Effective Semester / Session: Spring 2010

Type of Action:

- New
- Modification
- Move to Inactive (Stop Out)
- Cancellation

Course Alpha and Number: CS 103

Course Title: Introduction to Computers

Reason for initiating, revising, or canceling:
Beginning in Spring 2010, MS Office 2007 will be installed in the computer classrooms in building W, and will be used in all CS 103 classes, instead of the previous MS Office 2003 version. This course guide is being revised to update the textbook used in this course to a newer edition that is consistent with MS Office 2007.

 proposalsubmitted by Wil Maui, Instructor 1/21/10

Department Chair 1/21/10

Dean of Academic Programs and Services 1/21/10
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Course Guide

Course: CS 103 Introduction to Computers

1. Department
   Business

2. Purpose
   This course introduces students to basic knowledge in personal computing technology and provides them with skills in using the most commonly used personal computer (PC) application programs. This course covers basics in PC hardware, the Windows operating system, and PC application programs, including a word processing program, a spreadsheet program, a presentation program, a database program, and internet programs. Knowledge and skills obtained from this course will enable students to conduct research on the Internet, do spreadsheet computations and class presentations, and complete reports and research papers that may be required of them in other college courses. The knowledge and skills will also be useful in the job market after students leave college. This course is required for all students with majors in the Business Department, in Liberal Arts, and in Natural Resource Management. This course may also benefit individuals interested in learning how to use office application programs.

3. Description

   A. Required/Recommended Textbook(s) and Related Materials

   B. Contact Hours
      1. Lecture: 3 hours per week / 45 hours per semester
      2. Lab: Class is held in a computer classroom/lab
      3. Other:

   C. Credits
      1. Number: 3
      2. Type: Regular degree credits

   D. Catalogue Course Description
      This course covers basic knowledge on the PC hardware – including the system unit, local area networks and the Internet; provides students with practical skills in using the Windows operating system; provides students with practical skills in using commonly used PC
application programs, including a word processor, a spreadsheet, a presentation program, and a database program. This course also gives students skills in using the Internet for communication and research and introduces them to creating Web pages. This course emphasizes using the PC as a multiple applications tool. Prerequisite: OT 101 or concurrent enrollment or demonstrated proficiency on a recognized proficiency test. English Placement Level: EN 083/084. Math Placement Level: None. (Offered Fall and Spring)

E. Degree or Certificate Requirements Met by Course
This is a required course for the A.A. degrees in Business and in Liberal Arts, the A.A.S. degrees with an emphasis in Accounting, Business Management, Computer Applications, and Hospitality Management, and the A.S. degree in Natural Resource Management.

F. Course Activities and Design
This course consists of class lectures, in-class exercises, homework assignments, in-class exams, and a student presentation. Exercises and homework will come from the textbook, downloadable support materials from the author's Web page, and from local publications.

4. Course Prerequisite(s); Concurrent Course Enrollment; Required English/Mathematics Placement Level(s)
Prerequisite(s): OT 101 or concurrent enrollment or demonstrated proficiency on a recognized proficiency test.
English Placement Level: EN 083/084
Math Placement Level: None

5. Estimated Cost of Course; Instructional Resources Needed
Cost to the Student: Tuition for a 3-credit course, cost of textbook, and the student activities fee.

Cost to the College: Instructor's salary.

Instructional resources needed for this course include instructor's computer system, software, computer projector and projection screen, flash drive, whiteboard, whiteboard markers, photocopied handouts, and appropriate reference materials.
6. **Method of Evaluation**
   Student grades will be based on the regular letter grade system as described below:

   A: Excellent – grade points: 4.0;
   B: Above average – grade points: 3.0;
   C: Average – grade points: 2.0;
   D: Below average – grade points: 1.0;
   F: Failure – grade points: 0.0.

   NMC's grading and attendance policies will be followed.
7. Course Outline
This is a topical outline and does not necessarily indicate the sequence in which the material will be presented.

