

**Effective:** Spring 2023

## COURSE INFORMATION

**Course Title:** Introduction to Computer Hardware

**Course Number:** CSCI 130

**Credits:** 3

**Total Weeks:** 14 (Fall, Spring)  
12 (Summer)

**Total Hours:**

**Course Level:** ☒ First Year ☐ Second Year  
☐ New ☐ Revised Course  
☐ Replacement Course

**Department:** Computer Sci

**Department Head:** M. O'Connor

**Former Course Code(s) and Number(s) (if applicable):** N/A

**Pre-requisites (If there are no prerequisites, type NONE):** None

**Co-requisite Statement (List if applicable or type NONE):** None

**Precluded Courses:** None

## COURSE DESCRIPTION

Students will learn basic computer hardware concepts, which includes general architecture, CPU, MB, RAM, PSU, GPU, HDD, SSD etc. The students should be able to understand the computer hardware specification, configurations, and compatibility. They also should be able to perform basic assembly and issue diagnose.

## LEARNING OUTCOMES

Upon successful completion of the course, students will be able to:

- Describe the general architecture of a computer system.
- Recognize the hardware components of a computer system.
- Explain the functions of the hardware components
- Configure hardware settings and diagnose basic hardware problems.

## INSTRUCTION AND GRADING

Instructional (Contact) Hours:

Type	Duration
Lecture	39
Seminars/Tutorials	
Laboratory	
Field Experience	
Other ( <i>specify</i> ):	
Total	39

**Grading System:** Letter Grades ☒ Percentage ☐ Pass/Fail ☐ Satisfactory/Unsatisfactory ☐ Other ☐

**Specify passing grade:** 50%

**Evaluation Activities and Weighting** (total must equal 100%)

Assignments: 15% <i>Specify number of, variety, and nature of assignments:</i> 3 Assignments	Lab Work: 20%	Participation: 15% <i>Specify nature of participation:</i> In class performance and attendance	Project: %
Quizzes/Test: %	Midterm Exam: 20 %	Final Exam: 30%	Other: %

### TEXT(S) AND RESOURCE MATERIALS

Provide a full reference for each text and/or resource material and include whether required/not required.

Required textbook: A+ Guide to IT Technical Support, Jean Andrews, Cengage 2022

### COURSE TOPICS

List topics and sequence covered.

Week	Date	Topics	Assigned or Due work
1		Introduction	
2		Taking a computer apart and assembly	Lab 1
3		All about CPU	Lab 2
4		All about Motherboard / BIOS / UEFI	Lab 3 / Quiz 1
5		Memory	Lab 4
6		Hard drives / Cooling system	Lab 5
7		Midterm Exam	
8		Graphic cards	Lab 6
9		Power supply units	Lab 7
10		Network foundation	Lab 8 / Quiz 2
11		Computer Peripherals	Lab 9
12		Issue diagnoses and problem solving	Lab 10
13		Review	
14		Final Exam	

### NOTES

1. Students are required to follow all College policies. Policies are available on the website at: [Coquitlam College Policies](#)
2. To find out how this course transfers, visit the BC Transfer Guide at: [bctransferguide.ca](#)
3. Weekly course topics and textbooks may vary.