

**TOWSON UNIVERSITY**  
**CENTER FOR APPLIED INFORMATION TECHNOLOGY**

**AIT 632:** Database Management Systems

**Credit Hours:** 3

**Prerequisite:** AIT 600

**Course Description:** The course will study in the fundamentals of database technology and database management systems. It will cover a wide range of topics including: uses of databases, database architectures, design, real world implementations, security topics, integrity issues, SQL, performance concepts, and storage issues. The emphasis of the course will be on practical applied database technology. share

**Learning Objectives:**

1. To understand the fundamental concepts of relational database management systems
2. To understand how to design a database using data models
3. To understand the real world tradeoffs between normalization and de-normalization and to understand the concepts of performance tuning
4. To learn SQL functionality and be familiar with the available interfaces to the DBMS and the main components of the DBMS architecture
5. To prepare you for a career in the IT field, specifically so that you feel confident working with database technology

**Suggested Textbooks:**

1. Connelly, T., Begg, C., *Database Systems: A Practical Approach to Design, Implementation, and Management*, 4th edition, Pearson
2. R. Elmasri, S.B., Navathe, B., *Fundamental of Database Systems*, 4th edition, Cummings
3. Ramakrishnan, R., *Database Management Systems*, McGraw-Hill