COLLEGE OF DUPAGE
CIS 2485 – C++ for Engineers

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CIS 2485-002
Fall 2016

Monday 12:00 – 2:50
Location: BIC 1514

Course Name: CIS 2485 – C++ for Engineers

Credit and Contact Hours: 3 credit hours (3 lecture hours, 0 lab hours)

Prerequisites:
Required: MATH 2231 or equivalent
Recommended:

Textbook (Required): ***C++ for Engineers and Scientists***: 4th Edition, by Gary J. Bronson, Thomson Course Technology, ISBN# 978-1133187844

Course Description:

Development and application of the C++ language. Emphasis on programming and documentation of scientific applications. Includes statistical analysis, curve fitting, optimization and engineering, and scientific modeling applications. Topics include language format and syntax, functions, data-storage classes, arrays, structures, introduction to user-defined classes, inheritance and polymorphism.

Course Objectives:

1. Fundamentals of C++ Programming
2. Problem Solving Using C++
3. Assignment, Formatting, and Interactive Input
4. Selection Statement
5. Repetition Statements
6. Modularity Using Functions
7. Arrays
8. I/O Streams and Data Files
9. Numerical Methods
10. Introduction to Classes

Course Requirements:

Class Attendance, Participation and Timely Completion of Assignments: Class attendance and active participation are essential if students are to receive maximum benefit from this class. Participation requires preparation including completion of reading and other assignments by the due dates. If you cannot attend class or complete an assignment on time, please let me know beforehand so that we can discuss alternative strategies. **No late work will be accepted**. **Programs that do not run, or have no output will not be graded.**

Make-up Policy: There will be no makeup exams or quizzes. If there is an emergency and you contact me before the exam or quiz I may (at my discretion) allow a makeup exam or quiz.

Academic Honesty: Any violations of College of DuPage policies regarding academic honesty and/or integrity will be referred automatically to the appropriate College authorities for disposition. See appropriate pages in the college catalog for definitions and regulations. The minimum penalty for cheating will be a zero for all parties involved on that assignment.

Withdrawal Policy: The last day to withdraw from this class is **11/12/2016**. After that date, students may file a Petition for Late Withdrawal through the Registration Office. Petitions for Late Withdrawal will be granted for extenuating circumstances only, including student illness, death in the immediate family, family emergencies, call to active duty, or other appropriate extenuating circumstances. The student will be required to provide appropriate documentation for all requests for Late Withdrawal. **Prior to withdrawing from this class, students are encouraged to speak with the instructor**.

Classroom Behavior: Please silence your cellphones. No food or drink in the lab room. You may bring a drink into the lecture room.

General Note: In order to achieve the course objectives, it is essential that you enjoy the class in addition to complying with the above requirements and the rules and policies of College of DuPage contained in the catalog and other College materials. If you are having course/College related problems, please feel free to talk to me so that we can resolve them to your satisfaction and benefit.

Method of Evaluating Students:

Grading:
Point Distribution:

Tests (3 @ 100 points each) .....300 pts.
Labs (10 @ 10 points each).....100 pts.
Total points:.....400 pts.

Final Grades will be assigned as follows:

Accumulated Points	Grade
90%.....	A
83%.....	B
76%.....	C
69%.....	D
Below 69%	F

Course Outline/Schedule

Week	Lecture	Lab
1 (8/22)	Class Introduction Chapter 1	
2 (8/29)	Chapter 2	Lab #1
3 (9/5)	**No Class**	
4 (9/12)	Chapter 3	Lab #2
5 (9/19)	Chapter 4	Lab #3
6 (9/26)	Chapter 5	Lab #4
7 (10/3)	**Exam #1**	
8 (10/10)	Chapter 6	Lab #5
9 (10/17)	Chapter 7 (1-D Arrays)	Lab #6
10 (10/24)	Chapter 7 (2-D Arrays) Chapter 8 (Text Files)	Lab #7
11 (10/31)	Chapter 7 (Searching / Sorting)	Lab #8
12 (11/7)	**Exam #2**	
13 (11/14)	Chapter 10	Lab #9
14 (11/21)	Chapter 13	Lab #10
15 (11/28)	Chapter 11	Lab #11
16 (12/5)	Newton's Method Numerical Integration	Lab #12
17 (12/12)	**Final Exam**	