



IMPERIAL VALLEY COLLEGE

## Programming in C++ CIS 210

### Basic Course Information

Semester:	<b>Fall</b>	Instructor Name:	<b>Walid Ghanim</b>
Course Title & #:	<b>CIS 210</b>	Email:	<b>Walid.Ghanim@imperial.edu</b>
CRN #:	<b>20183</b>	Webpage:	<b><a href="https://www.imperial.edu/courses-and-programs/divisions/economic-and-workforce-development/business-department/computer-information-technology/">https://www.imperial.edu/courses-and-programs/divisions/economic-and-workforce-development/business-department/computer-information-technology/</a></b>
Classroom:	<b>TBA</b>	Office #:	<b>802B</b>
Class Dates:	<b>8/16/21-12/8/21</b>	Office Hours:	<b>TBA</b>
Class Days:	<b>Online</b>	Office Phone #:	<b>760-355-6428</b>
Class Times:	<b>Online</b>	Emergency Contact:	<b>760-355-6126</b>
Units:	<b>3</b>	Class Format:	<b>Virtual</b>

### Course Description

A course in programming using C++. Syntax of the language will be emphasized. Operating systems, comparative programming languages, data structures, graphics, numerical analysis, programming methodology, and scientific and business applications will also be covered.

### Course Prerequisite(s) and/or Corequisite(s)

*None*

### Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Communicate ideas and solutions to problems in writing. (ILO1, ILO2, ILO3)
2. Compose and create programming algorithms with correct computer programming instructions, syntax, style, and format. (ILO1, ILO2, ILO3)
3. Demonstrate personal responsibility by attending and completing in full the complete midterm and final examination.

## Course Objectives

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

- Recognize variable types.
- Use various types of constants.
- Develop applications using relational operators and decision-making statements.
- Create applications using data files for input.
- Demonstrate looping structure algorithms.
- Manipulate data in arrays.
- Use math functions and user-defined functions.
- Understand functions, strings, classes, objects, sequential access files and arrays.

## Textbooks & Other Resources or Links

*An Introduction to Programming with C ++* eighth edition. ISBN: 9781285860114 Author: Diane Zak

## Course Requirements and Instructional Methods

The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

### Course Grading Based on Course Objectives

Chapter Tests 20%

Projects 20%

Discussion Boards 10%

Midterm 25%

Final Exam 25%

### Course Grading Scale

90-100% = A

80-89% = B

70-79% = C

60-69% = D

0-59% = F

## Course Policies

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be



desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.

- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absence exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.
- Plagiarism is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question. Anyone caught cheating will receive a zero (0) on the exam or assignment and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct.

### Work-based Learning

Work-based learning (WBL) allows students to apply classroom content in professional settings while gaining real-world experiences. These opportunities will provide you with a deeper, more engaging, and relevant learning environment. This semester, I will be offering the following WBL activities in order to provide you with the opportunity to explore career options in Computer Information Systems.

WBL Activity Name	WBL Activity Description
WBL Activity 1: Guest Speaker	Programming Staff Member, IVC Information Technology Department. Presentation on programming in the Workplace. Q & A session.

Some examples of WBL assignments are job shadowing, informational interviews, guest speakers and workplace simulations.

### Other Course Information

- Learning Labs: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Learning Services (library). Please speak to the instructor about labs unique to your specific program
- Library Services: There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

- Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6312 if you feel you need to be evaluated for educational accommodations.

## IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

## Anticipated Class Schedule/Calendar

*[Provide a tentative overview of the readings, assignments, tests, and/or other activities for the duration of the course. A table format as in the example below may be used for this purpose.]*

Date or Week	Activity, Assignment, and/or Topic	Tests
Week 1	Syllabus & Introduction	
Week 2	Chapter 1 Introduction to Computers and Programming	
Week 3	Chapter 2 Beginning the Problem-Solving Process	
Week 4	Chapter 3 Completing the Problem-Solving Process & Getting Started with C++	Exam 1 (Chapters 1 and 2)
Week 5	Chapter 4 Variables, Constants, and Arithmetic Operators	
Week 6	Chapter 5 The Selection Structure	Exam 2 (Chapters 3 and 4)
Week 7	Chapter 6 More on the Selection Structure	
Week 8	Chapter 7 The Repetition Structure	
Week 9	Midterm	Midterm (Chapters 1-7)
Week 10	Chapter 8 More on the Repetition Structure	
Week 11	Chapter 9 Value-Returning Functions	
Week 12	Chapter 10 Void Functions	Exam 3 (Chapters 8 and 9)
Week 13	Chapter 11 Arrays	
Week 14	Chapter 12 String Manipulation	



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Date or Week	Activity, Assignment, and/or Topic	Tests
Week 15	Chapter 13 Sequential Access Files	
Week 16	Final Exam	Final Exam (Chapters 1-13)

**\*\*\*Subject to change without prior notice\*\*\***