

Computer Studies Working Committee (CSWC) DRAFT Minutes
ABE Articulation March 17, 2022, 9:30 am – 4:00 pm in Zoom

In attendance: Becky Wayte (CU); Dennis Contois (NEC); Beverly Jones (UFV);
Matthew Forster (VCC); Kevin Lipsett (OC); Shelley Umlah (NLC);
Charles Hooge (CU); Andrea Maxie (SC); Jennifer Bennett (CC); Puja Gupta (CC)
Regrets: Julie Hawkins (YC)

Link to Zoom room for meeting.

<https://capu.zoom.us/j/2271589673>

1. 9:30
 - a. Introductions (Institutional Reports uploaded to Moodle but not shared in meeting)
 - b. **Approval of Agenda** – Approved, Motion (Dennis); Seconded (Kevin)
 - c. **Acceptance of CSWC 2021 Minutes** – were approved last April 2021
2. 10:30 - Updates to the ABE Articulation Handbook, CSWC Membership List
Articulate Learning Outcomes Revision for “Advanced” computer studies on Grid (see below).

	L.O. Revision	Course Rearticulation	2 nd Chance for Rearticulation
2019	Intermediate	Advanced	Provincial
2020	Fundamental and Provincial Computer Science	Intermediate	Advanced
2021	Provincial Computer Studies	Fundamental	Intermediate
2022	Advanced	Provincial Computer Studies	Fundamental
2023	Intermediate	Advanced	Provincial

- Group discussed and revised outcomes for Advanced Computer Studies. Discussion points included topic of repetition of LOs across courses.

Suggestion to revisit this discussion when Fundamental and Intermediate levels are reviewed.

- **Edits/additions/deletions to Advanced LOs are attached.**

3. Break: 11:20 – 11:35 am

4. 11:35 – Updated CSWG Member List info for the 2022/23 ABE Handbook and made edits to the BCCAT Transfer Guide spreadsheet

5. Re-Articulate Provincial courses (from last year where some reps may have had to take back to institutions to receive okay)

1. **Vancouver Community College (VCC) Provincial courses (COMP 0982; COMP 0984; COMP 0985; COMP 0986; COMP 0987)** presented by Matt. Motion to approve (Andrea); Seconded (Beverly).

2. **Okanagan College COSC 012** (Provincial Programming) presented by Kevin. Motion to approve (Shelley); Seconded (Becky). **COST 012** also presented by Kevin. Motion to approve (Beverly); Seconded (Andrea).

3. **University of the Fraser Valley (UFV) COMP 091** (Provincial-level Computer Studies; Graphics and Publishing) presented by Beverly. Based on addition of statement with reference to the ABE Handbook, Motion to approve (Jennifer); Seconded (Becky). **COMP 092** also presented by Beverly (Provincial-level Computer Studies; Computer Applications). Based on addition of statement with reference to the ABE Handbook, Motion to approve (Shelley); Seconded (Becky)

4. **Selkirk College CPST 60** (Provincial-level Computer Studies) presented by Andrea. Based on addition of statement with reference to the ABE Handbook, Motion to approve (Becky); Seconded (Kevin).

5. **Native Education College (NEC) CST 080** (Provincial-level) was confirmed to have been re-articulated in 2021.

6. **Capilano University (CU) BCMP 051** (Provincial Computer Studies); **BCMP 052** (Provincial Computer Science); **BCMP 053** (Provincial-level Online and Current Technologies) all presented by Becky. Fixed bullets on page three of both course outlines. Motion to approve (Kevin); Seconded (Shelley).

7. **Northern Lights College (NLC)** Provincial-level course will be re-articulated as a second chance in 2023.

8. **Camosun College (CC)** does not offer Provincial-level Computer Studies.

6. Second Chance for Rearticulation for Fundamental computers.

1. **Vancouver Community College (VCC) COMP 0311; COMP 0312** (Fundamental Level) presented by Matt. Motion to accept (Andrea); Seconded (Shelley).

- Discussion about best practice when referencing ABE Handbook, should specify year for accuracy in reflecting learning outcomes. Suggested wording: **These outcomes come from the 20XX/XX edition of the ABE Articulation Handbook located at bctransferguide.ca**

7. **Information Item** - If others are interested, here is a link to a [Draft ABE Provincial Computer Studies OER Textbook](#) that Don has been working on. It uses categories 1 and 8 from the provincial learning outcomes. Don expects to

have the final version complete by this summer. It will be used in the CapU BCMP 053 course. Don is using a Creative Commons copyright, so students (and anyone else for that matter) can use it at no charge. For more information contact Don @ dbentley@capilanou.ca

8. Wrap up – discussion around issues that are important or key to the group. i) Becky sent out link with how to self-enrol in KPU Moodle site where Institutional Updates can be viewed; ii) Discussed Fundamental course online delivery challenges and best practices. Reps noted lower enrollments, challenges with delivery. Initial in-person meetings to teach students how to use Teams was suggested; also sessions on getting over anxiety about online courses. Agreed in-person or blended format is ideal for fundamental level, and that there is an ongoing need for fundamental level for adult students.
9. Discussion of Chair position. Discussed and agreed that an Acting or Interim Chair is needed should previous years Chair and Co-Chair be unavailable for 2021 meeting follow-up and 2023 Chair position. Andrea interested in the position and will be teaching Computer Studies next year. Motion to Approve **Andrea Maxie in Chair position** (Becky); Seconded (Beverly).
10. 1:55 pm – Meeting adjourned

Changes to the Advanced Level Computer Studies Learning Outcomes for the 2022/23 ABE Articulation Handbook

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, Of Firewire, HDMI)

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. assign meaningful file and 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 a 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 to a CD or other media
- 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 systems, 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, identity 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 perform basic operations of word processing:

- 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, the alignment, and the 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
- 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 in an applied business case use a spreadsheet to predict outcomes based on specific parameters (mortgages, investments, financial forecasting and planning)
- create several kinds of charts based on spreadsheet data
- save in a variety of appropriate formats (.xls .pdf .htm)
- preview and print using various print options
- work collaboratively on spreadsheets online

6. Internet

It is expected that learners will be able to:

- describe the basic structure and functioning of the Internet and define current terminology (URL, ISP, WWW, http, https)
- describe the implementation of the process of online commerce, including ATM cards, online banking, online shopping, and 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
- describe how business is conducted on the Internet, including security issues
- recognize computer security problems associated with Internet use (spyware, viruses, spam, firewall)
- understanding how the Internet was developed and how it functions

Option

1. Databases

It is expected that learners will be able to:

- describe the structure of relational database: tables, records, fields, primary keys and foreign keys
- perform simple database procedures: design a form enter, edit, and format data examine, manipulate records in different views; delete and insert records; sort records in different ways design database tables and fields design, create, and print a report consisting of selected fields
- search and query a database for information based on specified parameters

1. Computer Programming

It is expected that learners will be able to:

- create simple programs in a programming language
- describe the purpose of compilers and/or interpreters
- create and make use of computer designs or algorithms
- write basic input, processing and output instructions

2. Keyboarding

It is expected that learners will be able to:

- significantly increase their typing speed
- demonstrate proper keyboarding techniques

3. Presentation Software

It is expected that the learners will be able to:

- create, manipulate and deliver a presentation

4. Graphics Applications

It is expected that learners will be able to:

- edit a digital photograph
- create and manipulate a graphic image (Paintbrush, Draw)
- differentiate between various bit-mapped and vector-based graphic file formats (BMP, JPG and PNG)