#### **Basic Course Information**

Semester	Fall 2017	Office	802B
Course Title & #	<b>Programming in C++ CIS 210</b>	Office Phone #	760-355-6428
Units	3	Office Hours	As Posted
Instructor	Walid Ghanim	Email	Walid.Ghanim@Imperial.Edu

### **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. (CSU, UC)

# **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. (IL01, IL02, IL03)
- 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:

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

#### **Textbooks & Other Resources or Links**

Zak, Diane. An Introduction to Programming with C++ sixth edition. ISBN: 978-0538466523

#### **Course Requirements and Instructional Methods**

<u>Out of Class Assignments</u>: 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 <u>and</u> 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	30%
Projects	20%
Midterm	25%
Final	25%

90-100% = A 80-89% = B 70-79% = C 60-69% = D 0 - 59% = F

#### **Attendance**

- 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
  absences 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.

### **Classroom Etiquette**

- <u>Electronic Devices:</u> Cell phones and electronic devices must be turned off and put away during class unless otherwise directed by the instructor.
- <u>Food and Drink</u> are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- <u>Disruptive Students:</u> Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- <u>Children in the classroom:</u> Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

#### **Academic Honesty**

- <u>Plagiarism</u> 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. Acts of cheating include, but are not limited to the following:
  - o plagiarism
  - o copying or attempting to copy from others during an examination or on an assignment;
  - o communicating test information with another person during an examination;
  - o allowing others to do an assignment or portion of an assignment
  - o use of a commercial term paper service

### **Additional Help**

- <u>Learning Labs</u>: 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
- <u>Library Services:</u> 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.

# **Disabled Student Programs and Services (DSPS)**

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.

### **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see <a href="http://www.imperial.edu/students/stu

# **Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at <a href="http://www.imperial.edu/index.php?option=com\_docman&task=doc\_download&gid=4516&Itemid=762">http://www.imperial.edu/index.php?option=com\_docman&task=doc\_download&gid=4516&Itemid=762</a>

### **Information Literacy**

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at <a href="http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/">http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/</a>

# **Anticipated Class Schedule / Calendar**

- **Week 1 Course 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 Chapters 1 & 2)
- Week 5 Chapter 4 Variables, Constants, and Arithmetic Operators
- Week 6 Chapter 5 The Selection Structure (Exam Chapters 3 & 4)
- **Week 7 Chapter 6 More on the Selection Structure**
- Week 8 Chapter 7 The Repetition Structure
- Week 9 Midterm Exam (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 Chapters 8 & 9)
- Week 13 Chapter 11 Arrays
- **Week 14 Chapter 12 String Manipulation**
- Week 15 Chapter 13 Sequential Access Files

# Week 16 Final Exam

The above schedule and procedures are subject to change in the event of extenuating circumstances.