

CBEL Code: ELE-201

Course Name: Economic Evaluation of various diseases

Duration: 40 hours

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|----------------------|---------------------------------|----------------|
| Credits: 4 | | |
| Lecture Hours | Practical/Activity Hours | Mode |
| 16 | 24 | Blended |

Overview

Health professionals should be able to describe/use financial analysis methods used in making decisions about policies, programs, and services (e.g., cost-effectiveness analysis cost–benefit analysis, cost–utility analysis, cost- illness-studies). It will be important to understand the associated costs of any disease, evaluate the effectiveness and quality of population-based health services, preventive care of any disease, decision makers for efficient use of available resources formaximizing health benefits, examine both the costs and health outcomes of one or more interventions, prioritize and allocate scarce resources in an efficient way using analytical tools. By the end of course students will be able to evaluate the effectiveness and quality of population-based health services and estimate the cost of health programs and interventions

COURSE STRUCTURE

| Lecture/ Interaction | Content / Topic | Hours | Activity/ Assignment | Hours | Bloom's Level |
|---|--|-----------|-------------------------|-------|------------------|
| L1 | Unit 1 Demand for Health; Demand for Medical Care- as an investment | 3 | | | 1, 2 |
| L2 | Unit 2. Definition and concept of various costs | 1 | A1 | 2 | 1, 2 |
| L3 | Unit 3. Types of Economic Evaluation used in health care decision making | 2 | | | 3 |
| L4 | Unit 4 : Economics of abuse of smoking/ tobacco & Alcohol | 2 | A2 | 2 | 3 |
| L5 | Unit 5: Economics of few communicable and non- communicable diseases | 3 | | | 3 |
| L6 | Unit 6: Economics of HIV/AIDS- -Human immunodeficiency virus | 2 | | | 3 |
| L7 | Unit 7: Related Concepts- QALY; DALY; YPLL | 1 | A3 | 2 | 3 |
| L8 | Unit 8: Economics of Health Programs for Nutrition, Summary | 2 | | | 3 |
| Total Hours of Lecture- Interaction [L1-L8] | | 16 | | | |

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|--|--|--|-----------|-------|
| Total Hours of Activities- Assignments [A1-A3] | | | 6 | |
| Course End Project [A4] | | | 18 | 3,4,5 |
| Total Activity Hours | | | 24 | |

UNITWISE CONTENT

UNIT 1: Demand for Health; Demand for Medical Care-Medical Care as an Investment.:

Definition of HEALTH ECONOMICS,

The Production of health -Medical care spending that improves health.

Other factors affecting health status, such as lifestyle, environmental pollution, and

technological developments, Income and Education Environmental and Lifestyle Factors

Genetic Factors. Factors influencing Medical Demand (i) Patient factors and (ii) Physician

factors-Where patient factor include HS (health status), DC (demographic characteristics),

and ES (economic standing) INFLUENCING DEMAND for Medical Care-Demand based on Need vs Willingness to pay.

UNIT 2: Definition and concept of various costs:

Direct Costs- Health care cost & Non- health care cost and Indirect Costs – Morbidity Costs & Mortality Cost.

UNIT 3: Types of Economic Evaluation used in health care decision making:

A) Cost-of-illness studies,

B) Cost-benefit analysis and

C) Cost-effectiveness analysis

UNIT 4: Economics of abuse of smoking/ tobacco & Alcohol: TOBACCO/SMOKING- Introduction;

Components of the Economic Costs of Smoking –(A) Direct Costs of Smoking i) Health Care

Costs & ii) Non-Health Care Costs;

(B) Indirect Costs of Smoking- i) Morbidity Costs & ii) Mortality Costs.

