EDINBORO UNIVERSITY OF PENNSYLVANIA
Department of Mathematics and Computer Science

Essential Computing I

CSCI 104   Three Credit Hours
                                                Approved for Computer
Competency
Catalog Description:
This course familiarizes students with personal computer (PC) terms, and the use of Internet applications, and electronic mail applications.   Emphasis is placed on the use of PC productivity software (word processing, spread sheet management, file management, and presentation software).   Prerequisite: (MATH090 or placement into MATH 104 or higher) and (placement into ENGL101 or higher). This course is approved for General Education - Computer Competency.

Course Outline:

I.   Computer Terms
     A. Hardware
          1. Input devices
          2. Memory hardware
          3. Processing hardware
          4. Storage devices
          5. Output devices
          6. Communication devices
     B. Software
          1. System software
          2. Application software

II. Basic System Software Operations
     A. Application invocation
     B. File maintenance
     C. Other system utilities

III. Internet Applications
     A. Introduction to World Wide Web
     B. Web browser software
     C. Online searching
     D. Introduction to web pages
     E. Ethical issues

V. Basic File Management
     A. Create, load, save, and retrieve a list
     B. Create, save and print a query

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IV. Email Applications
   A. Send, receive and file email items
   B. Building a distribution list
   C. Professional communications
   D. Attachments

VI. Word Processing
   A. Create, edit, save, retrieve and print a document
   B. Use spell checker, electronic thesaurus and grammar checker
   C. Cut, copy and paste
   D. Character formatting
   E. Paragraph formatting
   F. Document formatting
   G. Using writing styles
   H. Create headers and footers
   I. Use templates and wizards
   J. Create table of contents
   K. Citations and bibliography

VII. Electronic Spreadsheet
   A. Create, edit, save, and retrieve a spreadsheet file
   B. Print showing both computed values and cell formulas
   C. Insert and delete rows and columns
   D. Change width of a column
   E. Format text in a cell
   F. Format numbers in a cell
   G. Define and use cell ranges
   H. Copy, move, merge cells
   I. Utilize relative and absolute cell references
   J. Employ functions
   K. Create and format charts and graphs

VIII. Presentation Software
   A. Create, load, save, retrieve and print an electronic slide presentation
   B. Format electronic presentation
   C. Utilize animations and transitions
   D. Utilize sound

IX. Application Integration
   A. Object linking and embedding
   B. Native document transformation to web page document

Course Objectives and Assessments

Objective	Assessment	Gen Ed Computer Competency

1. Employ a PC file system.	A. Students create folders in an organized hierarchy; manage folder content using store, retrieve, move and copy, remove / purge.
	
	B. Students use compressed files.
	
	C. Students employ local, removable, and network storage.
		1. Students must be able to employ a file system to store and retrieve data.
		  A. Create and remove folders.
		  B. Describe and create an organized hierarchy for data for multiple projects.
		  C. Save and retrieve files from a specified folder.
		  D. Copy and move files between folders.
		  E. Employ removable and network based storage.

2. Employ the internet and related applications as a research tool.	A. Students utilize internet search techniques.
	
	B. Students are able to validate web sources.
	
	C. Students can identify issues related to copyright laws.
	
	D. Students define plagiarism and recognize the pitfalls.
		2. Students can employ the internet and related applications as a research tool.
		  A. Employ evaluation techniques to validate a website and its contents.
		  B. Employ advanced Internet search techniques.
		  C. Understand copyright laws and plagiarism as they apply to the Internet.

3. Use of electronic mail.	A. Students utilize email to complete assignments, employing email features (attachments, spell check, blind copy, distribution lists).
	
	B. Students understand the permanence of electronic messaging and the importance of professional communications.
		3. Students can correctly employ electronic mail.
		  A. Headers
		    i. Create an email message correctly employing the header fields of the message.
		    ii. Describe the function and purpose of each of the email heading fields.
		  B. Attachments
		    i. Save an attachment from an email message in a location where it can be accessed later.
		    ii. Attach a document to an email message.
		  C. Professional communications
		    i. Explain the permanent nature of email messages and the implications.
		    ii. Explain the importance of employing proper spelling and grammar in professional email communications.

4. Create and format word documents.	A. Students will use a word processing program to create, save, retrieve, and print professionally formatted documents.
	
	B. Students will demonstrate use of character, paragraph, and document formatting techniques.
	
	C. Students correctly use writing styles, headers & footers, citations, bibliography, and table of contents.
		4. Students can employ a word processing productivity tool.
		  A. Basic Usage
		    i. Save, retrieve and print a document
		    ii. Cut, copy and paste text
		    iii. Use spell & grammar checker and thesaurus
		    iv. Insert page and section breaks
		    v. Manage headers and footers – inserting page numbers and system date
		    vi. Manage page layout – setting margins, orientation
		  B. Editing and Formatting
		    i. Use fonts and font sizes
		    ii. Use character formatting including bold, underline and italics
		    iii. Use paragraph formatting including line spacing, tab stops, and alignment
		  C. Tables and Graphics
		    i. Inserting and formatting a table
		    ii. Inserting clip art and images from a file
		  D. References
		    i. Generating and inserting a table of contents
		    ii. Proper formatting of citations and bibliography

5. Create functional and formatted electronic spreadsheet with graphic.	A. Students will design and implement a formatted spreadsheet using formulas, functions, absolute references. B. Students will construct graphs to appropriately represent the data in a spreadsheet.	5. Students can employ at least one other productivity tool
6. Communicate topic through purposeful use of presentation software.	A. Students will design and implement a series of presentation slides using a consistent design, demonstrating animations, transitions, and graphics. B. Students understand the importance of communicating the subject to an audience.	5. Students can employ at least one other productivity tool