Title: Computer Concepts and Applications II

Abbreviation and Number: CISB206

School: Business

Department: Computer Information Systems

Credits: 3

Course Sequence: (X) Fall ( ) Spring ( ) Fall and Spring

Hours Per Week: ( 3 ) Lecture ( ) Seminar ( ) Laboratory ( ) Studio ( ) Kitchen

( ) Other (Specify)

Pre-requisite(s): CIS106 or CISB106 and MATH163 or Permission of the Instructor/Chair

Co-requisite(s): None

COURSE DESCRIPTION

This course focuses on advanced features in a productivity suite. Topics include word processing, spreadsheet, database and presentation software. Students employ advanced computing skills.

SPECIFIC OBJECTIVES

Upon completion of this course, students will be able to

1) compare the features of various Operating Systems and utility programs;
2) demonstrate knowledge of the systems and programming development process;
3) demonstrate knowledge of advanced features in Microsoft Office applications;
4) produce electronic documents to support solutions to business problems;
5) describe the principle elements and functions of networking;
6) explain the importance of networking and internet security;
7) create, develop and query relational databases;
8) discuss the functions of databases in the business environment; and
9) explain the concepts involved in computer security and computer ethics.

COURSE CONTENT

I. Theory

A. System Software
   i. Operating Systems (OS)
      a. OS for PCs: UNIX; DOS; Netware; Solaris; Mac OS; Windows; Linux, Android
      b. OS for Handheld and other device: Embedded; Mobile versions of Windows; Palm OS; Blackberry
         OS; Embedded Linux, Android
   ii. Utility Programmes
      a. File management; Search tools
      b. Diagnostic and disk management programmes
      c. Uninstall and cleanup utilities
      d. File compression
      e. Backup and recovery
      f. Antivirus, antispyware, firewalls
      g. Security

B. Networking Concepts and Standards
   i. Network Applications
ii. Types of Networks
iii. Data Transmission
iv. Protocols
v. Hardware

C. Networks and Internet Security
i. Access to networks
ii. Safeguarding against unauthorized access and use, online theft, fraud and others
iii. Personal safety issues
iv. Security Legislation

D. Information Systems and Systems Development
i. Uses
ii. Types
iii. Systems Development Life Cycle (SDLC)
iv. Approaches to System Development

E. Programme Development and Programming Languages
i. Categories
ii. Design and development approaches
iii. Types
iv. Programming Development Lifecycle (PDLC)
v. Application Lifecycle Management
vi. Application Generators
vii. Device Software Development Tools
viii. Software development kits and API interfaces

F. Databases and Database Management Systems (DBMS)
  i. Types
  ii. Advantages and disadvantages
  iii. Data concepts and characteristics
  iv. Database Classifications
  v. Database Models

G. Computer Security and Privacy
i. Hardware loss or damage
ii. System failure and other disasters
iii. Threats
iv. Protecting information
v. Electronic surveillance and monitoring systems
vi. Legislation
II. Practical
   A. Wordprocessing
      i. Collaboration and integration tools
      ii. Creating Templates, master documents and macros
      iii. Securing documents
      iv. XML
   B. Spreadsheets
      i. Using PivotTables, PivotCharts, and Trendlines
      ii. Auditing formulas
      iii. Data validation and complex problem solving
      iv. Use of macros and Visual Basic for Applications
      v. Collaboration tools
      vi. Web Queries
      vii. Consolidation and linking workbooks
   C. Databases
      i. Designing
      ii. Advanced forms
      iii. Database administration
      iv. SQL
   D. Presentations
      i. Enhancements
      ii. Outline uses
      iii. Photo album
      iv. Masters templates and hand-outs
      v. Collaboration features
   E. Personal Information Manager
      i. Schedules and tasks
      ii. Customisation

ASSESSMENT
Tests 30%
Practical Assignments 20%
Theoretical Assignments 10%
Project 20%
Final Examination 20%
Total 100%
REQUIRED TEXTS

SUPPLEMENTARY READINGS/MATERIALS

JOURNALS
*E-Week*
*PC Magazine*
*PC World*

WEBSITES
*www.zdnet.com (ZDnet)*
*www.course.com (Course Technology)*
*www.ibm.com/university/scholarsprogram (IBM Scholars Programme)*