

## 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. 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

### HOURS

General Computer Units .....	3
Course introduction	
Computer history highlights	

- System components
- Input/Output
- Storage
- Computers in society (privacy, security, ethics, professions)

Network Environments .....	3
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 .....	6
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 .....	10
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 .....	9
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
	<b>TOTAL 45</b>

## **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**

Freund, Shelly Cashman Series Microsoft Excel 2016 Introductory, Cengage Learning, 2017.

Vermaat, Shelly Cashman Series Microsoft Word 2016 Complete - Custom Edition, Cengage Learning, 2017.