

COSC 101 Microbased Computer Literacy

An introductory course designed to provide students with a fundamental understanding of computers. The course familiarizes students with the interaction of computer hardware and software. Emphasis is placed on the application of microcomputers, the use of productivity software (word processing, spreadsheet management, file and database management, presentation graphics, web browsers, search strategies, and e-mail), and the social and ethical aspects of the impact of computers on society. (Does not count toward Computer Science major). Note: This course is cross-listed as BTED and IFMG 101. Any of these courses may be substituted for each other and may be used interchangeably for D or F repeats but may not be counted for duplicate credit.

Course Objectives

After successful completion of this course, The student will be able to:

- List the components of a microcomputer system.
- Use software in the categories of operating systems, word processing, spreadsheet, database management, and presentation graphics.
- Use e-mail and the Internet to communicate and locate information.
- Know the historical, current, and future trends in computing.
- Be prepared to new applications and technologies as they evolve in the coming years.
- Appreciate the value of computing as an intellectual skill.
- Identify issues in computing as they relate to ethical, social, psychological, political, and economic implications.
- Develop critical thinking skills in the area of current Information Technology issues.

Detailed Course Outline

A. Introduction to Computing Systems — 3 hours

1. History of Computer Development
2. Components of Computer Systems
3. Classification of Computer Systems

B. Microcomputer Hardware — 3 hours

1. Microprocessors
2. Primary and Secondary Storage
3. Input/Output Components

C. Microcomputer Operating Systems — 4 hours

1. Single-user, Multi-user, and Multitasking Operating Systems,
2. System Software: Language Translators and Utility Programs
3. Advanced Features of Operating Systems

D. Major Applications

1. Word Processing — 5 hours
 1. Fundamental Concepts
 2. Basic Applications
 3. Integration
2. Electronic Spreadsheets — 5 hours
 1. Fundamental Concepts
 2. Basic Applications
 3. Integration
3. Record and File Management Systems — 1 hour
 1. Fundamental Concepts
 2. Basic Applications
4. Database Management Systems — 4 hours
 1. Fundamental Concepts
 2. Basic Applications
 3. Integration
5. Presentation Graphics Applications and Integrated Software — 4 hours
 1. Fundamental Concepts
 2. Basic Applications
 3. Integration
6. Use of the Internet for Information Retrieval and Communications — 3 hours
 1. Fundamental Concepts
 2. Basic Applications

E. Other Personal Use Applications Software — 1 hours

1. Personal Financial Management
2. Management Information Systems/Decision Support Systems
3. Artificial Intelligence and Expert Systems (Basic ideas)

F. Data Communications — 2 hours

1. Components of Data Communications Systems
2. Diversity of Networks
3. Electronic Library Catalogs and other Public Database Systems

G. Impact of Computers on Society and the Individual — 2 hours

1. Computers in Business, Education, Government, Arts, and Sciences
2. Ethical considerations, social, psychological, political, and economics
3. Ergonomics, Green Computing

H. Information Assurance — 3 hours

1. Individual Privacy on the Internet
2. Software Piracy
3. Computer Crime/hackers
4. Computer Viruses and hoaxes
5. Computer Surveillance

I. Class Tests — 2 hours

Total = 42 hours

Evaluation Methods

The final grade for the course will be determined as follows:

1. Projects. 14 projects and in class labs covering word processing, spreadsheets, database management, presentation graphics . 30 – 40%
2. Reaction papers and a web site review. Library and Internet search and reaction to articles dealing with computer applications. A minimum of one reaction papers of this nature. 10– 20%
3. Quizzes and homework assignments. 10– 20%
4. Examinations. Minimum of two exams during the course of the regular teaching semester, and a final exam at the end of the semester. 40– 50%

Grading Scale:

90 – 100 = A

80 – 89 = B

70 – 79 = C

60 – 69 = D

59 and below = F

Attendance Policy: The attendance policy will conform to the universitywide attendance criteria.

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- Office Hours
- Tuesday and Thursday
- 4:00 p.m. – 5:00 p.m.

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