.

Unit 7: Information Management system and their use 8hrs

- a. System of generation (recording and reporting) valid and reliable information in a timely manner and using them: for effective planning and decision-making process.
- b. Health sector information system (HSIS),
- c. Health Management Information System (HMIS);
- d. Training information management system (TIMS)
- e. Drug Management System (DMS),
- f. Early Warning And Reporting System (EWARS),
- g. Financial Management Information System (FMIS)

Unit 8: Logistic System Management 6hrs

- a. Introduction, importance, current system of logistic management of DoHS
- b. Organizational structure and functions of Logistic management
- c. Role of Central and Regional Medical Stores.
- d. Store Management
- e. Logistic Cycle (Forecasting, quantification, bidding, procurement, storage and distribution),
- f. Logistic Management Information System (LMIS)

- g. Pharmaceuticals management (estimation and projection of drug supply, monitoring and control of drug use, ensuring rational use of drug).
- h. Quality assurance and inventory control system.

Unit 9: Quality Assurance in Health Care

6hrs

- a. Definition, concept and dimensions of quality assurance in health services, Core Values, Concepts and Models, mechanism of quality assurance of DoHS.
- b. Principles of Quality Management: Structure, Process and Outcome in health services
- c. Hindering factors to assure the quality in health services
- d. Standard guidelines for different types of health services/health institutions
- e. Tools and Techniques of quality management: charts, pareto-diagram, cause-effect diagram, statistical process control etc
- f. Quality management system in organization (total quality management – TQM): Force field and SWOT analysis for TQM and logical framework for introducing quality.
- g. Performance management in organization, performance efficiency indicators and improving of individual performance, job engineering, supervision and training.
- h. Role of MoHP/Professional Organizations/individual role in order to maintain quality in health services.

<b>Paper IX</b>		
<b>Course Title</b>	<b>Advanced Public Health</b>	
<b>Hours: 120</b>	<b>Full Mark:100</b>	<b>Pass Mark:50</b>

### 1. Course description

The course is designed to impart the knowledge about public policy, health policy and evidence based public health practice to the students and acquire necessary skills to carry out the policy work at national and international level. It also aims to acquire knowledge, skill, and value in developing health policy. The course focuses on concepts of evidence based public health practice to develop necessary knowledge and skills on how the evidences are generated to support the public health system and benefit health of people. This also included the three domains of evidence based public health practice- process, contents and outcomes.

### 2. Aim of the course

Aim of the course is to help the students understand the process of development of public policy and health policy in relation to national and international political and economical contexts. In addition students will be able to understand scientific basis of public health and concept of evidence based public health practice.

### 3. Objectives

Students will be able to

- a. describe concept of public policy and health policy development process
- b. familiarize with the public policies and health policies
- c. explain impact of public policies and laws in health
- d. critically analyze health policy and health system
- e. familiarize with evidence based public health practice
- f. review the global and national achievements in evidence based public health practice
- g. analyze the advances in public health system research
- h. carry out literature review using different retrieval methods
- i. develop knowledge and skills on systematic review, referencing by different styles using appropriate software and scientific writing

### 4. Contents

Unit 1: Public Policies and Health Policy	50 hrs
1.1: Public policy	25hrs
a. Concept of public policy	
b. Public policies relevant to health	
c. Health related laws	
d. Impacts of public policies and laws in public health	
e. Health in All Policies (HiAP)	

