



**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, Pilani**  
**Pilani Campus**  
**AUGS/ AGSR Division**

**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.

**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.

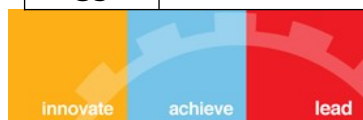


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**5. Course Plan:**

<b>Lect. No.</b>	<b>Learning Objectives</b>	<b>Topics to be covered</b>	<b>Chap/Sec No. (Book)</b>
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		Clinical research, drug	TB Ch10



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	Applications of Pharmacoeconomics in various healthcare settings	development process, Applications of Pharmacoeconomics in clinical trials	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



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**6. Evaluation Scheme:**

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

**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. **No make-up for the continuous assessment will be given.**

**10.** Any further detail (if required) will be announced in class.

**11. Chamber Consultation Hour:** To be announced in the class.

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



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