CSC-108 Introduction to Programming

Three Rivers Community College

Syllabus

Spring 2012

Course Information:

- Title: CSC-K108 Introduction to Programming
- Time: Lecture: TR 9:30 – 10:45, Lab: T 11 – 12:40
- Room: Lecture: E216, Lab: E119

Instructor Information:

- Instructor: Joe Johnson
- Telephone: 860-823-2818 (Office), 860-805-3670 (Cell)
- Email: jjohnson@trcc.commnet.edu
- Office hours: Tuesday: 1:00 – 4:00
- Office Location: 205W

Learning Outcomes:

- After successful completion of this course, the student should have an understanding of: general approaches to problem solving, essential elements of a program, program structure including sequence, branching, and looping structures, elementary data structures (variables and arrays), and basic elements of C++ syntax.

Texts:

- Frank L. Friedman, Elliot B. Koffman, <u>Problem Solving, Abstraction, and Design Using C++ (6th Edition),</u> Pearson Publishing, ISBN 0558828728 (Required)

Course Requirements:

- Regular programming assignments based on the topics covered in class (weekly or biweekly, depending on the topic) (40%)
  - It is extremely important you stay current with the material as it is cumulative – it builds on itself. Homework MUST be handed in ON TIME AT THE BEGINNING OF CLASS (not after the lab of the due date). No late homework will be accepted.
  - Homework will be generally assigned each Tuesday, due one week later on the following Tuesday.
  - Do not procrastinate. My strong recommendation is try the homework BEFORE class on Thursday. If you experience problems, ask questions during lab (immediately after class) or during lecture on Thursday.
  - Depending on the difficulty level of the assignment, we will review the solutions to the problems in class after they're due.
- Midterm Exam (20%) - most likely, will be conducted online (stay tuned)
- Final Exam (Cumulative) (30%) - most likely, will be conducted online (stay tuned)
- Participation in classroom/online discussions (10%)

Schedule

Week	Date	Topic	Reading Assignment	Programming Assignment
1	01/19, 01/24, 01/26	Introduction to Computers, Problem Solving, and Programming	Chapter 1	
2	01/31, 02/02	Overview of C++	Chapter 2	
3	02/07, 02/09	Overview of C++ (contd.)	Chapter 2	Assignment 01 due
4	02/14, 02/16	Top Down Design with Functions	Chapter 3	Assignment 02 due
5	02/21, 02/23	Top Down Design with Functions (contd.)	Chapter 3	Assignment 03 due
6	02/28, 03/01	Selection Statements: if and switch Statements	Chapter 4	Assignment 04 due

7	03/06, 03/08	Repetition and Loop Statements	Chapter 5	Assignment 05 due
8	03/13, 03/15	Repetition and Loop Statements (contd.) **Midterm Exam – 03/15**	Chapter 5	Assignment 06 due
	03/20, 03/22	************SPRING BREAK*************		
9	03/27, 03/29	Modular Programming	Chapter 6	Assignment 07 due
10	04/03, 04/05	Modular Programming (contd.)	Chapter 6	Assignment 08 due
11	04/10, 04/12	Modular Programming (contd.)	Chapter 6	Assignment 09 due
12	04/17, 04/19	Simple Data Types, Files and Streams	Chapter 7, 8	Assignment 10 due
13	04/24, 04/26	Data Structures - Arrays	Chapter 9	Assignment 11 due
14	05/01, 05/03	Data Structures - Arrays	Chapter 9	Assignment 12 due
15	05/08, 05/10	Data Structures – Trees, Hash Tables		Assignment 13 due
16	05/15	**Final Exam – 05/15**		

Academic Integrity

- Three Rivers' catalog defines various forms of academic dishonesty and procedures for responding to them. All forms are violations of the trust between students and teachers. Students should familiarize themselves with the penalties for plagiarism and other forms of cheating.