CS 128-01

INTRODUCTION TO C++

COURSE INFORMATION

Instructor : Sampath Jayarathna, Web: http://www.cpp.edu/~ukjayarathna

Contact : Office: 8-46, Email: ukjayarathna@cpp.edu, Phone: (909) 869-3145

Office Hours : Monday and Wednesday, 1.00 PM – 3.00 PM, or email me for an appointment

Schedule : Monday and Wednesday, Room: 3-2636, Time: 6.00 PM – 7.50 PM

Website : http://www.cpp.edu/~ukjayarathna/f16/cs128

Piazza : www.piazza.com/csupomona/fall2016/cs128/home

Blackboard : https://blackboard.cpp.edu/

WHAT IS THIS COURSE ABOUT?

The CS 128, Introduction to C++ is an introductory course on the fundamental concepts of programming and its use for problem solving. We'll focus a lot on design and principles and use C++ to implement those principles and practices. Of course we'll learn a lot about syntax and semantics of C++ in the process as well.

Current Catalog Description: Basic concepts of computer software and programming. Data types, expressions, control structures, functions, file and stream I/O. Use of pointers and dynamic storage allocation. Structured and abstract data types. Problem-solving techniques.

WHAT WILL YOU GET FROM THIS COURSE?

After successfully completing this course, students should be able to:

- Comprehend the basic concepts of programming and its use for problem solving (LO1)
- Learn good programming principles and practices using the C++ language (LO2)
- Have good knowledge of the syntax and semantics of C++ and its compilation and execution (LO3)

REQUIRED/OPTIONAL MATERIALS:

- Starting out with C++: From Control Structures through Objects by Gaddis, 7th Edition, 2011.
- **Bring Your Own Device (BYOD)**. You must have a computing device (Laptop, Tablet, or Phablet), we will do some activities in class and you should have a device in class to fully participate.

PREREQUISITES:

MAT 105 and 106 with grade of C or better or instructor's consent.

TENTATIVE COURSE SCHEDULE

The course topics, PowerPoint slides, Homework assignments, Programming Projects due dates and other activities will be available on the course web page before each lecture. Topics and specific course activities may change as needed.

WHAT YOU CAN EXPECT FROM ME:

I have an open door policy i.e., office visits. My posted office hours are times when I will make concerted effort to be available. Occasionally administrative meetings or emergencies may interfere with these posted times. The open door policy is: if my door is open, I am in and welcome walk-in visitations. In order to encourage you to find my office, the *first homework assignment is due at the drop box next to my office 8-46*.

I am committed to supporting students with disabilities. If you have challenges related to these issues or others I want to work with you to help you succeed. Please come and talk to me, since only you can properly communicate your situation to me.

WHAT YOU CAN GIVE TO THE CLASS:

It is extremely important for you to be engaged in the course. Otherwise, you will fall asleep and wonder what happened to your tuition dollars. So, I encourage you to ask questions during lecture and actively participate at the piazza forum. For the first few weeks, when asking a question at the class, state your name so that I know who you are.

Cell phones: You may have cell phones in class, but they must be on mute, or airplane mode and not answered until the end of class.

Tardiness: You are expected to arrive on time so that you do not cause a disruption in the middle of class. I would like to start the class at the scheduled time. If you cannot make it on time or want to leave early for some reason, please let me know. Persistent tardiness will be noted.

COMMUNICATION

Piazza: All questions will be fielded through Piazza. The primary benefit is that for many questions everyone can see the answer and other students can answer as well. I will endorse good student responses. Additionally, I expect you to actively participate in online discussions at Piazza. Over the course of the quarter, you should post at least one substantive, interesting post to the discussion forum. You must also respond to at least four posts made by others. You can also post private messages that can only be seen by the instructor. You will be signed up with your cpp email, but you may switch to another email.

Blackboard: Blackboard will be used primarily for homework, project, extra credit submission and grade dissemination.

Email: If you send email to me, please be sure to include your name and the course number in the body of the e-mail. You should also use an appropriate subject line that looks like "CS128 Homework 2" etc. Failure to follow these guideline may result in delayed response. *Again, email should only be used in rare instances*; I will probably point you back to Piazza if you have a question related to course materials and/or relevant to other students in the class.

COURSE ACTIVITIES

The class meets two times a week for lectures (Monday and Wednesday). Major components of the course are programming homework assignments and projects. Other course activities include reading slides, piazza discussion forum, exit tickets and a final exam.

The scores you receive on the various graded tasks in the class will be weighted as follows:

40%	Programming Projects (2) – LO1, LO2, LO3
30%	Final Exam – LO2, LO3
25%	Homework Assignments (5) – LO1, LO2
5%	Exit Tickets – LO1
1%	Extra Credit
101%	Your Total Score for the class

Project: The project is an opportunity to tackle a more challenging programming assignment. Details, requirements and submission information will be on the course website. We will have 2 individual programming projects, each worth 20% of your overall grade.

