# SECOND SEMESTER 2023-2024

**Course Handout (Part II)**

# Date: 09/01/2024

In addition to part-I (General Handout for all courses appended to the time table) this portion gives further specific details regarding the course.

Course No. : **PHA F417**

Course Title : Pharmacoeconomics

# Instructor In-Charge: Dr. Abhijeet Joshi

1. **Course description:** This course is designed to understand and apply the principles of pharmacoeconomics and pharmacoeconomic research through lectures, readings, class participation, and individual assignments. It identifies the role of pharmacists in pharmacoeconomics research and to appropriately use the vocabulary of pharmacoeconomics.

# Scope and objective of the course:

The principal objective of this course is to impart knowledge about some economic aspects of the health care and its applications in the health sector, with a focus on pharmaceuticals. It covers cost-benefit, cost- effectiveness, cost-minimization, and cost-utility analyses to compare the different pharmaceutical products, drug therapy and treatments. Economic concepts such as supply, demand, efficiency, equity, health policy, market failures, health insurance, and pharmaceutical market are covered. Measurement of direct and indirect costs to a health care program, economic issues, pharmaceutical regulations, pricing policy and other economic related topics will be emphasized.

# Text Book:

1) Bootman J. L., Townsend R. J., McGhan W. F. Principles of Pharmacoeconomics. Second edition, Harvey Whitney Books Company, Cincinnati, USA, 2002.

# Reference Books:

1. Gold M. R., Siegel J. E., Russell L. B., Weinstein M. C. Cost-Effectiveness in Health and Medicine, Oxford University Press, Oxford, UK, 1996.
2. Michael F. D., Sculpher M. J., Torrance G. W., O’Brien B. J., Stoddart G. L. Methods for the Economic Evaluation of Health Care Programmes. Third edition, Oxford University Press, Oxford, UK, 2005.
3. Walley T., Haycox A., Boland A. Pharmacoeconomics. Churchill Livingstone, Elsevier Science, Oxford, UK, 2004.

# Course Plan:

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| **Lect.**  **No.** | **Learning Objectives** | **Topics to be covered** | **Chap/Sec No.**  **(Book)** |
| 1-3 | Introduction to Pharmacoeconomics (PE) | Introduction and history of Pharmacoeconomics, applications of PE, methodologies, challenges  and limitations | TB: Ch 1  Class notes |
| 4-6 | To understand the cost determination and analysis | Cost of illness, cost of therapy, Framework for determining costs and pharmacoeconomic  applications. | TB: Ch3  Class notes |
| 7-11 | Understanding different methods of pharmacoeconomic analysis | Introduction, measurement of benefit, Steps in conducting cost-  benefit analysis (CBA), Case studies | TB: Ch4  Class notes |
| 12-16 | Principles of cost-effective analysis (CEA), Theoretical foundations for valuing cost in CEA, Framing and  designing CEA, case studies | TB: Ch5  RB1- various chapters Class notes |
| 17-21 | Introduction, health state utility assessment, Concept of utility, methods of assessing utility, Health  care interventions, case studies. | TB: Ch6  Class notes |
| 22-23 | Concept of cost minimization, sources of clinical trial evidence, Other issues in evaluating  equivalence | Class notes |
| 24-27 | Health related quality of life (HRQoL)- An overview | Components of health-related quality of life measures, General  health concepts. | TB: Ch7  Class notes |
| 28-31 | Decision Analysis | Application in pharmacoeconomic study to improve decision making  process | TB Ch8  Class notes |
| 32-35 | Applications of Pharmacoeconomics in various healthcare settings | Clinical research, drug development process, Applications of Pharmacoeconomics in clinical  trials | TB Ch10  Class notes |
| 36-38 | Application of research in clinical  practice and healthcare settings | TB Ch 11, 12, 13 |
| 39-41 | Pharmacoeconomics: An international perspective | Potential intervention points; Global status guidelines and health  care systems | TB Ch 2  RB1 Ch 1 |

1. **Evaluation Scheme:**

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| --- | --- | --- | --- | --- |
| **Components** | **Duration** | **Weightage (%)** | **Date & Time** | **Remarks** |
| **Mid-semester test** | 90 min | 25 | 14/03 - 2.00 - 3.30PM | CB |
| **Surprise quizzes** | 30 min each | 20 | Continuous | CB |
| **Seminar and report** | variable | 10 | Continuous | OB |
| **Compre Exam** | 180 min | 45 | 15/05 FN | CB/OB |

1. **Mid-Semester Evaluation:** Will be announced after the Mid-semester test.
2. **Grading Procedure:** It is not mandatory to award all the grades (i.e. A to E); subjective judgment will be exercised while awarding the grades. In borderline cases subjective judgment based on regularity and performance in all the components throughout the semester will be exercised to decide the final grade.
3. **Make-up:** Make-ups are not generally given as a routine. It is solely dependent on the “genuineness” of the circumstances under which a student fails to appear in a scheduled evaluation component; however, prior permission should be sought from the instructor-in-charge. **No make-up for the continuous assessment will be given.**
4. Any further detail (if required) will be announced in class.
5. **Chamber Consultation Hour:** To be announced in the class.

# Instructor In-Charge PHA F417