1.2: Health policy	25hrs
<ul style="list-style-type: none"> <li>a. Concept of health policy</li> <li>b. Process of health policy development</li> <li>c. Key players in policy development</li> <li>d. Health policy and service delivery</li> <li>e. Political context and health policy formulation at national and international level</li> <li>f. National Health Policy 2071 (BS)</li> <li>g. Review and evaluation of health policy</li> <li>h. Contemporary policy debates</li> <li>i. State and health policy</li> </ul>	
Unit 2: Evidence-based Public Health Practice	70hrs
2.1 Introduction to Evidence based Public Health Practice	10 hrs
<ul style="list-style-type: none"> <li>a. Concept of evidence based public health practice</li> <li>b. Concept of evidence</li> <li>c. Philosophy of science - knowledge generation</li> <li>d. Domains of evidence based public health practice</li> <li>e. Principles of public health practice</li> <li>f. Theory, research and public health practice</li> <li>g. Factors affecting public health practice</li> </ul>	
2.2 Advances in public health system research	20 hrs
<ul style="list-style-type: none"> <li>a. Advances in public health systems research</li> <li>b. Community based participatory research</li> <li>c. Network analysis and public health practice–based research networks</li> <li>d. Global and national achievements in evidence based public health: <ul style="list-style-type: none"> <li>Vaccine-Preventable Diseases</li> <li>Prevention and Control of Infectious Diseases</li> <li>Tobacco Control</li> <li>Maternal and child Health</li> <li>Nutrition and health</li> <li>Climate change and health</li> <li>Road traffic accidents and safety</li> <li>Occupational safety and health</li> <li>Cancer Prevention</li> <li>Cardiovascular disease and diabetes prevention</li> <li>Childhood Lead Poisoning Prevention</li> <li>Public Health Preparedness and Response</li> <li>Risk reduction</li> </ul> </li> </ul>	

- 2.3 Literature review: Process of information retrieval 10 hrs
- a. Public health information and public health
  - b. Concept of knowledge representation
  - c. The nature of the social, behavioral, and educational sciences literature
  - d. Traditional and modern retrieval models

- 2.4. Systematic review process 15 hrs
- a. Sources to search literature
    - Bibliographic databases
    - Journals and other non-bibliographic-database sources
    - Unpublished and ongoing studies
    - Institutional Repositories
  - b. Designing search strategies
  - c. Sensitivity versus precision
  - d. Structure and components of a search strategy
  - e. Free text terms and controlled vocabulary
  - f. Formulating search statements
    - Using Boolean operators (AND, OR and NOT)
    - Using Proximity operators (NEAR, WITHIN and ADJ)
    - Dealing with synonyms, related terms, variant spellings, and truncation
    - Language and date restrictions
    - Using search filters vs limiting command
  - g. Analysing data and undertaking meta-analyses
  - h. Biases in systematic review:
    - Search bias
    - Selection bias
    - Content bias
    - Addressing reporting biases
  - i. Interpreting results and drawing conclusions
  - j. Critical appraisal of literature
  - k. Cochrane collaboration review process

- 2.5 Writing scientific papers 15 hrs
- a. Concept of scientific writing
  - b. Components and steps of scientific writing
  - c. Citation and referencing, use of software in referencing
  - d. Manuscript preparation for publication
  - e. Plagiarism: concept, plagiarism in research, ways to avoid

## **5. Teaching learning methods and materials**

- a. Interactive lectures
- b. Individual and group reading assignments followed by presentation of students group discussion

- c. Individual and group writing assignments
- d. Journal club, seminar, workshop, field work, symposium, home assignment
- e. Practical problem solving sessions, review of journal articles on use of research objectives,
- f. Guest lectures
- g. Participation in relevant events
- h. White board, overhead projector, LCD projector, power point slides etc.

## 6. Evaluation

- a. Internal assessment- 20%: This will be done with the combination of individual and group presentation by the students, successful accomplishment of assignment, project works and class-room attendance and written examination, if necessary.
- b. Final examination- 80%: This will be done with written examination as per university schedule, rules and regulations.

## 7. References

1. Elena Andresen EDB (2010). Public Health Foundation: Concepts and Practices: JOSSEY-BASS.
2. Turnock BJ (2012). Essentials of Public Health, 2nd edn: JONES AND BARTLETT PUBLISHER.
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16. Manual for public health in emergencies (2012). Public Health Promotion Center and Nepal Red Cross Society.