Final Exam: The final exam is comprehensive, closed books and will be held on **Monday, December 5 from 6.00 pm to 7.30 PM**. You may bring one standard 8.5" by 11" piece of paper with any notes you deem appropriate or significant (front and back). No calculators, iPads, iPhones, Blackberries, Android phones/tablets, or abacuses are allowed.

Homework: We will have five homework assignments, each worth 5% of your overall grade.

Exit Tickets: Attendance in class and participation in the discussion are both important to your success in the course. As one crude measure of your participation, you will have around 5 to 10 low-stress ungraded quick online quizzes (less than 5 minutes each) spread across the quarter usually at the very end of the class time. These quick quizzes will not be graded for correctness. I will use them to gauge what topics we need to devote more time to and as an indicator that you were in class.

Extra Credit: You can get up to one point added to your final grade through culture reports that broaden your exposure to computer science, or user study evaluation participation. You can submit up to two reports, and each is worth one-half point. Details for participating for user studies, selecting material, writing, and submitting the extra credit is on the course website. Note: Borderline grades will not be boosted if extra credit is not submitted.

GRADES

Final course grades are based on the overall average. You are guaranteed a grade based on a 10% window (e.g., 90-100% is an A). Overall class grade (not the individual grade) windows may be increased in size if the instructor finds it appropriate.

A: 90-100, B+: 85-89, B: 80-84, C+: 75-79, C: 70-74, D+: 65-69, D: 60-64, F: 59 and below

ATTENDANCE, MAKE-UPS AND LATE POLICIES:

All programming projects, homework assignments, extra credit are due at the beginning of class in all required forms (e.g., paper and/or submit on blackboard) on the due date. Changes to a submission's due dates will be avoided because they are unfair to those students who have organized their time to complete the assigned work. Individual accommodations will be discussed if you have a valid medical excuse.

Programming project due dates will be set to give ample time for completion of the project and will not be extended save for the unexpected and unlikely major, long-lived catastrophe. Start projects early--last minute computer malfunctions will not be accepted as a reason for delaying a project due date. *Unless otherwise noted, all programming projects should be submitted via the Blackboard at the beginning of the class.*

Homework assignments must be turned in by the due date and time in order to contribute to your grade. *Unless otherwise noted, all homework assignments should be submitted via the Blackboard at the beginning of the class.*

For both Programming projects and Homework assignments, each late submission will incur a 10 points penalty per day. A missed submission without an acceptable excuse will be recorded as a grade of zero (0).No submission will be accepted after 3rd day and will be recorded as a grade of zero (0). There will be no makeup for programming projects and homework assignments. If you have a valid medical excuse, the missing component of your grade will be computed based on the other parts of the relevant course content. E.g.: A missed homework with acceptable excuse will be assigned the average grade of all other homework components, at the option of the course instructor.

An exam missed without an acceptable excuse will be recorded as a grade of zero (0). There will be no makeup examination. If you have a valid medical excuse, the missing component of your grade will be computed based on the other parts of the course content. E.g.: A missed final exam with acceptable excuse will be assigned the average grade of all other components, at the option of the course instructor.

There will be no make ups for exit tickets, and a zero will be recorded for all missing exit ticket grades. However, to accommodate illness and other things that life can throw at you, only 85% of either will be considered full credit.

ACADEMIC OFFENSES

Scholarly dishonesty, especially plagiarism, will not be tolerated. Plagiarism is defined as "Failing to credit sources used in a work product in an attempt to pass off the work as one's own. Attempting to receive credit for work performed by another, including papers obtained in whole or in part from individuals or other sources." Students found to have engaged in plagiarism will be punished severely, typically earning an automatic F in the course and being reported to the Office of Student Conduct and Integrity. The Office of Student Conduct & Integrity investigates issues of student misconduct to determine if there has been a violation of the Student Conduct Code. If students are found responsible for a violation, students receive educational sanctions which can range anywhere from warnings to expulsion from the California State University system.

Individual Programming Project and Homework Collaboration Clarification: To clarify, your projects and homework assignment are yours alone and you are expected to complete each project and homework independently. Your solution should be written by you without the direct aid or help of anyone else.

However, I believe that collaboration and team work are important for facilitating learning, so I encourage you to discuss problems and general problem approaches (but not actual solutions) with your classmates. If you do have a chat with another student about a project or homework problem, you must inform me by writing a note on your submission (e.g., Bob pointed me to the relevant section for problem 3). The basic rule is that no student should explicitly share a solution with another student (and thereby circumvent the basic learning process), but it is okay to share general approaches, directions, and so on. If you feel like you have an issue that needs clarification, feel free to contact me.

DISABILITY RESOURCES

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities.

If you have a physical or a learning disability, please talk to me privately and/or contact the Disability Resource Center (DRC) at 909-869-3333. The location is at Bldg 9-103 to coordinate course accommodations. For further information, visit the DRC website at http://www.cpp.edu/~drc/index.shtml