Syllabus CPSC-121
Object-Oriented Programming, Spring 2016

Instructor: Natalia (Natasha) V. Anderson
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Email is the best way to contact me. Please put CPSC-121 in the subject line.

Class web Site: Campus Portal/Titanium
Office Hours: Monday 12:00 – 1:00 pm and by appointment
Lecture: Saturday 8:00 – 9:50 am, E-202
Lab: Saturday 10:00 – 11:50 am, CS-408

Prerequisite: CPSC-120 or passing score on the Computer Placement Exam.

Course Description: Introduction to Computers and Programming, C++, parts of a program, variables, operators, cin and cout objects, formatting output, type casting, switches, menu driven programs, conditional operators, enumerated data types, looping, if, while, do while, arrays, parallel arrays, vectors. Functions, void and returning value, local, global, and static variables, default arguments, reference variables, overloading functions, classes, ADT, OOP, constructors, destructors, structures, arrays of objects, recursion. Pointers, C-Strings, library functions for working with C-Strings, file and I/O Operations, polymorphism and virtual member functions, exceptions, functions and class templates.

Student Learning Outcomes: The goal of this course is to learn the fundamental concepts of object-oriented programming. Upon successful completion of this course, you will be able to design and implement Abstract Data Types using C++ classes.


Grading:
Attendance and Participation 5%
Lab Activities 5%
Quizzes 5%
Group Projects 15%
Individual Projects 20%
Midterm 25%
Final 25%

The final letter grade shall be strictly assigned according to the following ranges:

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Plus and minus grading is not used when determining final grades. No makeup exams. No makeup projects.
**Individual Projects:** Each project will involve designing, implementing, and testing a substantial program from start to finish. All projects must be coded and will be tested using Microsoft Visual Studio.

**Group Projects:** Programmers need good communication skills; being an effective group member is also very important in any career path. The students will have opportunities to work together in a small group, design a program, code, and present to the entire class for evaluation and feedback.

**Projects Submission Policy:** Hard copy (printout) must be submitted in the beginning of each lab session on the deadline. The printout should include your name, project#, code comments, C++ code and a screenshot of your program output.

Programming projects will also be evaluated based on a brief demo in the lab where you present your source code to me, compile your program and demonstrate the operation of your program. You should be able to explain any part of your program. The feedback on your program will be given in person during the lab hours.

The following kinds of submissions cannot be evaluated, and will be assigned a zero score:
- Email submissions.
- Source code that cannot be compiled successfully.
- Input/output that is falsified or does not match the submitted source code.
- Submissions that are plagiarized.
- Late submissions can only accepted with a respectful documentation (example, a doctor note).

The grade of the project will be based on the following rule:
- Program works correctly: 5
- Program is mostly correct and has minor problems: 4
- Program has multiple significant errors (combination of incorrect output or calculation errors or missed project requirements): 3
- Project does not compile or no demo: 0

**Lab Activities and Participation:** These will be short mini-participation exercises that mainly test your understanding of recent concepts and reinforce what you should already know. Your lab attendance is important, at any time the activity can be presented during the lab session, and your participation will count toward your class grade.

**Attendance:** Attending class is mandatory. Your attendance will be recorded and also used as part of your grade.

**Quizzes:** These will be short mini-tests that mainly test your understanding of recent concepts and reinforce what you should already know. Collaboration and internet will not be allowed during the pop quiz time.

**Exams:** All exams will be closed book, closed notes. Electronic code or the internet will not be allowed. Midterm will be in March and the exact date will be announced 2 weeks in advance. The final exam will be comprehensive but will emphasize material from the second-half of the course including readings, lectures, and assignments. Final Exam – Saturday May 14th 2016, time: 8:00-9:50 am, location: TBD

**Student Responsibilities:** It’s important part of your learning outcome to code all projects from start to finish, at times it will be difficult, but you must seek help, there are a lot of resources available (refer to - how to get help document on Titanium).
The only excuse for a missed class is a serious illness or other extraordinary circumstances. Permissions to take exams on other dates than scheduled will not be given, except for extreme medical emergencies. Please contact me in advance if you have any issues with exam dates.

If you wish to drop this course, it is entirely your responsibility to complete all the necessary paperwork and follow the deadlines.

Cell phones are not acceptable in classes. Turn off your cell phone before you come to the class. The use of a laptop (or notebook, iPads) computer is permitted during class only for the purpose of taking notes.

**Collaboration:**
- You may help each other understand the assignment and brainstorm general solutions, but each student must develop and submit their own distinct work.
- You may give each other technical support, for instance troubleshooting installing Visual Studio.
- You must develop your own solution to the problem, type in your own source code and test your program.
- You should be able to explain any part of your submission, and why you wrote what you did.

Given these requirements, any submissions with identical excerpts, or excerpts that are identical up to superficial rearrangements, will be considered highly suspect of plagiarism.

**Special Needs:** Please inform the instructor during the first week of classes about any disability or special needs that you have that may require specific arrangements related to attending the class sessions, carrying out class assignments, or writing papers or examinations. According to the California State University Policy, students with disabilities need to document their disabilities at the Disabled Student Services Office.

**Academic Dishonesty:** Original work is expected from every student. Any copying of assignments will result in zeros being assigned to each person. Any cheating on exams will result in course grades of F for anyone involved.

It is your responsibility to be aware of and follow the spirit of CSU Fullerton’s academic honesty policy which can be found at [http://www.fullerton.edu/senate/documents/PDF/300/UPS300-021.pdf](http://www.fullerton.edu/senate/documents/PDF/300/UPS300-021.pdf). By submitting work for evaluation, you acknowledge that you have adhered to the spirit of the university’s academic honesty policy and that your submission is an original work by you unless otherwise directed to work in groups. Failure to follow the academic honesty policy will result in a severely negative evaluation of the work in question and may result in involving the Department Chair and the Judicial Affairs office to seek a disciplinary remedy.

**Emergency Procedures:** For your own safety and the safety of others, each student is expected to read and understand the guidelines published at [http://prepare.fullerton.edu/campuspreparedness/](http://prepare.fullerton.edu/campuspreparedness/). Should an emergency occur, follow the instructions given to you by faculty, staff, and public safety officials. An emergency information recording is available by calling the Campus Operation and Emergency Closure line at 657-278-4444.

**Disclaimer:** I reserve the right to make any changes to the syllabus as I deem necessary throughout the course.