17. Reference documents /web pages on

- Geneva Conventions
- Bamako Initiative
- International Conference on Population and Development (ICPD)
- World Summit for Children
- Convention on Elimination of Discrimination against Women (CEDAW)
- Millennium Development Goals
- Commission on Macro Economics and Health (CMEH)
- Framework Convention on Tobacco Control (FCTC)

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1. Day R and Gastel B (2012). How to Write and Publish a Scientific Paper: 7th edn:Cambridge University Press, UK.  
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2. Matthews JR and Matthews RW (2008). Successful Scientific Writing: a step by stepguide for the biological and medical science. 3rd edn: Cambridge University Press, UK;(web:[http://books.google.com.np/books?id=HXru-3yfoIoC&dq=guide+writing+scientific+paper&source=gbs\\_navlinks\\_s](http://books.google.com.np/books?id=HXru-3yfoIoC&dq=guide+writing+scientific+paper&source=gbs_navlinks_s)).
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7. Blake, John B (1959). Public Health in the Town of Boston, 1630-1822. Cambridge:Harvard University Press.
8. Dorothy P (1999). Health, Civilization and the State. London: Rutledge.
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<b>Paper X</b>		
<b>Course Title</b>	<b>Applied Health System Management and Health Care Financing</b> Part A: Applied Health System Management Part B: Health Care Financing	
<b>Hours: 120</b>	<b>Full Mark:100</b>	<b>Pass Mark:50</b>

## **Part A: Health System and Health Care Management**

**Marks: 60**

**Hours: 72hrs**

### **1. Course description**

The course is designed to meet the needs of advanced level management practice and research on health system and health care as required for public health graduates. It is a combination of advanced level theories and practices with support of compulsory practicum and research program. It provides a wider spectrum of health and specific knowledge of management theory in health system and health care management. The course also includes the elements of disaster management, hospital management and management ethics.

### **2. Aim of the course**

The course aims to equip the students with understanding of health management theories and principles and help them demonstrate leadership skills in management and policy formulation with thorough understanding of health systems analysis and health care services management. It is expected that at the end, students will be able to demonstrate leadership skills in health management through understanding of system analysis and interpretation of theories of management.

### **3. Objectives**

Upon completion of the course, the students will be able to:

1. Set priority, carry out strategic planning, logical framework analysis and prepare management plan
2. Describe the key theories underpinning health management
3. Explain health system of Nepal and different health programs under GoN as well as other national / international organizations
4. Investigate the issue of hospital (medical care) planning and management
5. Analyse the preparedness for any kind of emergency and emergency management during disaster
6. Evaluate health care management of hospital

### 3. Course contents

- Unit 1: Critical Appraisal on health care delivery systems of Nepal 15 hrs
- Concept of Health system
  - Critical appraisal on structure and functions MoHP, DoHS, RHD, D/PHO and Peripheral health services
  - Critical appraisal on current health programs of DoHS, Nepal
  - Critical appraisal on health delivery system from Central, Regional, District and Peripheral levels.
  - Preventive, curative promotive and rehabilitative - from center to peripheral level
- Unit 2: Organizational diagnosis and managing Change in an organization 15 hrs
- Health sector reform (HSR) strategy:
  - Health sector strategy: an Agenda for Reform
  - Sector wide approach design and implementation
  - Decentralization, local governance
  - Stewardship in health sector and contracting out services
- Unit4: Management Ethics and Social Responsibilities 12hrs
- Introduction of management ethics and social responsibilities.
  - Ethics, Values, Perspectives, ethics systems and role of managers
  - Ethics in workplace, different view of ethical behaviour
  - Factors affecting ethical behaviors of manager
  - Ethics and transparency
  - Ethical issues in global management
  - Levels of social responsibilities, proactive and reactive social responsibilities
- Unit5: Disaster Management 10hrs
- Humanmade and natural disaster, its role, sensing system, investigations, relief operation emergency and long term measures.
  - Basic elements of disaster planning
  - TRIAGE, management and evaluation of relief operation.
  - War and health
  - Current practices to disaster planning and management at district and national level
  - National policies, plans and programs related to disaster management in Nepal
  - Role of governmental and nongovernmental, local, international and regional organization in disaster planning and management
- Unit7: Hospital Administrations and Hospital Planning 10 hrs
- Planning and designing a hospital from primary to tertiary level
  - Guiding principles of hospital planning

- c. Management of Hospital Services including healthcare waste management
- d. Preparedness and disaster management of hospital

Unit 8: Evaluation of Hospital Services

10 hrs

- a. Evaluation of hospital services
- b. Steps in evaluation
- c. Factors influencing hospital services
- d. Frame work, guideline and procedures on evaluation of hospital services
- e. Tools of evaluation of hospital services
- f. Presentation on management of hospital departments or support services.

