

## 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.

**INSTRUCTOR:** Franco Carlacchi  
**OFFICE:** C-422  
**OFFICE HOURS:** TBA

**PHONE:** 780-539-2091  
**E-MAIL:** fcarlacci@gprc.ab.ca

**INSTRUCTOR:** Mohamed Elgamal  
**OFFICE:** C-427  
**OFFICE HOURS:** TBA

**PHONE:** 780-539-2976  
**E-MAIL:** melgamal@gprc.ab.ca

**INSTRUCTOR:** Ubaid Abbasi  
**OFFICE:** TBA  
**OFFICE HOURS:** TBA

**PHONE:** 438-9236182  
**E-MAIL:** UAbbasi@gprc.ab.ca

### **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:	<b>A2</b>	<b>Online</b>	<b>Monday 11:30 - 12:50</b>
Labs:	<b>L1</b>	<b>G111</b>	<b>Tuesday 14:30 – 17:20</b>
	<b>L2</b>	<b>G111</b>	<b>Friday 14:30 – 17:20</b>

### **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:

<b>Lab Assignments</b>	<b>33%</b>
<b>Midterm Exam</b>	<b>29%</b>
<b>Final Exam</b>	<b>38%</b>

## **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-**.

<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>		<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>
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:**

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

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

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.