

Last Revised: May 2014

### COURSE INFORMATION

**Course Title:** Event-Driven Programming with Visual Basic

**Course Number:** CSCI 110

**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

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

**Precluded Courses:** N/A

### COURSE DESCRIPTION

This course is an introduction to event-driven programming using the Visual Basic language. Students will be introduced to the principles of problem solving and algorithm design. By the end of the course, students will be able to design, develop, test and document well-structured programs.

### LEARNING OUTCOMES

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

- Use fundamental concepts of event-driven programming.
- Design graphical user interfaces using Visual Basic.
- Analyze problem specifications.
- Define algorithms to solve problems.
- Evaluate conditions using relational and logical operators.
- Develop Visual Basic programs using standard programming methodologies.
- Trace the execution of Visual Basic programs.
- Describe and apply Visual Basic debugging techniques.
- Develop Visual Basic programs using procedures, functions, arrays and files.
- Implement fundamental algorithms such as linear and binary search, and bubble sort.

**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: % <i>Specify number of, variety, and nature of assignments:</i>	Lab Work: 5%	Participation: 5% <i>Specify nature of participation:</i>	Project: % <i>Specify nature of project:</i>
Quizzes/Test: 20%	Midterm Exam: 30%	Final Exam: 40%	Other: % <i>Specify:</i>

**TEXT(S) AND RESOURCE MATERIALS**

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

An Introduction to Programming Using Visual Basic 2012, Ninth Edition, David I. Schneider. Prentice-Hall, 2014.

eText: ISBN-13 9780133429046, ISBN-10 0133429040

Print: ISBN-10 0-13-337850-0, ISBN-13 978-0-13-337850-4

**COURSE TOPICS**

List topics and sequence covered.

Week	Topic	Chapter
Week 1	Introduction to Computers and Problem Solving	1
Week 2	Visual Basic Controls and Events	2
Week 3	Variables, Input and Output	3
Week 4	Decisions - If blocks	4
Week 5	Decisions - Select Case Blocks	4
Week 6	General Procedures - Function Procedures	5

Week 7	General Procedures - Sub Procedures <b>MIDTERM EXAM</b>	5
Week 8	Repetition - Do Loops, For... Next Loops	6
Week 9	Repetition - For... Next Loops	6
Week 10	Arrays	7
Week 11	Text Files	8
Week 12	Programming Project	
Week 13	Review	
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](#)