

**THREE RIVERS COMMUNITY COLLEGE  
COURSE OUTLINE**

---

Intro to Programming  
Prof. George Volkov  
860-885-2384

Office: C 258

CSC K108  
Fall 2010  
gvolkov@trcc.commnet.edu

**Course Description:** This course presents a broad introduction to computer science including computer design, programming, information processing and algorithmic problem solving. It is intended as a foundation for beginning computer science students and others seeking to use computers as a tool in business, engineering, science and other disciplines. In addition, this course provides an introduction to C++, a high level computer programming language. The student will learn to design, develop and implement programs to solve various data processing problems. Topics covered include control structures, functions and parameter passing, file I/O, and an introduction to arrays and structures. In the lab, the student will use the computer to create and run programs to solve problems discussed in the lecture portion. Three lecture hours, one two-hour lab.

**Text:** Custom TRCC Edition – Problem Solving, Abstraction, and Design Using C++, by Friedman and Koffman, extracted from the 6<sup>th</sup> Edition of the book with the same title, Published by Pearson, ISBN 978-0-13-607947-7

**Prerequisite:** Familiarity with Microsoft Windows operating system and basic word processing and MAT\* K095 or acceptable math placement score.

---

TOPICS/CONTENT

Week 1:	Ch. 0 – Computer science as a Career Path Ch. 1 – Introduction to Computers
Week 2:	Ch. 1 – Introduction to Problem Solving and Programming
Week 3:	Ch. 2 – Overview of C++
Week 4:	Ch. 2 – More on C++ Fundamentals
Week 5:	Ch. 3 – Top Level Design with Functions (and Classes)
Week 6:	Ch. 4 – Selection Structures ( <b>if</b> and <b>switch</b> statements)
Week 7:	Ch. 5 – Repetition and Loop Statements
Week 8:	Midterm Exam
Week 9:	Ch. 5 – More on Loops
Week 10:	Ch. 6 – Modular Programming
Week 11:	Ch. 7 – Simple Data Types
Week 12:	Ch. 8 – Streams and Files
Week 13:	Ch. 9 – Introduction to Simple Data Structures: Arrays and <b>struct</b>
Week 14:	Course Review
Week 15:	Final Exam