

JEFFERSON COLLEGE

COURSE SYLLABUS

CIS125

Computer Concepts and Applications

3 Credit Hours

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CIS125 Computer Concepts and Applications

I. CATALOGUE DESCRIPTION

- A. Prerequisite and/or Corequisite: Reading Proficiency
- B. Credit hour award: 3 hours
- C. Description: Computer Concepts and Applications prepares students with the skills required to be a successful and responsible member of today's digitally connected society. Concepts include computer software, computer hardware, cloud computing, Internet use, networking, security, and privacy. Applications include current operating systems, word processors, spreadsheets, databases, and presentations. Students may find it necessary to work in the computer lab outside of class in order to complete the assignments. This course fulfills the computer literacy graduation requirement for degree-seeking students. (F,S,Su,O)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

Learning Outcome	Assessment measure(s)
Describe computers, information processing, networks, security, privacy, cloud computing, and the Internet	Quizzes Exams
Demonstrate effective use of computer hardware, operating systems, applications, privacy, cloud computing, and the Internet	Quizzes Exams Hands-on exercises
Create Word documents that include tables, source references, headers, footers, and graphics	Quizzes Exams Hands-on exercises
Create Excel spreadsheets and worksheets that include multiple calculations and formulas, conditional formatting, forecasting, graphics, and charts	Quizzes Exams Hands-on exercises
Create and modify Access databases and database objects that include queries, forms, and reports	Quizzes Exams Hands-on exercises
Create PowerPoint presentations that include multiple slides, graphics, bullets, picture enhancements, formats, speaker notes, and animation effects	Quizzes Exams Hands-on exercises Student Presentation
Create basic web pages	Quizzes Exams Hands-on exercises

III. OUTLINE OF TOPICS

- A. Computers and information processing
 - 1. Computers
 - 2. Functions of a computer
 - 3. Binary code representation of data
 - 4. Evolution of computer systems
 - 5. Types and characteristics of personal computers
 - 6. Personal computing devices
 - 7. Multiuser computers
 - 8. Safe and efficient technology use

- B. Windows 8
 - 1. File explorer and desktop app features for creating folders and saving files on a removable storage device
 - 2. Windows 8 operating system functions
 - 3. Windows Store apps
 - 4. Windows 8 features for signing out and turning off your computer
 - 5. User account management
 - 6. File explorer features for displaying libraries, folders, and files
 - 7. Program initialization and data files
 - 8. Windows 8 start screen personalization
 - 9. Files and folders - creating, renaming, and copying
 - 10. Files and folders - moving and deleting

- C. Office features
 - 1. File explorer features for downloading, extracting, and locating files and folders
 - 2. Start search features for locating and starting a Microsoft Office 2013 desktop app
 - 3. Office 2013 features for entering, editing, and checking the spelling of text
 - 4. Commands performed from a dialog box
 - 5. Folder creation, file naming, and saving
 - 6. Footer insertion, document properties, file printing, and desktop app closing
 - 7. Existing files - opening and saving with a new name
 - 8. Office sign-in and options for Microsoft Office desktop apps
 - 9. Commands performed from the Ribbon and Quick Access toolbar
 - 10. Office programs application of formats
 - 11. File compression and the Microsoft Office 2013 help system
 - 12. App installation for Office and Microsoft account creation

- D. The Internet
 - 1. Importance of the Internet
 - 2. Types of Internet connections
 - 3. Content on the Web
 - 4. Navigate the Web

