

## *Database Systems*

**Instructor:** Dr. Mike Gately

**Course Description:** After taking this course students should understand basic database theory: Models/Representations/Views, Relational calculus/SQL, Normalization, and Indexing/transactions/concurrency/recovery; Know fundamentals of one DBMS; Be prepared to learn any DBMS; Be ready to be a programmer or sophisticated user.

**Syllabus:** At the end of the semester, each student will turn a copy of his/her notes. This will be an indication of attendance and participation. The notes will be reviewed and points given totaling 5% of the student's final grade. Each student will design a relational database. The progress will progress in stages:

- 1) Requirements Analysis,
- 2) Conceptual Design (Schemas and Functions),
- 3) Logical Design,
- 4) Physical Design.

A set of queries will be developed that represent normal usage of the database. Implementing the database will be a plus.