

## Department Of Science

### COURSE OUTLINE – CS2210 (Fall 2022)

#### Introduction to PC Hardware and Systems Configuration – 3 (2-0-2) UT

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:** Dr. Mohamed Elgamal

**OFFICE:** C-427

**OFFICE HOURS:** Thursday 12:30-13:20, by Appointment

**PHONE:** 780-539-2976

**E-MAIL:** melgamal@nwpolytech.ca

#### CALENDAR DESCRIPTION:

This course introduces the fundamentals of PC hardware. Students will open up machines, install devices such as hard drives, I/O cards, video cards as well as memory, CD/DVD ROM drives, install operating systems, explore a variety of different software packages, attach communications equipment and supporting software. Topics include system hardware (e.g., motherboards, processors, storage devices, memory), device drivers, operating systems (e.g., Windows, Linux), troubleshooting and maintenance of LAN (Local Area Network)-based PC, etc.

**PREREQUISITE(S)/COREQUISITE:** None

#### REQUIRED TEXT/RESOURCE MATERIALS:

The required textbook is **CompTIA A+ Guide to IT technical Support 11th Edition**, Jean Andrews, Joy Dark, Nicholas Pierce.

Resources will also be available on BrightSpace.

**DELIVERY MODE:** In-Person, On-Campus

This course includes 2-hours of lecture per week and a 2-hour lab per week

<b>Lectures:</b>	H211	F	8:30 – 10:20
<b>Labs: L1</b>	G110	F	10:30 – 12:20
<b>Labs: L2</b>	G110	TBD	TBD

## COURSE OBJECTIVES:

This course is intended to prepare students to support personal computers (PC). Hardware and software configuration are covered so that you can configure and maintain LAN based PCs. Topics to be covered include system hardware (motherboards, peripheral ports, chipsets, processors, storage devices and memory), device drivers, operating systems (Windows, Linux/Unix, and DOS), troubleshooting and maintenance of PC, a review/overview of networks and data communications, and PC peripherals. The labs with this course help you learn hand-on experiences about how to build a computer from parts, how to configure a PC, support PC on LAN, etc.

## LEARNING OUTCOMES:

- Students will be able to identify the major components of a computer system
- Students will be able to assemble and disassemble a computer system
- Students will be able to install various operating systems on a computer system
- Student will be able to connect their computer system to a computer network

## TRANSFERABILITY:

Athabasca University

King's University College

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <http://www.transferalberta.ca>.

**\*\* 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	25%
Quizzes	10%
Midterm Test I	15%
Midterm Test II	15%
Final Exam	35%

Students are responsible for all lecture material, labs and readings. If midterms are missed due to illness the weight will be put on the final. If the final is missed due to illness it will be deferred. A doctor's note or a phone message or email will be required in both cases.

For the lab assignments, students will be asked to create a website that documents all the activities that they performed for the labs. Marks for the lab assignments will be divided equally between the webpage that documents your completed task and the task itself. It is the student's responsibility to adhere to

ALL requirements of the assignments. Once an assignment has been marked and a grade assigned, no further change/corrections to the webpage will be entertained.

Students are expected to arrive on time for both class and lab. If students are consistently late, they may be barred from attending future classes

Assignments MUST be submitted on their due date. Late assignments will NOT be accepted and will receive a grade of 0.

**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:**

Week 1	Introduction
Week 2	Chapters 1
Week 3	Chapters 2
Week 4	Chapters 3
Week 5	No Classes On Friday Sept 30
Week 6	Chapter 4
Week 7	Fall Break, No Classes
Week 8	Midterm 1
Week 9	Chapters 5
Week 10	Chapters 6
Week 11	No class on Friday Nov 11
Week 12	Chapter 7
Week 13	Chapter 8
Week 14	Midterm #2
Week 15	Chapter 9

**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.