**Part B: Health Care Financing**

**Marks: 40**

**Hours: 48hrs**

**1. Course Description**

This course is designed to develop an understanding of health financing at organization and macro-level in totality that suits the needs of public health managers and National Health Service delivery mechanism. The course covers theoretical underpinnings of financial management which are key skills to perform as manager and administrator in health system. The content of the course has been organized into three sections. The first two sections cover introduction to financial management and basic tools that form fundamentals for financial management at organization level. It also covers economic explanation of specific health sector matters. The third section covers health insurance, health system financing and budgeting aspect. The students are expected to get fairly detail acquaintance with Insurance mechanisms, financing mechanisms, national health account and budgeting. Collectively, these areas will develop a comprehensive understanding of health care financing at organizational and system level.

**2. Aim of the course**

Aim of the course is to enable the student understand and appreciate health financing systems based on economic theories and principles and apply health financing principles in health service provision.

**3. Objectives**

At the end of the course, students will be able to

- a. Explain general financial management concept and its applications
- b. Describe the social insurance principles.
- c. Interpret health financing mechanisms in light of universal health coverage
- d. Explain the budgeting and financial management principles for health sector

#### 4. Course contents

Unit1: Basic Financial Management Concepts 8 Hrs

- a. Time Value Analysis: Time Lines, Future Value of a Lump Sum (Compounding), Present Value of a Lump Sum (Discounting)
- b. Opportunity Costs, Solving for Interest Rate and Time, Annuities, Perpetuities, Uneven Cash Flow Streams
- c. Using Time Value, Analysis to Measure ROI, Semi-annual and Other Compounding, Periods, Review of Interest Rate Types.
- d. Financial Risk and Required Return: Introduction to Financial Risk, Faces of Financial Risk, , Portfolio Risk and Return, Portfolio Risk of Business Investments, Portfolio Risk of Stocks (Entire Businesses), Portfolio Betas
- e. Relevance of the Risk Measures, Interpretation of the Risk Measures, The Relationship Between Risk and Return, Some Thoughts About Beta and the CAPM

Unit 2: Capital Acquisitions and Budgeting 12hrs

- a. Debt Financing: The Cost of Money, Interest Rate Levels, Long-Term Debt, Term Loans, Bonds, Short-Term Debt, Debt Contracts; Credit Ratings, Credit Enhancement, Interest Rate Components, The Term Structure of Interest Rates, Economic Factors That Influence Interest Rate Levels, Advantages and Disadvantages of Debt Financing.
- b. Equity Financing and Investment Banking: Preferred Stock, Rights and Privileges of Common, Stockholders, Classified Stock, Selling New Common Stock, The Decision to Go Public, The Decision to List, Advantages and Disadvantages of Common Stock Financing, Securities Regulation and the Investment Banking Process, Equity in Not-for-Profit Firms.
- c. Securities Valuation: The General Valuation Model, Debt Valuation, Preferred Stock Valuation, and Common Stock Valuation.
- d. Lease Financing: Lease Parties and Types, Evaluation by the Lessee, and Evaluation by the Lessor.
- e. Cost of Capital and capital structure: Overview of the Cost of Capital Estimation Process, Estimating the Cost of Debt, cost of preferred stock and cost of Equity. Estimating weighted average cost of capital. Factors That Influence a Business's Cost of Capital.
- f. Capital budgeting: The Basics of Capital Budgeting: Project Classifications, The Role of Financial Analysis in Health Services Capital Budgeting,
- g. Overview of Capital Budgeting Financial Analysis, Cash Flow Estimation, capital budgeting methods,
- h. Evaluating Projects with Unequal Lives, Economic Life versus Physical Life, Capital Budgeting in Not-for-Profit Businesses.
- i. Working Capital Management: Cash Management, Marketable Securities Management, Long-Term Securities Management;
- j. Receivables Management, Credit Policy, Supply Chain Management, the Economic Ordering Quantity Model, Accruals, Accounts Payable (Trade Credit)