Related concepts of Years of potential life lost (YPLL). Disability Adjusted Life Years

(DALY) & Quality -Adjusted -life-Years (QALY)

UNIT 5: Economics of few communicable and non- communicable diseases: Economics of Malaria-INTRODUCTION, Economic Burden, Household Expenditures on Malaria, Economics of Malaria Control, Economic Justification for Government Intervention in Malaria Control

UNIT 6 : Economics of HIV/AIDS--Human immunodeficiency virus :

What is HIV/AIDS? -Human immunodeficiency virus Responsible for causing AIDS-Effects of the Virus; Main Routes of HIV Transmission; Physical Factors Affecting Transmission and Vulnerability; Social and Demographic Factors in Transmission and Vulnerability; Phases of HIV Infection. Economics of HIV: A). Effect on taxable population, B). Relationship to GDP, Work place Interventions, Economic Evaluation ; Conclusion

UNIT-7 Related Concepts- QALY; DALY; YPLL

UNIT 8 : Economics of Health Programs for Nutrition,

Nutrition Economics, its definition, IMPACTS OF NUTRITION ECONOMICS,

Impact on the General Characteristics of Nutrition of the population Impact on Agriculture, Food industry and Trade

Impact on the standard of Living

Impact on the society at large Methodology of Nutritional Economics

Suggested Study Materials & References:

1. Health Economics-Jay Bhattacharya, Timothy Hyde & Peter Tu
2. Health Economics- Dr. JJeyasingh, Dr. D. Solomon Raj, Dr.D Jery Josephin
3. Health Economics- Pushpalata Pattnaik
4. Health Economics- P.C.Das
- 5 D.H. Peters, A. Yazbeck, R. Sharma, *et al.* Better Health Systems for India's Poor: Findings Analysis, and Options, The World Bank, Washington, DC (2002)[Google Scholar](#)

Others:

James W. Henderson-Health Economics and Policy-Cengage Learning, Health Economics; Peter Zweifel Freidrich Breyer- Oxford, Joel Dean – Managerial Economics, PHI, Ppleby J, Devlin N, Parkin D (2007) NICE's cost effectiveness threshold. *British Medical Journal*, 25;335(7616):358-9, Begg,D., Fischer,S., Dornbusch,R.(2003) *Economics*, London, McGraw-Hill, Black, W.C. (1990). The cost-effectiveness plane: a graphic representation of cost-effectiveness. *Medical Decision Making*, 10, 212-5

ASSESSMENT SCHEME

- Interim Formative Assessment [A1-A2-A3: 6 Hours]
- Course-end Summative Assessment [A4: 18 Hours]

Formative Assessment - X

| Sl No. | Slot | Hours | Content / Topic | Assessment Type | Marks |
|-----------------------------|------|-------|-------------------------------------|-----------------|------------|
| A1 | L2 | 2 | Content / Topics covered in L1 & L2 | Theory | 20 |
| A2 | L4 | 2 | Content / Topics covered in L1 - L4 | Practical | 40 |
| A3 | L7 | 2 | Content / Topics covered in L5 – L7 | Practical | 40 |
| Total [A1 + A2 + A3] | | | | | 100 |

Summative Assessment - Y

| | | | | | |
|----|---------|----|-------------------------------------|-------------------------|------------|
| A4 | Post L8 | 18 | Content / Topics covered in L1 – L8 | Practical: Live Project | 100 |
|----|---------|----|-------------------------------------|-------------------------|------------|

Computation of Final Score: [X + Y]

- **X** : 20% of total marks obtained out of total marks 100 in Interim Formative Assessment cumulatively (A1+A2+A3)
- **Y** : 80% of marks obtained out of total marks 100 in Course-end Summative Assessment (A4)

Gradation Scheme:

- 90 – 100 : O : Outstanding
- 80 – 89 : A : Excellent
- 70 – 79 : B : Very Good
- 60 – 69 : C : Good
- 50 – 59 : D : Pass

Eligibility for Certification:

- Attendance & active participation in class lectures/interactions [L1-L8]
- Completion/submission of all the three activities/assignments as part of Formative Assessment [A1, A2 & A3]
- Obtaining minimum Grade D as per the formula for computation of Final Score stated above

NB: A candidate must satisfy all the criteria mentioned in order to receive the course completion certificate