Catalog description

Database principles for microcomputers, with an emphasis on relational database management systems (DBMS) for applications development in the library and information fields. Database design, creation, and maintenance; the user interface; programming concepts. Creation of a working database system.

Accurate description

Database principles and their application within the library and information fields. Emphasis on the relational model and Structured Query Language (SQL). Operational database design, construction, and maintenance. Creation of a working database system using a personal computer. Advanced topics include distributed database systems, data warehouses, local area networks, and distributed processing strategies.

Prerequisite: None


Instructor: Ted Borys
Class number: 5785, spring 2012
Lecture: Wednesday 4:15 – 7:05 PM, January 18th to May 2nd
Room: HS-004

Final grade: 50% quizzes, 50% assignments
Extra credit: None offered or available
Academic integrity: Students are expected to do their own work and abide by University policy

Rationale

Information technology rests on four basic foundation blocks: operating systems, networks, programming, and database management systems. This course is a graduate-level introduction to database systems. The assignments will be done using Microsoft Access, but this course is definitely not simply “all about Access”. The SQL syntax taught is independent of any vendor’s software product. Also, there is more to learning about database systems than just mastering SQL syntax. Major topics include: database concepts, logical database design, physical data structures, relational concepts, SQL, transaction management, and several advanced topics including distributed databases, data warehouses, and distributed processing technologies. If your future includes working with database systems as a researcher, programmer, database administrator, business analyst, data analyst, project leader, line manager, or executive manager, this course is invaluable.