1.0 Introduction to the Personal Computer (PC) System
   1.1 The PC’s Hardware
      1.1.1 The computer system’s basic components: Input, output, and storage devices, memory and the central processing unit (CPU)
      1.1.2 How computer systems represent data
      1.1.3 Historical development of the PC
      1.1.4 Local area network, wide area network and the Internet
      1.1.5 Important terminologies
   1.2 The PC’s Software
      1.2.1 Software types: Operating systems (OS) and application programs
      1.2.2 Brief history of OS types: DOS, Windows, Mac OS and others
      1.2.3 Common types of application programs

2.0 Using Windows XP
   2.1 Windows current desktop and associated icons and bars and their settings
   2.2 Folders, program files, data files and file types
   2.3 File organization and maintenance with Windows Explorer
   2.4 The Windows application programs common user interface: Menus, toolbars and commands and how to use and customize them
   2.5 File sharing on a local area network (NMC’s W-3)
   2.6 Windows Help
   2.7 Important terminologies

3.0 Using the Internet and the World Wide Web
   3.1 Brief history of the Internet and the World Wide Web
   3.2 Internet browsers and how to use them
   3.3 Search engines and how to use them
   3.4 Obtaining materials from the Web
   3.5 Email and other communications on the Internet
4.0 Word Processing Using MS Word
   4.1 Introduction to MS Word
      4.1.1 Word interface
      4.1.2 Create, save, retrieve, edit and print a simple document
      4.1.3 Spell check, custom dictionary and the thesaurus
      4.1.4 AutoCorrect and AutoText features
      4.1.5 Options for backing up documents
   4.2 Gaining Proficiency: Editing and Formatting
      4.2.1 The select-then-do methodology
      4.2.2 Copy and move text within a document; find and replace
          character string; undo and redo prior commands
      4.2.3 Different document views; scrolling within a document
      4.2.4 Typography: Typefaces and type sizes
      4.2.5 Paragraph formatting: Line spacing, alignment, tabs, indents, and pagination
      4.2.6 Using Borders and Shading to box and shade text
      4.2.7 Section formatting: Changing column structure of a document
      4.2.8 Change the margins and/or orientation of a document
   4.3 Enhancing a Document
      4.3.1 Insert clip arts and photos and wrap text in a document
      4.3.2 Insert decorative text, lines and objects into a document
      4.3.3 Include materials from the Web and insert footnotes and endnotes
      4.3.4 Insert a hyperlink and save a Word document as a Web page
      4.3.5 Mail merge, wizards, and templates
   4.4 Advanced Word Processing Features
      4.4.1 Bulleted or numbered lists and outlines
      4.4.2 Use the Outline view to move text within a document
      4.4.3 Create and edit a table in a document
      4.4.4 Create, edit and use styles in a document
      4.4.5 Create and use section, paragraph, and character formatting
      4.4.6 Create and edit header and/or footer and insert and change page numbers in a document
      4.4.7 Creating a table of contents for a long document

5.0 Data Processing Using MS Excel
   5.1 Introduction to MS Excel
      5.1.1 Excel program interface
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5.1.2 Excel data file: Workbook, worksheets, columns, rows, and cells
5.1.3 Types of cell entries: Constants and formulas
5.1.4 Create, edit, format and print a worksheet
5.1.5 Doing calculations: User-defined formulas and functions

5.2 Gaining Proficiency
5.2.1 Relative, absolute and mixed references; isolating assumptions
5.2.2 The fill handle and auto-fill; building a formula with pointing
5.2.3 Hyperlink, Web pages, and “round trip HTML” in Excel
5.2.4 Date arithmetic in Excel

5.3 Preparing Summary and Reports
5.3.1 Charts: Types of charts; create and customize charts
5.3.2 Integrate Excel objects with other Windows application programs: Object linking and embedding
5.3.3 Page headers, footers, page numbers, page breaks; margins, orientation, and other print options; print preview and print a worksheet/workbook

