GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF SCIENCE AND TECHNOLOGY
Course Outline – Computing Science 2910

INTRODUCTION TO FILE AND DATABASE MANAGEMENT

Instructor: TBA   Room: TBA
Office Phone Number:

Purpose: This course provides a conceptual background in file management techniques and an introduction to database management systems.

Description: Basic concepts in computer data organization and information processing; hardware devices, physical organization, and access methods for file storage; file I/O; introduction to database systems.

Course Outline:

We will discuss basic file processing operations, fundamental file structure concepts, as well as the more important high-level file structure designs such as sequential access, B-trees, and hashing. The second half of the course is intended to provide a clear description of the concepts underlying database management systems such as the fundamental data models, database query languages, and database schema design. We will also examine some current trends in database systems research. By the end of this course you should have acquired the necessary skills to:

  (1)   understand basic concepts underlying file and database management,
  (2)   know how to design and implement efficient file structures,
  (3)   be able to design and create database schemas,

and

  (4)   be able to use query languages of existing commercial database systems.
  (5)   ER diagrams, hierarchical data model, and the network data model.

Prerequisite: CS 2010

Corequisite: None

Mark Distribution:

Assignments	30%
Midterm	30%
Final	40%

Text Books: "File Structure - A Conceptual Toolkit"