### Unit 3: Health Insurance

10hrs

- a. Theory of Insurance mechanism: Introduction to insurance, insurance v/s social health insurance, Different mechanisms of health insurance: Voluntary Health Insurance, Social Health Insurance, Community Health Insurance, Insurance Terminology: Premium, Coverage, Coinsurance and Co-payment, Deductible, Exclusions, Pure Premiums, Pre-existing Conditions, Loading Fees, Risk and Insurance, Marginal Utility of Wealth and Risk Aversion, Purchasing Insurance
- b. Demand and supply of health insurance: Demand and supply of health insurance: the benefit package, risk selection efforts, loading: true price of Insurance, vertical restraints/vertical integration.
- c. Problems with insurance: Moral hazard and adverse selection and impact on designing optimal health insurance.
- d. Limits of Health Insurance: Limits created by regulation; limits imposed by behavior of insurers; Limits imposed by institutional design; limited willingness to pay of citizens.
- e. Design and implementation of Social Health Insurance: Determining Eligible Population Groups; Determining the Level of Benefits; Assessing the Fiscal Requirements for Funding SHI and Achieving Universal Coverage; Establishing Governance for SHI; Improving the Delivery of Health Services.

### Unit 4: Financing Health System

10 Hrs

- a. Definition and boundaries of Health system: Goals of health system; Health System Functions: National Health Accounts, Patterns of Health Expenditure, Financing and Fairness in financial contribution, Provision and coverage, Resource Generation, Stewardship, Population Health and Inequality, Responsiveness of health system, Efficiency
- b. Health care financing: Introduction; main mechanisms of health care financing (Government funding, Health insurance, Out-of-pocket payments) pros and cons of each type of health care financing mechanisms; Conceptual framework for health care financing
- c. Health care financing functions: Revenue collection: Source of funds, contribution mechanisms (out-of-pocket payments and prepayment mechanisms), collecting organizations; Pooling funds: Coverage and composition of risk pools; Allocation mechanisms (Risk-adjusted, or “needs-based”); Purchasing services: choice of benefit package (type of service, service provider, Affordability and sustainability, Service delivery infrastructure); Provider payment mechanisms
- d. Specific Issues in financing arrangements: Revenue collection, Pooling funds and Purchasing services
- e. Provider payment system: The triangular model of health care; money and service flow; Prospective vs retrospective payment; fixed vs variable payment system; pros and cons of different provider payment mechanisms; Incentives, health financing and efficiency, Paying for performance

## Unit 5: National Health Account and Budgeting

10hrs

- a. Introduction to National Health Accounts: Concept, Basic Principles, Boundaries of health system, Time frame, Categorizing Health Expenditure and Uses, Fiscal space and fiscal sustainability in health sector
- b. Key concepts of Budgeting: What is a budget?, Public financial management, Medium-term expenditure framework (MTEF), Line-item budgeting for health, Performance budgeting, Fiscal space and fiscal space for health, Strategic purchasing
- c. Budgeting Cycle: When does the budgeting process take place?, Budget cycle steps – a brief overview, Fiscal vs calendar year, Roles of different stakeholders, MoH: engaging in health budget formulation and execution, Role of civil society organizations (CSOs) in the health budgeting process
- d. Budget formulation, Budget approval or enactment, Budget execution, Budget evaluation, Important operational issues: Legal considerations, How can countries introduce and effectively undertake multiyear budgeting?
- e. From a line-item to a programme-based budget? When and how should countries assess fiscal space for health? How can the necessary data be collected? How should countries understand and influence the political economy of budgeting for health? Looking beyond budget: importance of public finance systems for health financing and Universal Health Coverage.

### 5. Teaching learning methods and materials

- a. Structured interactive sessions
- b. Group discussion
- c. Individual and group presentation by students
- d. Guest lectures
- e. Participation in journal clubs, seminars, observation visits
- f. Project works
- g. Problem solving exercises
- h. White board, overhead projector, LCD projector, power point slides etc.

### 6. Evaluation

- Internal assessment 20%: This is a formative evaluation based on project work and practicum
- Final written examination 80%

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