

SCIENCE DEPARTMENT COURSE OUTLINE – FALL 2022

CS 2020: Technology Tools for Teaching and Learning – 3 (1.5-0-3) 67.5 Hours for 15 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

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CALENDAR DESCRIPTION:

This course will provide education students with the basic skills for using the most common information technology tools currently applied in schools. The type of tools includes Internet tools, digital media processing, multimedia/hypermedia presentations, spreadsheets, and database. The course offers a number of advanced modules dealing with more complex topics in these areas plus additional tools such as those for editing digital video and sound

PREREQUISITE(S)/COREQUISITE: None

REQUIRED TEXT/RESOURCE MATERIALS:

- i) Teachers Discovering Computers: Integrating Technology in a Changing World (8th) by Gunter and Gunter, ISBN: 978-1-285-84543-2
- ii) Headphone or earphones with a USB or standard 3.5mm plug.
- iii) Students should have a USB drive that they can use as backup for their work

DELIVERY MODE(S):

This course includes 1.5-hours of lecture per week and a 3-hour lab per week

Lectures:	A2	Online	Monday 11:30 - 12:50
Labs:	L1	G111	Tuesday 14:30 – 17:20
	L2	G111	Friday 14:30 – 17:20

COURSE OBJECTIVES:

This course introduces students to:

- Common information technology tools including: internet tools, digital media processing, multimedia/hypermedia presentations, spreadsheets, and databases.
- Tools such as those for editing digital video and sound
- Integrating appropriate technology into school curriculum.

LEARNING OUTCOMES:

As a result of taking this course, students will gain the ability to:

- Use information technology including internet tools, digital media, multimedia/hypermedia presentations, spreadsheets, databases.
- Use tools for editing digital video and sound.
- Integrate technology into the school curriculum.

TRANSFERABILITY:

UA, UC, UL, AU, KUC, GMU.

***Warning:** Although we strive to make the transferability information in this document up-to-date and accurate, **the student has the final responsibility for ensuring the transferability of this course to Alberta Colleges and Universities.** Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at Alberta Transfer Guide main page <http://www.transferalberta.ca> or, if you do not want to navigate through few links, at <http://alis.alberta.ca/ps/tsp/ta/tbi/onlineSearch.html?SearchMode=S&step=2>

**** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

Your final grade will be determined in the following manner:

Lab Assignments	33%
Midterm Exam	29%
Final Exam	38%

GRADING CRITERIA: (The following criteria may be changed to suite the particular course/instructor)

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100		C+	2.3	67-69
A	4.0	85-89		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

Weeks	Topics
1	Introduction, Outline, Discussion and Expectations
2	Integrating Educational Technology into the Curriculum
3	Integrating Educational Technology into the Curriculum (cont.)
4	Communications, Networks, the Internet and the World Wide Web
5	Communications, Networks, the Internet and the World Wide Web
6	Software for Educators
7	Software for Educators (cont.)

8	Hardware for Educators
9	Hardware for Educators(cont.)
10	Midterm Exam
11	Technology, Digital Media, and Curriculum Integration
12	Technology, Digital Media, and Curriculum Integration (cont.)
13	Online Teaching Technologies
14	Evaluating Educational Technologies and Integration Strategies
15	Security Issues and Ethics in Education
16	Final Exam

During the scheduled labs, students will be introduced to various practical ways to integrate technology into the curriculum. The labs will include the use of internet tools, digital media, multimedia/ hypermedia presentations, spreadsheets, databases, tools for editing digital video and sound, and other appropriate educational technologies.

STUDENT RESPONSIBILITIES:

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at <https://www.nwpolytech.ca/programs/calendar/> or the Student Rights and Responsibilities policy which can be found at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

**Note: all Academic and Administrative policies are available on the same page.