

**Course Code:** BMGT E3045

**Title:** Operational Management

**Aim:** To; (i) Introduce students to the concepts and functions of operations management.

(ii) Provide the knowledge on functions and processes of operations management .

**Learning Outcomes :**

On completion of this course unit, students should be able to;

- Demonstrate knowledge and understanding of the concepts and functions of operations management.
- Solve the practical problems and interpret the results, which is required for managers of organizations in making decisions.

**Content:**

Introduction; historical evolution of OM, factors affecting OM today, different approaches in studying OM, production as a system, production as an organization function, decision making in OM. Operations Planning; forecasting in OM, forecasting models, short-range and long-range forecasting, computer software for forecasting, forecasting in small business. Designing and Developing Products and Production Processes; developing new products, improving designs of existing products, process planning and design, technology selections and management, allocating resources to strategic alternatives (linear programming), scheduling. Capacity Planning; measurement of capacity, forecasting capacity demand, economies of scale. Facility Location; factors affecting location decisions, types of facilities and their dominant location factors, integrating quantitative and qualitative factors into location decisions. Facility Layout; manufacturing facility layout, service facility layout. Operations Decisions; Planning production to meet demand, production planning system, independent demand inventory

system, material requirement planning (MRP), just-in-time (JIT) manufacturing, material management and purchasing. Operations for Productivity; Quality and Reliability; productivity and human behavior, job designing, work study and work measurement, learning curve, employees health and safety, quality control, planning and controlling projects, maintenance management.

**Method of Teaching and Learning:**

Lectures, Seminars

**Scheme of Evaluation:**

Examination, Assignments

**Recommended Readings:**

Buffa & Miller J.(1985) Production & Inventory Systems, Planning & Control, USA : Richard D Irvin, Inc.

Chary S.N. (2007), Production and Operations management, (8<sup>th</sup> edition), Delhi: Tata Mc Graw-Hill.

Evarett E. A, Ronald J . E.(2002) Production & Operations Management, New Jersey: Prentice Hall Inc., Ennglewood Cliffs.

Mahadevan, B (2008) , Operations management Theory and Practice, (4<sup>th</sup> edition), Dorling Kindersley, Del