

Name of the course	Data Base Management Systems (DBMS)
Course Code	COMP-311
Semester	VII
Credit Hours	3
Prerequisite	-
Learning outcomes	<p>On successful completion of this course, students are expected to have knowledge about:</p> <ol style="list-style-type: none"> 1. Basic concepts about data, information, database management systems, functions and important. 2. Organizational, business, and strategic issues related with IT/IS Management. 3. Analyzing and evaluate the database management systems and practices and future potential.
Contents	<p>Unit- 1 Introduction</p> <ol style="list-style-type: none"> 1.1 Concept of System 1.2 Information System and its classification 1.3 Database Systems and its Components <p>Unit-2 Database Concept</p> <ol style="list-style-type: none"> 3.1 Introduction 3.2 Data, Information and metadata 3.3 File terminology 3.4 Association between Fields 3.5 Association between Files and its types 3.6 File Organization <p>Unit-3 Data Structure</p> <ol style="list-style-type: none"> 3.1 Introduction 3.2 Location Methods 3.3 Types of Pointers 3.4 Inter record Data Structure <p>Unit- 4 Data Model</p>

	<p>1.4 Introduction</p> <p>1.5 Classification of Data Model</p> <p>1.6 Entity relationship Model</p> <p>Unit- 5 Database Design</p> <p>1.1 Introduction</p> <p>1.2 Steps of Database Design</p> <p>1.3 Normalization</p> <p>1.4 Case Problem</p> <p>1.5 Data Volume and Usage Analysis</p> <p>Unit- 6 Database Design Implementation</p> <p>1.1 Introduction</p> <p>1.2 Implementation design</p> <p>1.3 Guidelines for Mapping</p> <p>1.4 Program Design Guidelines</p>
Teaching & Learning Strategies	A combination of lecturing, presentations, and discussions will be used to conduct the course. Students will be expected to read extensively ahead of each class session and actively participate in discussions and practical work.
Assignment	Written assignment (10 marks), presentation (5 marks) and Quiz (10 marks)
Suggested Readings	<p>Gupta, S. B.,Mittal, A.(2017). <i>Introduction to database management systems</i>. University Science Press.</p> <p>Kahate, A. (2009). <i>Introduction to database management systems</i>. Pearson.</p> <p>Panneerselvam, R. (2018). <i>Database management system</i> (3rd ed.). PHI Learning.</p> <p>Zhang, M., Martin, P., Powley, W., & Chen, J. (2017). Workload management in database management systems: A taxonomy. <i>IEEE Transactions on Knowledge and Data Engineering</i>, 30(7), 1386-1402.</p>

Assessment and Examinations

Sr. #	Elements		Details	Conducting Body
1	Midterm Assessment		Written test (at the mid-point of the semester)	College
2	Formative Assessment		Assignment, presentation and quiz	College
3	Final Assessment		Written test (at the end of the semester)	The University of Punjab, Lahore.