**BLS 2215** **DATABASE MANAGEMENT SYSTEMS**

**Short** **Description**

The course covers database management concepts and how to design and implement database systems within records offices

Aim

Equip students with knowledge and skills in designing and implementing database management systems

Learning outcome

Students should be able to:

- Design a database - Enter data and edit in a database - Retrieve data from database - Maintain a database

Intellectual, Practical and Transferable skills

Database design skills

Data entry and editing skills

Skills in searching and retrieval of records from database

Teaching and Learning Pattern

By use of lectures, case studies and demonstrations, student led group presentations and self – directed research guided by the lecturer

Indicative Content

Definition, concepts and methods in the management of databases; Architecture of a DBMS; Data Models: relational, hierarchical and network models; Relations, attributes, domains, etc; Database design, Database architecture and schema, Logical and physical views of data schemas and sub schemas, normalization; Form design, indexing, tables and program design. Data manipulation languages; programming in a database environment: database security, integrity, recovery, and concurrence; file organization: sequential, random, indexed sequential, hierarchical, heap, inverted; Database administration; Distributed database systems.

**Assessment** **method**

- Coursework and Examination. Tests, coursework research questions, group work presentations will all constitute coursework marks (30 marks) and final examinations (70 marks). For a student to be allowed to sit the final examination in this course, he/she should have obtained at least 15 out of 30 marks. The pass mark for the course will be 50%.

Indicative sources

* Ramakrishnan, R. & Gehrke,J. 2003. Database management system. Boston: McGraw-Hill
* Jacso, P. and Lancaster, F.W. 1999. Build your own database: Chicago: American Library Association.