

Kishwaukee College Schedule

CIS 150 - 5002

C++ Programming I

Tentative Weekly Schedule

Please note that this schedule and the topics covered are likely to change. Changes will be announced in class. If you are not able to attend class, it is your responsibility to find out what was covered. A more detailed schedule is provided on the course website. Assignment descriptions and due dates will also be posted on the course web site.

Week Date Topics

1	1/17	Overview of course and introduction to programming (Chapter 1) <ul style="list-style-type: none"> • School closed for MLK birthday observance on 1/16/17 • syllabus • C++ compilers, MSDNAA downloads • intro to zybooks.com • writing a simple program, using Visual Studio • program structure, basic input and output, comments, errors • basic programming concepts
2	1/24	Variables, expressions, and assignment statements (Chapters 1 and 2) <ul style="list-style-type: none"> • identifiers, variables, and constants • assignment statements and arithmetic expressions • data types in C++ • the binary number system • output formatting • Chapter 1 challenge activities due • Chapter 2 challenge activities due • In-class lab: Input, output, expressions, calculations
3	1/31	More variables and basics (Chapter 3) <ul style="list-style-type: none"> • characters and strings • overflow • number types and unsigned numbers • type conversions • math functions • random numbers • debugging • style guidelines • Chapter 3 challenge activities due • Program due: Input, output, calculations
4	2/7	Selection (Chapter 4) <ul style="list-style-type: none"> • the Boolean (bool) data type

		<ul style="list-style-type: none"> • logical operators • relational operators • using "if" and "if/else" selection statements • using the "switch" selection statement • the conditional (?) operator • Chapter 4 challenge activities due • In-class lab: Selection, calculation, output formatting
5	2/14	<p>Repetition (Chapter 5)</p> <ul style="list-style-type: none"> • using the "while" statement • using the "do/while" statement • using the "for" statement • nested loops • increment and decrement operators • the "break" and "continue" statements • loop counters and sentinel values • accumulators • Chapter 5 challenge activities due • In-class lab: Repetition, input validation • Program due: Selection, output formatting
6	2/21	<p>Functions (Chapter 6)</p> <ul style="list-style-type: none"> • breaking a program into simpler, modular pieces • creating and using simple functions • declaring and defining functions • calling functions • passing values to functions • returning values from functions • how functions work • In-class lab: Functions, input validation • Program due: Repetition
7	2/28	<p>Functions continued (Chapter 6)</p> <ul style="list-style-type: none"> • common errors in functions • passing references to functions • variable scope and lifetime in functions • default parameter values • overloading functions • unit testing for functions • Chapter 6 challenge activities due • Program due: Functions, input validation
8	3/7	<p>Application of concepts so far and Midterm exam</p> <ul style="list-style-type: none"> • In-class demonstration of concepts covered so far • Midterm exam #1: input, output, variables, calculations, selection, repetition • Program due: Functions