COMP-080 – Computer Applications – Advanced Level

College Preparation and Upgrading

Effective Term & Year: Fall 2023
Course Outline Review Date: 2028-04-01

Program Area: Upgrading for Academic and Career Entry

Description:

Computer Applications – Advanced Level – COMP 080 develops skills and knowledge in computer technology with support for personal, scholastic, community, and employment endeavors. The focus is on word-processing, worksheets, and presentation applications within Microsoft Office 2016 & Office 365. Windows 10 operating system, file management, electronic mail, Internet browsing and the use of graphic images are integrated into course activities. Students may have little prior computer experience and/or wish to upgrade their skills to enter a higher level of computer studies with this course.

Program Information:

Skills developed will be useful in COMP 153 or any program at College of the Rockies.

Delivery Methods: Directed/Guided Studies, Online

Credit Type: ABE Credits

Credits: 3

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	20
Seminar/Tutorials	
Laboratory/Studio	70

Practicum/Field Experience	
Co-op/Work Experience	
Other	
Total	90

Course Requisites:

None

Flexible Assessment: No

Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see https://www.bctransferguide.ca/ or https://transferalberta.alberta.ca . For more transfer credit information, please visit https://www.cotr.bc.ca/Transfer

All requests for course transfer credit from institutions in British Columba or elsewhere should go to the College of the Rockies Enrolment Services office.

Textbook Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date, the following textbooks were in use:

Parsons, et al. *Illustrated Computer Concepts and Microsoft Office 365 & Office 2016.* Cengage Learning: Nelson Education Ltd. 2017.

Please see the instructor's syllabus or check COTR's online text calculator https://textbook.cotr.bc.ca/ for a complete list of the currently required textbooks.

Learning Outcomes:

The goals of computer studies at the advanced level are

- to provide students with a survey of the major applications of computers;

- to develop an understanding of computers and concepts to aid students' employment opportunities, personal productivity, and enjoyment; and
- to enable the student to acquire skills to contribute to and participate productively in society.

These learning outcomes come from the 2022-2023 edition of the ABE Articulation Handbook under Computer Studies: Advanced Level, located at
www.bctransferguide.ca/transfer-options/adult-basic-education/past-abe-guides/

1. Hardware

It is expected that learners will be able to:

- identify, name and describe basic components of a computer system unit:

- motherboard
- central processing unit (CPU)
- memory (RAM)
- peripheral connections (USB, firewire, HDMI, etc.)

Memory and Secondary Storage

It is expected that learners will be able to:

- identify, name and describe Secondary Storage Devices, including:

- hard drives (fixed and removable)
- USB devices (flash drives and USB hard drives)
- solid state drives
- memory cards (SD, SC)
- online storage (cloud storage)
- optical and magneto-optical storage devices (CD-ROM, DVD)

- recognize and use capacity descriptors (KB, MB, GB, TB)
- distinguish between and describe the function of RAM, ROM, and BIOS/UEFI

Input and Output

It is expected that learners will be able to:

- identify, name, describe, and distinguish among input and output devices (and associated software):

- keyboard, pointing devices, scanners
- video adapters and displays (LCD, touch screen)
- printers (various types)
- voice
- describe how various input and output devices can be used to assist people with

disabilities
- option: digital camera, cell phone, other devices

2. Operating a Computer

It is expected that learners will be able to:

- distinguish between System Software, Utility Software and Application Software and describe the purpose of an operating system
- differentiate among various commonly used operating systems
- employ operating system(s) to perform basic operations of disk and file management, including:

- assign meaningful folder names
- employ wildcard characters in file management
- organize files on storage devices and designate drives, folders, and files
- perform management functions to locate, list, display properties of, copy, rename, move, (un)delete folders and files
- describe drive formatting (sectors, tracks, index) and defragment a drive
- recognize variety of common program and data file types and their associated extension)

- describe the problem of computer malware (viruses and spyware) and methods to detect and remove them
- demonstrate care, maintenance, and protection of computer equipment
- demonstrate the ability to back up data
- option: identify workspace ergonomics conditions

3. Computers in Society

It is expected that learners will be able to:

- identify the effect of computers on their everyday lives (databases-subscription lists, ATMs, the Internet, computer record system, income tax)
- give examples of how computers are affecting career opportunities
- trace the history of computer technology and identify current trends
- state the purchasing considerations from the perspective of an informed consumer (warranty, service, licensing, needs assessment, market trends)
- provide examples of issues involving computers in society (protection of privacy, social networking sites, identify theft, phishing sites, spam, and copyright)
- discuss ethical and political implications of advancing technology (artificial intelligence, block chain technology, targeted advertising)

4. Word Processing

It is expected that learners will be able to:

- create a word processing document and save it to a specified location and directory

- select any amount of text and format the character attributes
- format the indentation, alignment and spacing of lines and paragraphs
- identify non-printing characters (space, tab, new line, new paragraph) as displayed on the screen
- move, copy, and delete text
- insert a page break and section break into a document
- insert, format, and manipulate a table
- use bulleted and numbered lists
- use footnotes/endnotes
- apply lines, shading and colour to a document
- use the find and the replace functions
- use the spell checker/thesaurus
- insert a graphic into a document
- set page margins
- use headers and footers (including page numbering, filename, and date codes) with multiple sections
- preview and print a document
- set page margins
- use headers and footers (including page numbering, filename, and date codes) with multiple sections
- preview and print a document
- recognize different document output devices
- recognize that different file formats originating from different word processors and versions may be incompatible, requiring file conversion routines
- save in a variety of appropriate formats
- work collaboratively on documents online

5. Spreadsheets

It is expected that learners will be able to:

- perform basic spreadsheet operations
- enter and format data (numbers, text, data series)
- create simple formulas (using basic operators and functions)
- copy or move data and/or formulas, utilizing absolute and relative cell addresses and ranges
- change cell characteristics (column widths, alignments, fonts, etc.)
- modify page layout (orientation, scaling grid lines)
- use formulas to predict outcomes
- create several kinds of charts based on spreadsheet data
- save in a variety of appropriate formats
- preview and print using various print options
- work collaboratively on spreadsheets online

6. Internet

It is expected that students will be able to:

- describe the basic structure and functioning of the internet and define current terminology (URL, ISP and WWW, http, https)
- describe the process of online commerce, including: ATM cards, online banking, online shopping, online auctions, and security issues
- describe the various options for computer connectivity (cable modems, XDSL, routers, wireless, 3G, 4G, 5G, satellite, LTE)
- send and receive e-mail (including attachments) using proper etiquette
- use a web browser to access and navigate through a web site
- use search engines to locate and bookmark information
- save text and graphical information from a web site
- recognize computer security problems associated with Internet use (spyware, viruses, spam, firewall)
- understand how the internet was developed and how it functions

Options are available upon instructor's discretion.

Course Topics:

- Basic Concepts
  - Getting Started with Windows 10 & Understanding File Management
  - Internet – Getting Started with Internet Explorer 11 and E-mail
- Microsoft Office 2016 and Word 2016
  - Getting Started with Microsoft Office
  - Working with Word to Create Documents
  - Working with Excel to Create Worksheets
  - Working with PowerPoint to Create Presentations

- Integrating Word and Excel
- Integrating Word, Excel, and PowerPoint

See instructor's syllabus for the detailed outline of weekly readings, activities, and assignments.

The outcomes of this course meet and are consistent with the outcomes prescribed for Computer Studies: Fundamental Level in the Adult Basic Education in British Columbia Colleges – An Articulation Handbook –
https://www.bctransferguide.ca/wp-content/uploads/2022/08/abeguide2223.pdf

Evaluation and Assessments

Assessment Type: Directed/Guided Studies

Assessment Type	% of Total Grade
Basic Concepts, Windows, Internet and Email	20%

Office and Word Exercises	25%
Excel Workbooks	20%
PowerPoint Presentations	20%
Integration Exercises and Final Project	15%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=95	94-90	89-85	84-80	79-75	74-70	69-65	64-60	59-55	54-50	<50

Pass requirements: None

Evaluation Notes: A grade of "D" grants credit, but may not be sufficient as a prerequisite for sequential courses.

Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a "0" on the exam.

Academic Policies:

College of the Rockies policies related to courses can be found at https://cotr.bc.ca/about-us/college-policies/ and include the following:

- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
- Policy 2.5.8 Academic Performance
- Policy 2.5.3 Grade Appeal
- Policy 2.4.9 Student Concerns Re Faculty

Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.