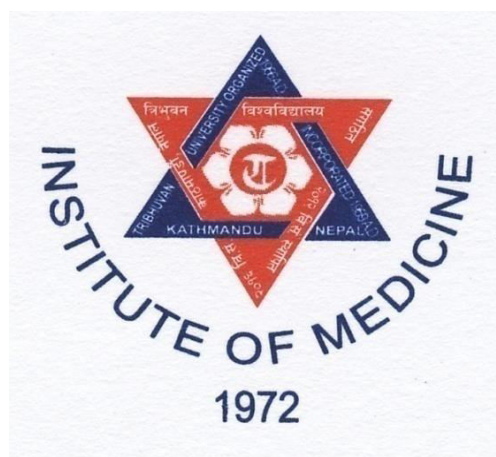


**Curriculum**  
**on**  
**Bachelor in Pharmacy**  
**(B. Pharm)**



*Published by*

**TRIBHUVAN UNIVERSITY**

**INSTITUTE OF MEDICINE**

**NATIONAL CENTRE FOR HEALTH PROFESSIONS EDUCATION**

**Maharajgunj, Kathmandu, Nepal**

**2020 (2076)**

## PHARMACEUTICAL MANAGEMENT

Subject: Theory	Year: Fourth	Code: BP 702 A
Full Marks: 100	Total Teaching hours: 90	Credit hour: 6

**Course Description:** This course deals with Pharmaceutical management, entrepreneurship development and applications of pharmacoeconomics principles.

### General objectives:

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

- a. Discuss managerial function in the projection, production, procurement, dispensing, distribution and sale of pharmaceutical products in an innovative and cost effective manner.
- b. Describe and assume the management role of a pharmaceutical graduate as a head or member of a pharmaceutical enterprise
- c. Discuss and carry out management function of planning, organizing, leading, controlling, staffing, directing, coordinating and budgeting
- d. Discuss feasibility plan for small scale pharmaceutical business and manage it for the purpose of profit and growth
- e. Discuss the principles of demand and supply of medicine in health care
- f. Discuss pharmacoeconomic principles (cost of illness, cost minimization analysis, cost effectiveness analysis, cost benefit analysis, cost utility analysis) and take necessary measures to improve efficiency and reduce the pharmaceutical waste

### Specific objectives:

#### Unit 1: Fundamentals of management [10 Hrs]

After the completion of the course, students will be able to

- a Discuss the concept, principle and function of management
- b Discuss administrative management (Planning, organizing, HRM, controlling, & directing).
- c Discuss theory and principle of Scientific management/ Taylorism
- d Discuss the role of manager in Leadership, Communication, Decision-making and Entrepreneurship

#### Unit 2: Motivation: [3 Hrs]

After the completion of the course, students will be able to

- a Discuss objectives and types of motivation.
- b Discuss Financial and non-financial motivators.
- c Explain theories of motivation: Maslows hierarchy of needs, McGregor's Theory X and Y, Herzberg's motivation-hygiene theory.

- d Discuss different motivational techniques.

### **Unit 3: Pharmaceutical Industrial Management: [9 Hrs]**

After the completion of the course, students will be able to

- a Discuss Pharmaceutical production planning and control
- b Discuss Material Management: (Purchase Management, Vendor management, Inventory control, EOQ, Min/Max inventory, ABC Analysis).
- c Discuss Maintenance Management: (Routine maintenance, Preventive and Breakdown maintenance, Pollution control, Safety and environment control).
- d Discuss Productivity management: (Total productivity, partial productivity, productivity improvement techniques. Factors affecting productivity).

### **Unit 4. Pharmaceutical Supply and Logistics Management. [8 Hrs]**

After the completion of the course, students will be able to

- a Discuss Pharmaceutical Supply process and its pitfalls
- b Explain planning for Pharmaceutical supply and planning models
- c Describe steps to develop a formulary
- d Estimate medicine requirements, Procurement cycle and its methods
- e Design training programs to improve pharmaceutical logistics.

### **Unit 5. Entrepreneurship [13 Hrs]**

After the completion of the course, students will be able to

- a Discuss theories of entrepreneurship
- b Discuss role and impact of business in Nepalese economy
- c Mention causes for the success and failure of business in Nepal
- d Discuss role of entrepreneurs in economic development.
- e Describe Project formulation: need for project formulation, concept of project formulation, significance of project formulation (feasibility study, economic analysis, project design, input analysis)
- f Discuss different Case studies on Entrepreneurship

### **Unit 6: Pharmaceutical Marketing [15 Hrs]**

After the completion of the course, students will be able to

- a Discuss concept of marketing strategy and SWOT analysis
- b Discuss Porters five model.
- c Describe Market mix (Product, Price, People, Physical environment, Proces, Promotion and Place)
- d Explain different types of market research and their differences.
- e Discuss Market Analysis Techniques 3Cs (Customer analysis, Company analysis, competitors analysis)
- f Discuss ethical consideration of Pharmaceutical Marketing
- g Discuss difference between Pharmaceutical Marketing and Consumer Marketing
- h Discuss Emerging trends in marketing: E-Pharma Marketing, Digital marketing, International and global marketing

### **Unit 7: Pharmaco-economics [12 Hrs]**

After the completion of the course, students will be able to

- a** Discuss Principles of economics with special reference to the laws of demand and supply.
- b** Discuss Cost calculation, Cost volume profit analysis and its application.
- c** Discuss Time value of money and its application, investment decision based on time value of money, discounting and depreciation analysis
- d** Explain Financial analysis: working capital management, balance sheet, profit and loss account, cash flow statement.
- e** Describe Taxation and alternative health care financing (drug scheme) system in Nepal

### **Unit 8: Pharmacoeconomic evaluation [20 Hrs]**

After the completion of the course, students will be able to

- a** Discuss the needs of pharmacoeconomic evaluations
- b** Discuss role of pharmacoeconomics in formulary management decisions
- c** Discuss theoretical aspects and practical study of various methods with the help of case studies for individual methods: Cost of Illness (COI), Cost Minimization Analysis (CMA), Cost Effectiveness Analysis (CEA), Cost Benefit Analysis (CBA), Cost Utility Analysis (CUA).

### **Reference books (Latest Editions)**

- 1** Kotler P. Keller K. L. Marketing Management. Prentice Hall of India. New Delhi.
- 2** Walker O. C, Boyd H. W, Larreche J. C. Marketing strategy: Planning and implementation. McGraw-Hill/Irwin.
- 3** Smith M. C. Pharmaceutical marketing: strategy and cases. CRC Press.
- 4** Lidstone J, MacLennan J. Marketing planning for the pharmaceutical industry. Routledge.
- 5** Katsanis L. P. Global issues in pharmaceutical marketing. Routledge.
- 6** Rollins B. L, Perri M. Pharmaceutical marketing. Jones & Bartlett Publishers.