**CIS 155 - INTRODUCTION TO COMPUTER SCIENCE –**

**STRUCTURED PROGRAMMING – C++**

.

**COURSE TITLE:** Introduction to Structured Programming with C++

**INSTRUCTOR: Bradley Siesko MSIS.**

**COURSE NUMBER:** CIS 155

**CONTACT**: **610-799-1050 ext. 3557**

**EMAIL:** [**bsiesko@lccc.edu**](mailto:bsiesko@lccc.edu) – Please use this email for all communications.

**PREREQUISITES:** None

**CLASS MEETINGS:** Online

**OFFICE & HOURS: Online W (5:00 P.M. – 9:00) P.M**

**Course Description**

This class is an algorithm design and structured programming course using C++. Covered will be elementary data types and data operations, functions and parameter passing, looping, arrays, classes and objects, introductory algorithm analysis, string operations, and pointers. Educational Philosophy Proficiency in any subject requires regular study of the material. Prior to class, pre-read the assigned topics and make sure you seek clarification on any points you do not understand. As part of your study session, include frequent reviews of older material. Lastly, get experience by practicing techniques applicable to the C++ programming environment that is presented in the lecture and laboratory portions of this course.

**THIS CLASS USES WebStudy, THE COLLEGE’S ONLINE LEARNING MANAGEMENT SYSTEM**

In this class, various materials and activities will take place on the class’s WEBSTUDY website. You access the website via the myLCCC Portal. After logging into the Portal, click on “Connect to Online Courses.” This will bring you to your WEBSTUDY Homepage. Look on the right side of the page, and in the Select Course window, click on the link for your class. It is highly recommended that you go through the WEBSTUDY Distance Education Orientation, to become familiar with WEBSTUDY’s features. On your WEBSTUDY Homepage, the orientation is listed on the right side under Institutional Resources. Click on the link to get started. Your instructor will help you understand the uses of WEBSTUDY in this particular class. For technical issues, please contact Distance Education support at: 1-610-799-1919 (M-F 8:00 a.m. – 5:00 p.m.) or distanceeducation@lccc.edu.

**Course Objectives**

This class will start with the basics of the c++\_ language and end up with a solid understanding of structured programming and object oriented philosophies. You must read the material prior to attempting the labs and exercises in myprogramminglab. The secret to becoming a good programmer is practice as well as learning techniques and shortcuts from other programmers. Some of you will be better at programming than others will be. If you fall into this category, you should feel free to assist your fellow programmers just as you would if you were working for a company on a team of programmers

**Required Materials**

Starting Out with C++: Early Objects Plus

MyProgrammingLab with Pearson eText -- Access Card Package, 9th Edition (required) Gaddis, Walters & Muganda ISBN-13: 9780134520520.

This syllabus is subject to change at any time by the instructor.

**Course Content**

Upon completion of this course, the student should be able to:

• Be able to use primitive data types in a C++ program

• Apply industry-accepted style to a C++ program

• Write effective console programs and classes

• Select the correct control, decision, and loop statements for a C++ program

• Correctly use functions and arrays in a C++ program • Effectively use pointers in C++ programs and classes

• Compare and contrast characters, C-strings and the string class as used in C++

• Identify and use abstract data types (ADTs) in C++

• Develop structures and use them to create objects • Write classes and use them to create objects

# Online Courses attendance policy

Class attendance is important. You show attendance in this online course by logging in, participating and handing in assignments. You will be dropped from the course if you have not logged in, participated or communicated with your professor in any way for the period of time specific by your instructor. However, this does not constitute an official withdrawal from the course. Students who do not follow-up with completing a withdrawal form from Registration/Student Records risk receiving a failing grade for the course.

| Length of online course | Suggested time periods equating college attendance policy (absences exceeding 9 consecutive hours) to online courses |
| --- | --- |
| 14 week course | 3 consecutive weeks (21 days) |

**Section Exercises**

Section exercises are to be complete in MyProgrammingLab at myprogramminglab.com by Thursday night at 11:59 PM of the week assigned. The assignments in WebStudy will indicate which sections you need to complete. These are generally short exercises meant to strengthen your knowledge of topics covered in the chapter. Each chapter’s exercises are worth 20 total. Late assignments will have 2.5 points deducted per day late. After 4 days, a grade of 0 will be given.

