

CSC 503 - DECISION SUPPORT SOFTWARE WITH APPLICATIONS

CREDIT HOURS: 3

PREREQUISITES: CSC 121 and MTH 220

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 business computing. For non-computer science students.

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.
4. Audit electronic spreadsheets for errors.
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.

CONTENT

Hours

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| 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 | |
| Data base 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 | |

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| Decision Support Systems / Databases | 18 |
| 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 | 5 |
| | TOTAL 45 |

REFERENCES

Briggs, A.D., Access 2003 with Visual Basic for Applications, Course Technology, 2005.

Friedrichsen, L., Excel 2002 with Visual Basic for Applications, Course Technology, 2002.

Shelly, Cashman, and Quasney, Excel 2003 Comprehensive Concepts and Techniques, Course Technology, 2006.

Shelly, Cashman, Pratt, and Last, Access 2003 Comprehensive Concepts and Techniques, Course Technology, 2006.