



INSTRUCTION DIVISION
SECOND SEMESTER 2015-2016
Course Handout (Part II)

Date: 01/01/2016

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: Murali Monohar Pandey

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:

| Lect. No. | Learning Objectives | Topics to be Covered | Ref / Text Book chap |
|-----------|--|-----------------------------------|----------------------|
| 1-3 | Historical perspective; Definition and application; Overview of pharmacoeconomic methodologies; Applications; Guidelines; Challenges and limitations | Introduction to pharmacoeconomics | TB1- Chapter 1 |





| | | | |
|-------|---|--|---------------------------------------|
| 4-6 | Potential intervention points; Global status guidelines and health care systems | Pharmacoeconomics: An international perspective | TB1- Chapter 2; RB-1 Chapter 1 |
| 7-9 | Cost of illness, cost of therapy, framework for determining costs and pharmacoeconomic applications. | Cost determination and analysis | TB-1 Chapter 3 |
| 10-14 | Introduction, measurement of benefit, steps in conducting cost-benefit analysis (CBE), case studies | Cost benefit analysis | TB1- Chapter 4 |
| 15-19 | Principles of cost effective analysis (CEA), theoretical foundations for valuing cost in CEA, framing and designing CEA, case studies | Cost effectiveness analysis | TB-1 Chapter 5; RB-1 various chapters |
| 20-24 | Introduction, health state utility assessment, concept of utility, methods of assessing utility, health care interventions, case studies. | Cost utility analysis | TB-1, Chapter 6 |
| 25-26 | Concept of cost minimization, sources of clinical trial evidence, other issues in evaluating equivalence | Cost Minimization Study | Class Notes and Slides |
| 27-30 | Components of health related quality of life measures, general health concepts. | Health related quality of life- An overview | TB-1 Chapter 7 |
| 31-33 | Application in pharmacoeconomic study to improve decision making process | Decision analysis | TB-1 Chapter 8 |
| 34-38 | Clinical research, drug development process, applications of pharmacoeconomics in clinical trials | Incorporating pharmacoeconomic research into clinical research | TB-1 Chapter 10 |
| 39-41 | Application of research in medical centers, community practice, healthcare settings and clinical practice | Other applications of pharmacoeconomic research | TB-1 Chapter 9, 11, 12, 13 & 14 |

6. Evaluation Scheme:

| Component | Duration | Weightage (%) | Date & Time | Remarks |
|----------------------|------------|---------------|----------------------|-----------------|
| Mid Term | 90 min | 25 | 14/3 9:00 - 10:30 AM | CB |
| Surprise Quiz | | 10 | | |
| Assignments/ Seminar | Continuous | 20 | Continuous | To be announced |
| Compre Exam | 3 h | 45 | 3/5 FN | CB+OB |

7. Mid-Semester Evaluation: Will be announced after the Mid Term.

8. Grading Procedure: It is not mandatory to award all the five 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.





BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, Pilani
Pilani Campus

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. Notices: Pharmacy Notice Board.

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

Instructor-in-charge
PHA C417



Please Consider Your Environmental Responsibilities
Do Not Print Unless Necessary