



**SECOND SEMESTER 2022-2023**

**Course Handout (Part II)**

**Date: 16/01/2023**

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 R 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.

**2. 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.

**3. Text Book:**

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

**4. 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.





### 5. Course Plan:

Module Number	Learning Objectives	Ref / Text Book Chapter	Learning Outcome
1. Introduction to pharmacoeconomics	L.1. Historical perspective; Definition and application; L.2. Overview of pharmacoeconomic methodologies; Applications; L.3.Guidelines; Challenges and limitations	TB- Chapter 1	Orientation to the background of pharmacoeconomics
2. Pharmacoeconomics: An international perspective	L.4. Potential intervention points; L.5-6. Global status guidelines and health care systems	TB- Chapter 2; RB1-Chapter 1	Overview of the international status of pharmacoeconomics
3.Cost determination and analysis	L. 7. Cost of illness, cost of therapy, L.8-9. Framework for determining costs and pharmacoeconomic applications.	TB- Chapter 3	Understanding of various aspects of cost determination
4. Methods of pharmacoeconomic analysis	L.10. Introduction, measurement of benefit, L.11-13. Steps in conducting cost-benefit analysis (CBA), L.14. Case studies	TB- Chapter 4	Complete understanding and applications of CBA
	L. 15.Principles of cost effective analysis (CEA), L.16-17. Theoretical foundations for valuing cost in CEA, L.18-19. Framing and designing CEA, case studies	TB-Chapter 5; RB1- various chapters	Knowledge and applications of CEA
	L.20. Introduction, health state utility assessment, L.21-22. Concept of utility, methods of assessing utility, L.23-24. Health care interventions, case studies.	TB- Chapter 6	Incorporation of the concept of utility in healthcare systems
	L.25. Concept of cost minimization, sources of clinical trial evidence, L.26. Other issues in evaluating equivalence	Class Notes and Slides	Overview of cost-minimization study
5. Health related quality of life (HRQoL)- An overview	L.27-28. Components of health related quality of life measures, L.29-30. General health concepts.	TB- Chapter 7	Building a thorough concept of (HRQoL)
6.Decision Analysis	L. 31-34. Application in pharmacoeconomic study to improve decision making process	TB-Chapter 8	Understanding of the methods used in decision analysis
7. Applications of pharmacoeconomics in various health-care settings	L. 35-36. Clinical research, drug development process, L.37-38. Applications of pharmacoeconomics in clinical trials	TB-Chapter 10	Exposure to the pros and cons of incorporation of PE in CR
	L.39-41. Application of research in clinical practice and healthcare settings	TB-Chapters 14, 11, 12 & 13	Applications of PE in other healthcare settings

### 6. Evaluation Scheme:





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Components	Duration	Weightage (%)	Date & Time	Remarks
Mid-semester test	90 min	25	17/03 4.00 - 5.30PM	CB
Continues assessment (Quizzes /case studies / assignments / presentation)	Continuous	30	Continuous	CB/OB
Compre Exam	180 min	45	18/05 AN	CB/OB

7. **Mid-Semester Evaluation:** Will be announced after the Mid--semester test.
8. **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.
9. **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.
10. Any further detail (if required) will be announced in class.
11. **Chamber Consultation Hour:** To be announced in the class.
12. **Academic Honesty and Integrity Policy:**  
Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

**Instructor In-Charge**  
**PHA F417**



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