COSC 1301 - INTRODUCTION TO COMPUTING

CREDIT HOURS: 3
PREREQUISITES: 2 years of high school algebra or equivalent
Credit not available for students who have taken BCIS 1305.
May not be taken by business majors.
GRADE REMINDER: Must have a grade of C or better in each prerequisite course.

CATALOG DESCRIPTION

General study of computer types, capabilities, uses, and limitations. Use of operating systems and application software on a microcomputer. Use of network environments to access online resources. Introduction to problem solving using a computer.

PURPOSE OF COURSE

To acquaint students with the capabilities and limitations of different types of digital computers. To provide experience in using a microcomputer as a productivity tool. To provide practice in operating system utilization on microcomputers. To develop competencies in word processing and electronic spreadsheet utilization. To provide experience in using digital resources to locate information. To introduce students to the concept of information literacy. To introduce students to problem solving using a computer.

EDUCATIONAL OBJECTIVES

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

1. Identify capabilities, limitations and procedures for using computer systems to solve personal, business, and educational problems.
2. Discuss the role of computers in society, business, and education.
3. Use digital resources to gather information.
4. Use a microcomputer operating system.
5. Apply concepts of word processing and document design.
6. Apply concepts of electronic spreadsheet design.

COURSE CALENDAR

This course meets for a minimum of 37.5 lecture contact hours during the semester, including the final exam. Students have significantly weekly reading, homework assignments and quizzes, three exams and a 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 a minimum six additional hours of outside of classroom work each week.

CONTENT

<table>
<thead>
<tr>
<th>General Computer Units</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course introduction</td>
<td>3</td>
</tr>
<tr>
<td>Computer history highlights</td>
<td></td>
</tr>
</tbody>
</table>
System components
Input/Output
Storage
Computers in society (privacy, security, ethics, professions)

Network Environments
Data communication principles and equipment
Using local and wide area networks
Using e-mail
Accessing digital resources
Downloading information from the Internet

Microcomputer Operating Systems
System startup (boot) process
Graphical environment
Command line environment
File types, names, and path information
File management
Disk organization
Executing application software
Utility programs

Word Processing
Word processing environment and help utilities
Designing and organizing a document
Saving and opening a document
Printing a document
Cursor movement in the document
Creating and editing text
Formatting text
Formatting the document
Language tools
Special tools
Columns and tables
Graphics objects
Document enhancement features

Electronic spreadsheets
Spreadsheet environment and help utilities
Designing and organizing a spreadsheet
Saving and opening a spreadsheet
Printing a spreadsheet
Viewing the spreadsheet
Cursor movement in a spreadsheet
Formatting text and values in rows, columns and cells
Formatting the spreadsheet
Types of cell content (value, label)
Generalizing solutions using formulas and functions
Cell addressing (relative, absolute, mixed)
Displaying graphs
Special tools

Web Page Development............................................................................................................7
  Organization and appearance guidelines
  Text formatting
  Hyperlinks and navigation elements
  Graphics
  Tables
  Uploading files to server

Independent Study of Other Computer Applications...............................................................4

Exams (plus a comprehensive final)..........................................................................................3

  TOTAL 45

EXAMINATIONS

Matching, completion, and short answer questions should be used on examinations. Class size permitting, competency/power exams should be given at appropriate occasions. All students must take a comprehensive final.

REFERENCES
