

Effective: Fall 2024

### COURSE INFORMATION

**Course Title:** Software Packages and Programming

**Course Number:** CSCI 100

**Credits:** 3

**Total Weeks:** 14 (Fall, Spring)  
12 (Summer)      **Total Hours:** 39

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

**Department:** Computer Science    **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):**

- PREC 12 or MATH 100 or MATH 120 recommended

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

**Precluded Courses:** N/A

### COURSE DESCRIPTION

This is an introductory course in computer science. The course provides students with an overview of the fundamentals of computers, computer applications, the Internet and the World Wide Web. The use of software packages is emphasized, focusing on word processing, spreadsheet applications, database management and graphical presentation. Students will be introduced to computer programming using a high-level programming language such as Python.

### LEARNING OUTCOMES

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

- Describe some key points in computer history.
- Describe how digital technology plays a critical role in modern life.
- List the major types of computers and their principal uses.
- Discuss the social and ethical impact of information technology.
- Describe hardware components and their functionality.
- Discuss and assess different types of memory.
- Distinguish between different types of software and discuss their uses.
- Demonstrate the ability to use common productivity software.
- Discuss Internet technology.
- Demonstrate an understanding of the WWW.
- Construct a webpage using HTML5 and CSS.
- Develop algorithms to solve a problem.
- Demonstrate knowledge of programming languages and their purpose.
- Develop simple software programs.

**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%)

Homework Assignments: 7%	Computer Assignments: 3% <i>Database, Spreadsheet, Web Page</i>	
Quizzes: 20%	Midterm Exam: 35%	Final Exam: 35%

**TEXT(S) AND RESOURCE MATERIALS**

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

Technology In Action Complete, **18/E**

Alan Evans, Kendall Martin, Mary Anne Poatsy

ISBN-13: 9780138043346

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**COURSE TOPICS**

List topics and sequence covered.

Week	Topic
Week 1	Hardware Basics
Week 2	Application Software
Week 3	Application Software - Excel Spreadsheet
Week 4	Database Systems
Week 5	Application Software - Relational Database
Week 6	System Software

Week 7	<b>Midterm</b>
Week 8	The Internet and the WWW
Week 9	Web Development (HTML5 and CSS)
Week 10	Introduction to Software Development
Week 11	Introduction to Programming (Python)
Week 12	Introduction to Programming (Python)
Week 13	Introduction to Programming (Python)
Week 14	<b>Final Exam</b>

### 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](http://bctransferguide.ca)

**Last Reviewed:** July 2024

**Last Revised:** November 2023