



# THE UNIVERSITY COLLEGE OF THE CARIBOO

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## Course Outline

### COMP 113 & COMP 152 (3 Credits) Computer Programming I (3,1,1) Fall 2004

| Sections    | Instructor      | Office / Phone     | E-mail                  |
|-------------|-----------------|--------------------|-------------------------|
| 113-01 & 02 | Wayne Babinchuk | OM 2831 / 828-5077 | babinchuk@cariboo.bc.ca |
| 113-03      | Yanni Giftakis  | OM 2842 / 371-5933 | giftakis@cariboo.bc.ca  |
| 152-01      | Oscar Meruvia   | OM 2852 / 828-5153 | omeruvia@cariboo.bc.ca  |

### Course Description

An introduction to programming, and program design, using the JAVA programming language. Since this is a programming course, the requirements placed on the student are greater than just using the computer as a tool. The student must employ problem-solving skills to evaluate and solve "word problems" and then compose software using basic programming language constructs to implement the solutions.

(Note: Course credit is given for only one of COMP 113 or COMP 152.)

### Educational Objectives/Outcomes

1. To familiarise students with fundamental programming aspects through the JAVA programming language.
2. To develop sound techniques on how to design, develop, and document well-structured programs using software-engineering principles.
3. To teach problem solving skills and provide a foundation for further programming courses.

### Prerequisites

A grade of C+ or better in Math 12 (Math 060), or C+ or better in Physics 12, or instructor's written consent.

### Required Texts/Materials

1. Textbook: Savitch, Walter, JAVA: An Introduction to Computer Science & Programming, Third Edition, Pearson Education Inc. (ISBN 0-13-101378-5)
2. At least one (1) diskette (standard 3.5" high density)
3. UCC Lab/Network Computer Account (*optional - useful for storing files on local server*)
4. Standard 8.5 x 11 (letter-size) laser/inkjet printer paper (*for printing in UCC computer labs*)

### Other Available/Recommended Resources

- Java 2 Software Development Kit (SDK) – see Page viii of text, and CD with text
- JCreator – available from internet
- UCC lab network folder: h:\comp113

### Student Evaluation

|                              |                            |                  |
|------------------------------|----------------------------|------------------|
| Assignments & Labwork – 10 % | Midterm Exams I & II – 40% | Final Exam – 50% |
|------------------------------|----------------------------|------------------|

Midterm Examinations: Friday, October 22, 2004 and Monday, November 22, 2004

Final Examinations: December 6<sup>th</sup> to 18<sup>th</sup> inclusive – students expected to be available for ENTIRE period

### Course Notes

#### • Successfully Passing the Course

The student must achieve a passing grade in both supervised (term tests, and final) and submitted work (assignments) to pass the course.

- **Attendance**

Consistent attendance is very important for success in this course, for lectures and labs. Material presented in lecture highlights important concepts, while lab exercises and submissions demonstrate practical applications of these concepts. Further, there is much 'hands-on' programming involved, requiring the student to be vigilant in completing assignments and reviewing important topics.

**Please note the following from the UCC Policy Manual:**

- the student is expected to regularly attend lectures, laboratories, tutorial and seminar sessions for which they are enrolled. Admission to a lecture, laboratory, tutorial or seminar may be refused by the instructor for lateness, class misconduct or failure to complete required work.
- unless otherwise stated, the student will be expected to attend a minimum of 90% of class or lab time allocated to each course.

- **Late Homework Policy**

Assignments and Labs are due at the **BEGINNING** of the class or lab of the date indicated. Homework that is late receives a mark of zero (0).

- **Class Conduct**

During lectures and labs, the student is expected to act in a professional and respectful manner towards other students and instructors; otherwise, the students may be asked to leave.

During lab/seminar times, the student is expected to work on course work only.

- **Academic Honesty Policy - Policy ED-5-0 ([www.cariboo.bc.ca/policy/educ/index.html](http://www.cariboo.bc.ca/policy/educ/index.html))**

All work submitted must be your own.

UCC's academic honesty policy is strictly followed in this course. Copied work on assignments or tests will result in a reduction in the course mark, up to possible automatic grade of "F" for the course. The student is expected to be familiar with these policies--see the UCC website for a revised description of academic honesty. **If help is received on an assignment, the safest course of action is to throw away any written materials obtained from other sources (friends) and rewrite the code;** otherwise it is highly likely that both you and your source (friend) will be accused of violating the honesty policy.

- **Lab Preparation**

Lab readings and assignments will be posted on H: drive at least 2 days in advance. You will be required to study certain parts of your notes and the text **BEFORE ARRIVING AT THE LAB**, so that you will be prepared to do the assignment once you arrive.

## Course Schedule

- 3 Lectures per week (50 Minutes each) and 1 Lab session per week (110 minutes each)

## Syllabus

| Unit   | Duration  | Chapter   |
|--|-----------|-----------|
| 1. Introduction to Computers and JAVA Objects .....    | 2.0 weeks | Chapter 1 |
| 2. Primitive Types, Strings, and Interactive I/O ..... | 2.0 weeks | Chapter 2 |
| 3. Flow of Control.....                                | 2.0 weeks | Chapter 3 |
| 4. Defining Classes and Methods .....                  | 2.0 weeks | Chapter 4 |
| 5. More about Objects and Methods.....                 | 2.0 weeks | Chapter 5 |
| 6. One Dimensional Arrays .....                        | 2.0 weeks | Chapter 6 |
| 7. Other (Midterm and review) .....                    | 1.0 week  |           |

## Use of Technology

JCreator (free download from internet), Sun Microsystems' Java SDK (free on CD on back page of text)