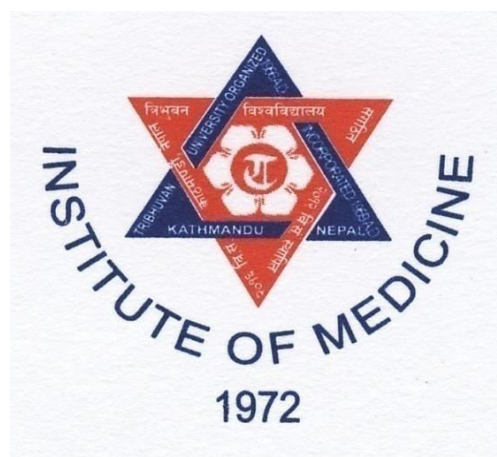


**Curriculum**  
**on**  
**Bachelor in Pharmacy**  
**(B. Pharm)**



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**TRIBHUVAN UNIVERSITY**

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**2020 (2076)**

## PHARMACOTHERAPEUTICS

Subject: Theory	Year: Fourth	Code: BP 704 A
Full Marks: 100	Total Teaching hours: 90	Credit hour: 6

**Course Description:** This course is designed to impart the knowledge and skills necessary for contributing to the quality use of medicines. Chapters dealt cover briefly pathophysiology, Etiology, clinical manifestation, investigation and management (Pharmacological and Non-Pharmacological) of various diseases. This will enable the student to understand the pathophysiology of common diseases and their management.

**General objectives:** Upon completion of the course, the student will be able to

- a. Identify the patient-specific parameters relevant in initiating drug therapy, and monitoring therapy (including alternatives, time-course of clinical and laboratory indices of therapeutic response and adverse effects).
- b. Discuss the therapeutic approach to the management of the diseases including reference to the latest available evidence.
- c. Discuss the controversies in drug therapy.

**Specific objectives:**

### **Unit 1. Pharmacotherapy of diseases associated with following systems/ diseases**

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

Discuss: Definition as per the established guidelines, Brief epidemiology, Diagnostic investigations, differential diagnosis (if any), Main medicines and their brief profile, Rational use of medication with their regimen (key points) of following diseases

- a. **Cardiovascular system:** Hypertension, Congestive heart failure, Angina Pectoris, Myocardial infarction, Hyperlipidemia, Arrhythmias, Cardiovascular Shock. [14 Hrs]
- b. **Respiratory system:** Asthma, Chronic obstructive airways disease(COPD), Drug induced pulmonary diseases. [9 Hrs]
- c. **Central Nervous System:** Anxiety, Depression, Epilepsy, Parkinsonism, Pain. [2 Hrs]
- d. **Endocrine system:** Type I & IIDiabetes, Thyroid diseases, Infertility. [4 Hrs]
- e. **Ophthalmology:** Glaucoma, Conjunctivitis. [2 Hrs]
- f. **Infectious disease:** Guidelines for the rational use of antibiotics and surgical Prophylaxis, Tuberculosis, Meningitis, Pneumonia, Gastroenteritis, Septicemia, Urinary tract infections, Protozoal infection- Giardiasis/amoebiasis, Malaria, HIV, Fungal infections, Viral hepatitis, Typhoid, Gonorrhoea and Syphillis. [20 Hrs]
- g. **Musculoskeletal disorders:** Rheumatoid arthritis, Osteoarthritis, Gout, Spondylitis. [5 Hrs]
- h. **Renal system:** Acute Renal Failure, Chronic Renal Failure, Drug-induced renal disorders. [4 Hrs]
- i. **Oncology:** General principle of Chemotherapy. Minimization of chemotherapy induced toxicities, Leukemia, Breast cancer, Ovarian cancer, Lung cancer [6 Hrs]
- j. **Dermatology:** Psoriasis, Scabies, Eczema, Impetigo. [2 Hrs]

- k. Diseases of GIT:** GI ulcers, Inflammatory bowel diseases, Alcoholic liver disease, Liver Cirrhosis. [6 Hrs]

### **Unit 2: Documentation of Pharmacotherapy plan [8 Hrs]**

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

Describe the documentation of Pharmacotherapy plan: SOAP note, CORE Pharmacotherapy plan, PRIME Pharmacotherapy plan and FARM note.

### **Unit 3: National Immunization Programme [2 Hrs]**

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

- a Discuss National programme on Immunization and Immunization Schedule and its implications.

### **Unit 4: Evidence-based Medicine: [6 Hrs]**

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

- a Discuss Meta-analysis and systematic reviews of findings related to diseases mentioned in the course (Recent trends and advancements in therapeutics)

### **Activities**

1. Hospital postings in various departments designed to complement the lectures by providing practical clinical discussion; attending ward rounds; follow up the progress and changes made in drug therapy in allotted patients; case presentation upon discharge. Students are required to maintain a record of cases presented and the same should be submitted at the end of the course for evaluation. A minimum of 10 cases should be presented and recorded covering the most common diseases.
2. Students are required to submit written assignments on the topics given to them. Topics allotted should cover recent developments in drug therapy of various diseases. An assignment should be submitted for evaluation.

### **Text books [Latest Editions]**

- a Walker R, Edwards C. Clinical pharmacy and therapeutics. Edinburg: Churchill Livingstone.
- b Dipiro J. T. Pharmacotherapy: A Pathophysiologic approach. Appleton & Lange
- c Guidelines: The NICE guidelines, SIGN guidelines, WHO guidelines, guidelines provided by APhA, ASCO, American Diabetes Association (ADA), American Thoracic Society (ATS), British Thoracic Society (ATS), American Society of Nephrology, British Renal Society, American Heart Association.

### **Reference books [Latest editions]**

1. Robins S. L. Pathologic basis of disease. Saunders publication.
2. Greene R. J, Harris N. D, Goodyer L. I. Pathology and therapeutics for pharmacists: a basis for clinical pharmacy practice. Pharmaceutical press.
3. Koda-Kimble MA. Koda-Kimble and Young's Applied Therapeutics: The clinical use of drugs. Lippincott Williams & Wilkins.
4. Goodman L. S. Goodman and Gilman's the pharmacological basis of therapeutics. New York: McGraw-Hill; 1996.
5. Crees Z, Fritz C, Huedebert A, Noe J, Rengarajan A, Wang X. The Washington Manual of Medical Therapeutics. Washington University.
6. Satoskar R. S, Bhandarkar S. D. In Pharmacology and Pharmacotherapeutics. Bombay, Popular Prakashan.
7. Boon N. A. Davidson's principles and practice of medicine. Edinburgh: Churchill Livingstone Elsevier.
8. Eric T. Clinical Pharmacy and Therapeutics. Williams and Wilkins Publication.