5. Credibility of information found on the Web
 6. Different forms of synchronous online communication
 7. Different forms of asynchronous online communication
 8. Roles of social media in today's society
 9. Influence of social media on e-commerce
- E. Internet Explorer, Microsoft cloud computing, and OneNote
1. Internet Explorer
 2. Email
 3. Skype
 4. SkyDrive
 5. OneNote
- F. Hardware
1. Function of the central processing unit
 2. Parts of a system unit and motherboard
 3. Input devices
 4. Video and audio output devices
 5. Features of different types of printers
 6. Communication devices
 7. Storage devices
- G. Word document creation
1. New documents and text insertion
 2. Document and paragraph layout
 3. Text formatting
 4. Tab stops
 5. Graphic insertion and formatting
 6. Text boxes and shapes
 7. Smartart graphics
 8. Print features
 9. Research papers
 10. Document proofreading and correction
 11. Footnotes
 12. Citations and bibliographies
 13. Web page creation
- H. Word resumes and cover letters
1. Table creation
 2. Table text
 3. Table formatting
 4. PDF creation
 5. Building Blocks
 6. Cover letter creation
 7. Text reorganization
 8. Document templates

- I. System software
 - 1. Operating system purpose and functions
 - 2. Common stand-alone operating systems
 - 3. Specialized operating systems
 - 4. System utilities
 - 5. File backup
 - 6. File management
 - 7. File types and extensions

- J. Excel worksheets and column charts
 - 1. Excel workbook creation and navigation
 - 2. Data entry in a worksheet
 - 3. Formulas and the SUM function
 - 4. Merge & Center and cell styles
 - 5. Column charts and Sparklines
 - 6. Excel features for printing, displaying formulas, and closing
 - 7. Worksheet spell-check
 - 8. Formulas for mathematical operations
 - 9. Format editing

- K. Excel – inventory status and charts
 - 1. SUM, AVERAGE, MEDIAN, MIN, and MAX Functions
 - 2. Data moving, error message resolution, and text rotation
 - 3. COUNTIF, IF functions, and conditional formatting
 - 4. Date & time functions and pane freezing
 - 5. Excel features for creating, sorting, and filtering a table
 - 6. Large worksheet formats and print setup
 - 7. Pie charts
 - 8. Line charts
 - 9. Worksheet edits and chart updates
 - 10. Workbook management

- L. Networks, security, and privacy
 - 1. Computer networks
 - 2. Types of LANs and WANs
 - 3. Hardware used in both wired and wireless networks
 - 4. Software and protocols used in both wired and wireless networks
 - 5. Network protection
 - 6. Cybercrime
 - 7. Types of malware
 - 8. Computer security
 - 9. Safe computing practices

- M. PowerPoint
 - 1. New presentation creation

2. Presentation editing
3. Images in a presentation
4. Presentation views and print options
5. Presentation edits
6. Presentation formatting
7. Object insertion and formatting
8. Object formats
9. SmartArt graphic creation and formats
10. Slide sorter and presenter views

N. Access

1. Database design
2. New database table creation and field definition
3. Table structure with multiple tables
4. Table relationships
5. Queries, forms, and reports
6. Database saving and closing
7. Query creation in design view
8. Query creation from an existing query
9. Query criteria specification
10. Numeric criteria in a query
11. Compound criteria in a query
12. Calculated fields, statistics, and grouping in a query
13. Report creation from a query using a wizard

O. Applications

1. Types and uses of business productivity software
2. Home and Educational Programs
3. Media and Graphic Software
4. Software compatibility
5. Methods of obtaining software
6. Software Licenses and Registration Agreements
7. Cloud computing

P. Cloud computing with Google

1. Google Docs
2. Google Docs word processing documents
3. Google Docs sharing
4. Google Calendar
5. Google +
6. Google sites website creation

IV. METHOD(S) OF INSTRUCTION

A. Lecture

B. Hands-on exercises

V. REQUIRED TEXTBOOK(S)

None.

VI. REQUIRED MATERIALS

USB Flash Drive

VII. SUPPLEMENTAL REFERENCES

None

VIII. METHOD OF EVALUATION (basis for determining course grade)

A. Section quizzes

B. Hands-on exercises

C. Hands-on examinations

D. Student presentation

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Technology Center 101; phone 636-481-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College Website <http://www.jeffco.edu>).

XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.