CSCI 5303 - DECISION SUPPORT SOFTWARE WITH APPLICATIONS

CREDIT HOURS: 3
PREREQUISITES: COSC 1301 or CSCI 1302 or BCIS 1305; MTH 1342
GRADE REMINDER: Must have a grade of C or better in each prerequisite course.

CATALOG DESCRIPTION

Operating systems, spreadsheets, graphing, statistical analysis and interpretation, database management systems, network environment, current topics in computing support for decision making.

PURPOSE OF COURSE

To provide the student with the knowledge of and practice in using contemporary software for decision support in business.

EDUCATIONAL OBJECTIVES

Upon successful completion of the course, students should be able to:

1. Design and produce advanced, user friendly, error free electronic spreadsheets.
2. Integrate Visual Basic macros in spreadsheet applications and database applications.
3. Use electronic spreadsheets for statistical analysis.
5. Export, import, and convert data files from one type of application to another.
6. Describe the process of designing and implementing a decision support system.

COURSE CALENDAR

This course meets for a minimum of 37.5 lecture contact hours during the semester, including the final exam. Students have significant weekly reading assignments. Students are expected to complete weekly homework assignments, quizzes, and 2-3 periodic exams in addition to the final exam. Students are expected to prepare for any class assignments or quizzes over the material covered in class or in the reading material. Successful completion of these activities requires at least six additional hours of outside of classroom work each week.

CONTENT

Orientation: ........................................................................................................................................................................ 2
   Course requirements, exams and grading
   Review of computer terminology
   Overview of application software in business environment

Spreadsheets .......................................................................................................................................................................20
   Review of elementary Excel functions & operations
   Graphing
   Linear Regression
   Design principles and error detection/avoidance
Database operations (Sort, Query, Table)  
Key macros, macro library  
Pivot Tables  
Filtering data  
Transferring and sharing data among applications  
The use of Visual Basic in business applications

Decision Support Systems / Databases
Review of business decision-making process  
Applying knowledge to business decisions  
The role of decision support systems in business  
The process of building a decision support system  
Tools for building a decision support system  
Executive information systems  
The use of Visual Basic in decision support systems

Exams

REFERENCES
