CBIS 452 - Decision Support Systems
1999/2000 (Spring Semester)

Instructor	:	Prof. Duarte Trigueiros
Lecture Hours	:	Mon. & Thu. 9:30am - 10:45 am
Office Location	:	L410 (Ext.735) fbadt
Office Hour	:	Mon. & Thu. 11:00 – 12:00; Tue. & Fri. 10:00-11:00

Course Objective

The course is intended to introduce Decision Support Systems to students by providing an overview of the DSS fundamentals, covering technical DSS development issues, and investigating the major kinds of models that are useful for decision support. Upon completion of this course, students should be familiar with categorizing organizational decision needs and applying the best method to various situations. Finally, they are expected to group themselves and construct a DSS that matches decision makers' support needs.

Recommended Textbook:

Understanding Decision Support Systems and Expert Systems, Efrem G. Mallach, IRWIN, The McGraw-Hill Companies, Inc., 1994.

Course Outline:

Chapter 1   Introduction to Decision Support Systems
➢ Evolution of Information Systems
➢ What is a DSS?
➢ DSS in the Information Systems Picture
➢ Specific DSS Benefits
➢ Why study DSS?

Chapter 2   Human Decision-Making Processes
➢ What is a Decision?
➢ The Decision Process
➢ Types of Decisions
➢ How Managers make Decisions?
➢ The Impact of Psychological Type on Decision Making
➢ The Kepner-Tregoe Decision-Making Method

Chapter 3   Systems and Models
➢ About Systems
➢ Information Systems
➢ Data Flow Diagrams
➢ DSS as Information Systems
➢ Models

Chapter 4   Types of Decision Support Systems
➢ The DSS Hierarchy
➢ Generalizing the DSS Categories
➢ Matching DSS to the Decision Type

- ➢ Individual and Group DSS
- ➢ Matching Benefits to DSS User Community
- ➢ Matching DSS tot he Decision Maker's Psychological Type
- ➢ Usage Modes
- ➢ Institutional versus Ad Hoc DSS

Chapter 5   Building a Decision Support System
- ➢ Defining the DSS Architecture
- ➢ DSS Development Project Participants
- ➢ The DSS Development Process
- ➢ DSS User Interfaces

Chapter 6   DSS Software Tools
- ➢ DSS Software Categories
- ➢ Standard Packages
- ➢ Specialized Tools and Generations
- ➢ Programming Languages for DSS

Chapter 11   Group Decision Support Systems
- ➢ What are Group DSS?
- ➢ Why Group DSS Now?
- ➢ Group versus Individual Activities
- ➢ Types of Group DSS
- ➢ Groupware
- ➢ Group DSS in Use Today
- ➢ Four Group DSS Products

Chapter 12   Executive Information Systems
- ➢ Who Are the Executives?
- ➢ What Is an Executive Information System?
- ➢ Why Use an EIS (or ESS)?
- ➢ EIS Characteristics
- ➢ EIS Issues
- ➢ From EIS to ESS
- ➢ Implementing EIS/ESS

Evaluation:

Mid-term Test   40%
Chapters 1, 2, 3 and 4

Final Exam   60%