**Labs**

Lab consists of the Programming Challenges in MyProgrammingLab at myprogramminglab.com by Saturday night at 11:59 PM of the week assigned. Labs are due by the end of the week they are assigned. Late labs will have 5 points deducted per day late. After 4 days, a grade of 0 will be given. The lab computers in TC208 and TC210 are equipped with a version of Microsoft Visual Studio. You may acquire your own copy of Microsoft Visual Studio from Dreamspark.com or you may use any of the free development tools listed in the Let’s Get Started folder in WebStudy. Note that following Chapter 7, the chapter numbers in MyProgrammingLab and those of the text are different. Read the instructions in WebStudy carefully. I have arranged the chapters in MyProgrammingLab in the order of the topics we will cover.

**Exams**

**Exam 1 - Chapter 1 and Chapter 2**

**Exam 2 - Chapter 3 and Chapter 4**

**Exam 3 - Chapter 5 and Chapter 6**

**Exam 4 – Chapter 7**

**Exam 5 – Chapter 8 and Chapter 9**

**Final Exam – Chapter 1 – Chapter 10**

**Grading Procedures**

**Each activity is worth a percentage of your course grade, as shown below:**

Section Exercises myprogramminglab.com 20%

Lab Assignments 30%

Exams 40%

Final Exam 10%

**The table below shows how your numeric score will be translated to a letter grade at the end of the semester**.

|  |  |
| --- | --- |
| **Numeric Score** | **Letter Grade** |
| 93 – 100 | **A** |
| 90 – 92.4 | **A-** |
| 87 – 89.4 | **B+** |
| 83 – 86.4 | **B** |
| 80 – 82.4 | **B-** |
| 77 – 79 | **C+** |
| 73 – 76.4 | **C** |
| 70 – 72.4 | **C-** |
| 67 – 69 | **D+** |
| 63 – 66.4 | **D** |
| 60 – 62.4 | **D-** |
| 0 - 59 | **F** |

# Distance Education

Any computer/technical malfunctions are not an acceptable excuse for late work. Students are expected to make other arrangements to continue with their course. **Computers are available at LCCC.**

**Withdrawal from Class**

See important dates on the www.lccc.edu website.

**Support Services for Students with Disabilities**

Students with disabilities (a substantial limitation of one or more major life activities for greater than six months) must first contact the Office of Disability Support Services (SH 150) at (610) 799-1156 to request course accommodations. Students are also encouraged to personally discuss arrangements with the instructor if there is a need to share medical emergency information or if there is a need for special building evacuation assistance in an emergency situation.

**Support Services for Students with Temporary Limitations**

Students requesting assistance due to a temporary limitation (such as injury, illness, or a condition related to pregnancy) that impairs or influences a student’s ability to fully participate in academic activities should complete a Request for Temporary Assistance form and submit it as soon as possible. The completed form should be returned to the Office of the Dean of Library and Educational Support Services located in the Educational Support Center Room SH150 or Rothrock Library Room LB 115. A temporary impairment is a limitation with an actual or expected duration six months or less. The type of assistance allowed is determined on a case-bycase basis and is based on documentation of the student's temporary limitation and what is necessary and reasonable.

**Ombudsman Service**

Most problems or concerns that you encounter in the classroom or in receiving college services, can be resolved by simply taking the time to speak with the instructor, department staff or director, so that should always be your first step. If after doing so, you are unable to reach a satisfactory resolution, the College offers a service to assist you. You can now confidentially email or speak to someone by telephone at any time, Monday through Friday from 8:30am – 5pm.

**This syllabus may change by the instructor at any time.**