CSC 103 Computing Sciences Portal

General Information

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Department
Computing Sciences

Course Prefix
CSC

Course Number
103

Course Title
Computing Sciences Portal

Course Information

Credit Hours
3

Lecture Contact Hours
3

Lab Contact Hours
0

Other Contact Hours
0

Catalog Description
This course is designed to establish a core knowledge base for all Computing Sciences students. Foundational computing science topics are covered and include word processing, spreadsheet management, web design, operating system file management, number systems, algorithm development, and career planning and advising. Students are also introduced to the concept of ethics in the computer science industry.

Key Assessment
This course does not contain a Key Assessment for any programs
Prerequisites
None

Co-requisites
None

Grading Scheme
Letter

First Year Experience/Capstone Designation

This course is designated as satisfying the outcomes applicable for status as a First Year Experience

SUNY General Education

This course is designated as satisfying a requirement in the following SUNY Gen Ed category
None

FLCC Values

Institutional Learning Outcomes Addressed by the Course

Vitality
Inquiry
Perseverance
Interconnectedness

Course Learning Outcomes

Course Learning Outcomes

1. Create professional documents and spreadsheets using industry-standard productivity applications
2. Identify and apply program design techniques to the problem-solving process
3. Create a simple program using a visual programming environment
4. Create a functional website using HTML5 and CSS
5. Write an informed and logical response to an IT-related ethical issue

Outline of Topics Covered

A. Word Processing
a. Create and Edit a Document
b. Navigate and Format a Document
   i. Formatting Styles
   ii. Citations and Bibliographies
c. Create and Format Tables
   i. Organizing Data in Tables
   ii. SmartArt
d. Create and Format Multipage Reports
   i. Sections, Headers and Footers, Cover Pages
e. Page Layout and Design
   i. Desktop Publishing Elements
   ii. Objects, Drop Caps, WordArt
   iii. Pictures, Text Boxes, Clip Art
f. Document Collaboration
   i. Tracking, Accepting, and Rejecting Changes
   ii. Comparing and Combining Documents
g. Application and Data Integration
   i. Embedding, Linking, Webpages, and Blogs
h. Mail Merge
   i. Documents, Labels, and Directories
   ii. Creating and Managing Data Sources
a. Online Forms

B. Spreadsheet Processing
a. Create a Basic Spreadsheet
   i. Enter Text, Data, and Numbers
   ii. Print a Workbook
b. Format Workbook Text and Data
   i. Format Cells, Cell Text, and Numbers
   ii. Copy and Paste Formats
   iii. Conditional Formats
   iv. Themes
v. Format for Printing

c. Calculate Data with Formulas and Functions
   i. Insert Functions and Formulas
   
   ii. Cell References
   
   iii. Autofilling
   
   iv. Logical and Lookup Functions

d. Analyze and Chart Data
   i. Create Charts
   
   ii. Format Chart Elements
   
   iii. Chart Types and Styles
   
   iv. Sparklines and Data Bars

e. Work with Excel Tables, Pivot Tables, and PivotCharts
   i. Create a Data Range
   
   ii. Sort and Filter Data
   
   iii. Create Subtotals
   
   iv. Analyze Data Using PivotTables
   
   v. Create PivotCharts

f. Managing Multiple Worksheets and Workbooks
   i. Work with Grouped Worksheets
   
   ii. 3-D References Across Worksheets
   
   iii. Link Workbooks and External References
   
   iv. Update Linked Workbooks

C. Computational Thinking
   a. Logical techniques for problem solving and program design
      i. Step-By-Step Algorithms
      
      ii. Flowcharts
      
      iii. Pseudocode

D. Programming
a. Introduction to programming using a visual development environment

E. Ethics
   a. Introduction to Ethical Behavior
      i. Reusable Code vs. Stealing Code

F. Computer Science Fundamentals
   a. Number Systems Used in Computing Sciences
   b. Operating Systems and File Management
      i. Windows
      ii. Linux
      iii. Mac OS
   c. Website Development
      i. HTML5
      ii. CSS
   d. Career Exploration within the Computer Science Field
   e. One-on-One Advising