Computer Studies Working Committee

MINUTES

BRITISH COLUMBIA COUNCIL on ADMISSIONS AND TRANSFERS (BCCAT)

Institution/Location: Online, hosted by Selkirk College
https://selkirk.zoom.us/j/61527239987

Meeting Dates: March 2 & 3, 2023

Present – Day 1 & 2

Member Institution	Representative	Email
Camosun College	Jennifer Bennett (Day 2 only)	bennettj@camosun.bc.ca
Capilano University	Charles Hooge	chooge@capilanou.ca
Coast Mountain College	*No representative*	
College of New Caledonia	Dino Gigliotti	gigliottid1@cnc.bc.ca
College of the Rockies	Colleen Weatherhead	cweatherhead2@cotr.bc.ca
Douglas College	*No representative or courses on grid*	
Kwantlen Polytechnic University	*No representative or courses on grid*	
Langara College	*No representative or courses on grid*	
Native Education College	*No representative*	
Nicola Valley Institute of Technology	*No representative*	
Northern Lights College	Shelly Umlah	sumlah@nlc.bc.ca
North Island College	*No representative or courses on grid*	
Okanagan College	Kevin Lipsett	klipsett@okanagan.bc.ca
Selkirk College	Andrea Maxie	amaxie@selkirk.ca
Thompson Rivers University	*No representative or courses on grid (though some listed on website)*	
University of the Fraser Valley	*No representative*	
Vancouver Community College	*No representative*	
Vancouver Island University	Tom Leavitt (Day 1 only)	tom.leavitt@viu.ca
Yukon University	Julie Hawkins	jhawkins@yukonu.ca

1. **9:30 Call to order**

2. **Introductions/welcome**
   - Indigenous Greeting/Prayer
   - Institutional Greeting
   - New Members/Guests: None
   - Regrets: None

3. **Approve agenda and any additional items**
   a. Corrections to advanced outcome corrections from last year
   b. Add discussion of learning outcome alignment
   c. Approved (unanimous)

4. **Approve previous minutes of the articulation committee meeting of March 17, 2022**
   a. Approved (unanimous)

5. **Business arising from previous minutes**
   a. None

6. **Present institutional reports**
   a. Colleen (COTR): they teach a fundamental computer course. She would like to teach provincial level. They offer $5/week tutoring for any course. Online consistency is something they would like to work on.
   b. Kevin (OC): teach fundamentals and advanced computer courses. Trying to get provincial level going. It is a challenge to get busy students in for lectures.
   c. Julie (Yukon): Having trouble with low attendance for computer classes because an English and a math course there is now full-time. Have not offered comp 030 for several years. Tried the course online but it was not that successful. They struggle with tech challenges for students.
   d. Shelley (Northern Lights): they have 7 campuses. All 4 levels of computer courses are offered with continuous intake for 20 weeks. Retention and attendance is a challenge.
   e. Dino (New Caledonia): They have not offered any computer study courses for a few years but hope to revitalize it after some instructor retirements.
   f. Tom Leavitt (VIU): Currently offering provincial level online but the online course is synchronous and taught 4 days a week. Students buy a kit for building logic circuits. Instructor uses OBS with a camera on the circuit board for instruction. The course has been well subscribed. Currently we are working on trying to standardize the look and structure of online courses for consistency for students. VIU is operating with a severe budget shortfall. Most instructors have noticed a “pandemic gap”, not so much with content per se but student skills and attention spans are weak.
   g. Andrea (Selkirk): Budget struggles as well so not a lot of extras. Upgrading is their biggest offering at outpost centres. Selkirk is trying to re-focus on the in-class approach to teaching. This Spring, enrollment is up. They offer a study skills course as part of nursing pathways but they have no computer pathways. They offer a Computer Skills for Seniors course. They are currently trying to revitalize their int./adv. Computer courses with some revisions. They are finding online computer courses difficult.

7. Review articulation grid

a. Grid reviewed and updates applied

8. Re-articulate Advanced courses

a. **College of the Rockies COMP080**: Approved pending addition of link to articulation guide (unanimous)
b. **Northern Lights College CPST 040:** Approved pending addition of link to articulation guide (unanimous)
c. **Okanagan College COST 011:** Approved (unanimous)
d. **Selkirk College CPST 50:** Approved pending updates to learning outcomes to reflect 2022 updates (unanimous)
e. Capilano does not have an advanced outline to present this year but will submit at next year's articulation meeting.

9. 2nd chance re-articulation for Provincial courses

a. **Northern Lights College CPST 050:** Approved pending addition of link to articulation guide (unanimous)

10. Articulate new courses

a. **Yukon University COMP 050:** Approved pending clarification of learning outcomes (full outcomes are listed at end of document with a different list of condensed outcomes at the beginning) and link to articulation guide (unanimous)

11. Correct learning outcomes for Advanced computer studies

a. See Appendix A for corrections to the updated outcomes submitted last year

12. Revise learning outcomes for Intermediate computer studies

a. Discussion of alignment of outcomes across levels. Various points of view on value of repetition between fundamental and intermediate courses depending on how institutions deliver these courses. Good progress made on cleaning up and better organizing Intermediate outcomes.
b. See Appendix B for updates to the Intermediate computer studies learning outcomes

13. BCCAT report

a. Attendees joined the super meeting via Zoom to receive updates from BCCAT

14. Approve new articulation grid

a. Move: Kevin, Second: Jennifer, Approved (unanimous)

	L.O. Revision	**Course Rearticulation**	**2nd Chance for Rearticulation**
2023	Intermediate	Advanced	Provincial (Applications and Science)
2024	Fundamental	Intermediate	Advanced
2025	Provincial (Applications and Science)	Fundamental	Intermediate

2026	Advanced	Provincial (Applications and Science)	Fundamental
2027	Intermediate	Advanced	Provincial (Applications and Science)

15. Elect/re-elect chair and co-chair

a. Chair asked for someone to volunteer as co-chair. No volunteers as no one had capacity and/or interest. Suggested to ask again in September.

