



Course Name	Database
Prerequisite course	Data Structure
Corequisite course	
References	<ol style="list-style-type: none">1. R. A. Elmasri, S. B. Navathel, Fundamentals of Database Systems, 3rd ed., Addison-Wesley, 1999.2. C. J. Date, An Introduction to Database Systems, 7th ed., Addison-Wesley, 1999.3. R. Ramakrishnan, Database Management Systems, Mc Graw-Hill, 1997.4. S. Abitebout, R. Hull, and V. Vianu, Foundations of Databases, Addison-Wesley, 1995.5. H. Korth and A. Silberchatz, Database System Concepts, 3rd Edition, Mc Graw-Hill, 1998.6. J. D. Ullman, J. Widom, A First Course in Database Systems, 1st ed., Prentice-Hall, 1997.7. F. R. Mc Fadden, J. A. Hoffer, and M. B. Prescott, Modern Database Management, 4th ed., Addison-Wesley, 1999.8. S. Abiteboul, P. Bunenman, and D. Sueiu, Data on the Web: From Relations to Semistructured Data and XML, Morgan-Kaufmann, 1998.
Course instructor	Dr. Saeed Farzi
Syllabus	<ol style="list-style-type: none">1. Fundamental Database Concepts2. The Entity Relationship (= ER) Model3. The Relational Data Model4. Logical Database Design5. Relational Algebra6. SQL: Querying and Manipulating Data7. Transaction Management and Concurrency Control8. Functional Dependencies and Normalization9. NoSQL DATABASE