6.0 Presentation Using MS PowerPoint
6.1 Introduction to PowerPoint
6.1.1 PowerPoint interface
6.1.2 Different views in PowerPoint and their features
6.1.3 Create, edit, and format text in slides; print slides
6.1.4 Showing and editing a presentation
6.1.5 Enhance a presentation: Insert and edit clip arts, pictures, WordArt, charts, lines, and objects
6.1.6 Apply and change a design template to a presentation
6.1.7 Add slide transitions and custom animation effects to the objects on a slide

6.2 Gaining Proficiency: Slide Show Tools, the Web, and Slide Master
6.2.1 Add a table to a PowerPoint slide
6.2.2 Add headers and footers to slides and/or handouts
6.2.3 Add timing to a presentation
6.2.4 Importing/exporting between PowerPoint and Word
6.2.5 Include a photo from the Web; insert a hyperlink
6.2.6 Modify and use the slide master
7.0 Database Management Using MS Access
   7.1 Introduction to MS Access
      7.1.1 The Database window
      7.1.2 Access objects: Tables, forms, queries, and reports
      7.1.3 Filters and sorting
      7.1.4 A brief look at a relational database
   7.2 Tables and forms: Design, properties, views and wizards
      7.2.1 Table design considerations, table views, and primary key
      7.2.2 Create and modify forms; AutoForms, Form Wizard, and form views and properties
   7.3 Information from the Database: Reports and Queries
      7.3.1 Data versus Information
      7.3.2 Create and modify reports; anatomy of a report; and report controls
      7.3.3 Create and modify queries; types of queries
      7.3.4 Grouping records; crosstab queries; and action queries

8. Instructional Goals
   This course will introduce students to:

   1.0 The PC system's basic hardware components (input, output, storage devices, memory and the CPU) and PC's software types (operating systems and application programs);

   2.0 The functions, features and commands of Windows XP and how to use this operating system;

   3.0 The Internet and how to communicate on it and utilize its resources;

   4.0 The word processing program, MS Word, and how to use it to prepare different types of documents;

   5.0 The spreadsheet program, MS Excel, and how to use it to calculate and summarize numerical data;

   6.0 The presentation program, MS PowerPoint, and how to use it to communicate ideas, findings and other topics;

   7.0 The database program, MS Access, and how it is used to track things and generate information and reports; and
8.0 Web pages and how to create and edit them using application programs like Word and Excel.

9. **Student Learning Outcomes**

Upon successful completion of this course, students will be able to:

1.0 Identify and describe a PC's basic hardware components (input, output, and storage devices, memory and the central processing unit); describe how a computer represents data; and identify types of PC software (operating systems or application programs);

2.0 Use Windows XP to open, run and close application programs, to perform file maintenance routines like creating, moving, copying and renaming files and folders, to perform routine system maintenance; customize Windows settings and use Windows utilities and accessories;

3.0 Get onto the Internet and perform searches, read and send email messages, download materials form the Web, and do other activities, like chat, and play music and/or videos;

4.0 Use MS Word to complete different types of text documents from short letters to enhanced documents with embedded graphic images to long documents, like reports and term papers;

5.0 Use MS Excel to perform numerical calculation, analyze and summarize data in a table format, summarize data using charts, and embed tables and charts from Excel worksheets into Word documents;

6.0 Use PowerPoint to communicate ideas, findings, and other topics in an electronic slide presentation format;

7.0 Recognize the power of MS Access to track things, generate information and reports, and create a simple database in Access; and

8.0 Create and edit Web pages using Word or Excel as the editor.
10. **Assessment Measures**

   Assessment of student learning may include, but not be limited to, the following:

   1.0 Daily classwork;
   2.0 Homework assignments;
   3.0 In-class tests; and
   4.0 A class presentation.