16. Any other business

a. **Missing many members/reps**
   i. Several institutions are not represented on this committee (though some because they do not offer computer studies). Approach steering with this issue.

b. **Earlier minutes—2019, 2020 (nothing posted before 2021)**
   i. A question from Dino about minutes from earlier years—nothing is posted on our Moodle site from before 2021. Is it possible to find these?

17. Next meeting:

Location: Likely online, though some interest in in-person.
Date: March 7 & 8, 2024

18. Adjourn

a. Move: Kevin, Second: Shelley; Approved (unanimous)

Appendix A: Corrections to Advanced learning outcomes

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...)

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
- 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:

- ~~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 a spreadsheet to predict outcomes based on specific parameters (mortgages, investments, financial forecasting and planning)~~
- use formulas to predict outcomes
- 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. ~~Work collaboratively on spreadsheets online~~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 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
- ~~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. 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)

Appendix A: Updates to Intermediate learning outcomes

Goal Statement

Computers are a part of daily life in personal, work and educational environments. The goal of an Intermediate Level computer course is to introduce adult learners to the use of the computer as a tool so that they become more confident and able to function more efficiently with a computer.

Core Skills

Students will be able to demonstrate the following learning outcomes:

A. Keyboarding

- use correct touch-typing techniques and procedures
- achieve an adjusted typing speed of 20 wpm

B. Introduction to Computers

- ~~demonstrate the ability to launch and terminate an application program~~
- ~~develop an appreciation of the evolution of computer technology~~ ~~and~~ give examples of the history of computers and range of applications in society
- describe commonly used computer terminology and acronyms
- describe the differences between hardware and software
- assess and modify workspace ergonomics
- ~~demonstrate the use of the features of a mouse, trackpad and other pointing devices~~
- ~~demonstrate the ability to operate a printer (power on, put on line/off line and load paper)~~

C. Operating System

- demonstrate use of basic operating system maintenance and management functions (e.g., task manager, start up applications, add/remove applications, system and driver updates)
- ~~describe the basic operations of an Operating System (launching applications, programs and managing system resources)~~
- demonstrate the ability to correctly name, ~~and~~ locate, and identify files and folders
- demonstrate the ability to perform basic file and folder operations ~~using the operating system~~ (e.g., copy, move, delete, restore ~~erase~~ and rename)

D. Word Processing

- create a new word processing document and save it ~~a document~~ to a specified location
- use templates to create documents
- retrieve a document from a specified location
- ~~edit a document, including cutting and pasting text~~
- print a document using advanced options
- ~~save a document to a specified location~~
- ~~retrieve a document from a specified location~~
- use tools, such as ~~a spell checker and~~ spelling and grammar, thesaurus, and search
- modify text using basic operational tools (e.g., copy, cut, paste)

- format text using basic text formatting tools (e.g., fonts, text treatments, and paragraph settings such as bullets, spacing, indents and tab stops)
- format a page using basic page layout properties (e.g., margins, orientation, size, columns, and breaks) ~~justification, boldfacing and line spacing)~~
- insert and modify objects and features (e.g., tables, pictures, shapes, headers, footers, and page numbers)
- ~~demonstrate the ability to use help features and tutorials~~
- ~~create headers, footers and page numbering~~
- ~~manipulate margins~~
- ~~create and edit tab stops, tables, columns, page and section breaks~~

E. Electronic Communications

- ~~browse and search the Internet~~
- perform a targeted Internet search
- evaluate online sources using basic techniques (e.g., identify author, publication date, citations/references, funding sources)
- send and receive email with file attachments
- recognize security problems associated with Internet (e.g., passwords and multi-factor identification, online shopping and banking, malware, phishing scams, suspicious file attachments)
- identify online privacy concerns (e.g., social media, digital fingerprint, sharing personal information, understanding disclosure and permanence of online information)
- demonstrate the ability to participate in an online course (e.g., download and upload files, complete online activities, use synchronous communication tools such as Zoom)

F. Options

- import information to a word processor from other sources ~~such as~~ (e.g., graphs, graphics, spreadsheets~~, databases~~ and the Internet)
- perform basic spreadsheet ~~and database~~ operations
- ~~prepare and deliver a presentation~~ create and deliver a slideshow or poster using presentation software
- transfer, manage, edit, and share digital photos using basic photo editing software
- ~~demonstrate the ability to participate in an online course~~
- ~~identify workspace ergonomics~~
- ~~identify software maintenance issues (software updates and patches, deleting browser cache and history files, defragmenting hard drives, backing up important files, etc~~