Course code: BCOM E3055

Title: Operations Research

Type/Status: Core

Aims:

This course unit is designed to provide a knowledge and practice in the usage of quantitative tools for aiding in management decision making.

Learning outcome:

By the end of the course unit, students will be able to:

- apply the appropriate analytical techniques to real world problems.
- transform the managerial problem into a mathematical model.
- use the quantitative techniques for better decision making.

Course Content:

Introduction to Operations Research. Formulation of Models. Linear Programming. Transportation Model. Network Analysis. Decision Analysis. Inventory Models. Assignment Problems. Game Theory. Queuing Theory. Simulation. Duality Theory and Sensitivity Analysis.

Method of Teaching and Learning:

Seminars & self learning

Scheme of Evaluation:

End year examination

Recommended Readings:

Hillier, F. S. and G. J. Lieberman, (2005)**.** *Introduction to Operations Research (8th edition) New York: McGraw Hill.*

Paul A. Jensen and Jonathan F. Bard, (2003). *Operations Research, Models and Methods*. John Wiley & Sons.

Hamdy A. Taha, (2002). *Operations Research: An Introduction***.** (7th Edition). Prentice Hall.