Syllabus
CSCI 271 – Sections 4771 – 4 Units (Hybrid) – Spring 2015
Problem Solving and Programming 1
Mondays, 6:30pm – 9:35pm, ELT 114 and Online
January 12, 2015 through May 02, 2015

Instructor
John Zamora, Professor of Computer Science
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Office Hours: Mon through Thurs: 9am – 9:30am; Mon and Wed: 11am – 11:30am; Mon: 6pm – 6:30pm
Tue and Thurs: 1:00pm – 2:00pm

Required Textbook and Materials
- *C++ Programming: Program Design Including Data Structures, 6th Edition* by D.S. Malik. Cengage, 2013 (ISBN: 978-1-133-52632-2)
- External Drive (to save your materials)
- Visual Studio C++ or ANSI Compliant C++ Compiler (which are made available to you)
- Blackboard Access
- Your student.yosemite.edu e-mail account (Activate it if you have not done so)

For successful completion of this class you will need to:
- The textbook is required.
  - Textbook is required the first week of class.
  - If you order textbook online, be sure it arrives within 3 to 4 working days.
- Read.
- Work on and complete all assignments and quizzes.
- Submit work on time.
- Participate regularly in all class sessions.
- Have access to a computer and the Internet. You can use the MAGIC Lab (ELT 109).

Blackboard Learning Management System (LMS)
We will be using the Blackboard system for all course material and communication. The address for the system is
http://yccd.blackboard.com. **If you have problems with accessing Blackboard, please contact the online help desk**. You must make sure to allow http://yccd.blackboard.com through your pop-up blocker in your web browser.

Course Description
Prerequisite: Satisfactory completion of CMPSC 204
First course for Computer Science transfer majors, but open to all students. Emphasizes object-oriented programming, algorithmic design, and problem analysis skills for computer science. Software engineering skills will be emphasized. Solutions will be implemented using a high-level object-oriented programming environment such as, C++, C#, or JAVA. Extensive programming projects demonstrating problem solving and implementation skills will be assigned throughout the semester.

Course Objectives
In this course, you will be expected to understand and apply the following concepts:
- Syntax, Semantics, and the Program Development Process
- Top-down decomposition, Software Design, and Program Modules
- Conditions, Logical Expressions, Selection Control Structures, and Iterative Control Structures
- Functions, Scope, and Lifetime
- Built-in and User-Defined Data Types
- Structured Data Types
- Classes and Data Abstraction

Course Learning Outcomes

Upon completion of this course, students should be able to:
1. Analyze and evaluate the five steps for software engineering: definition, analysis, design, implementation and testing.
2. Evaluate simple data requirements of a problem and select appropriate data types for their implementation in a high level language.
3. Create input/output control processes using a high-level programming language.
4. Evaluate the implementation of sequence, selection, and iterative control processes using a high-level programming language.
5. Evaluate the principles of top-down problem decomposition.

Your Success and Class Participation

Our class meets once a week, face-to-face, for the semester. Also, the class meets online. Please show up on time and ready to work in our face-to-face time and schedule your regular presence on the Blackboard LMS. Class time is not optional and completing the course successfully is dependent on your regular participation in face-to-face and online contributions. Your success in the course will be based on your ability to successfully complete coursework and submit it on time. Follow the schedule and read assigned readings before class.

Dropping or Withdrawing from the course

It is the student's responsibility to drop or withdraw from class through appropriate channels and deadlines. Do not assume, as your instructor, I will drop you from the course. Students, who are "no shows" starting from the first day of our in-class meeting, are dropped by the instructor by the census date. Students may be dropped for non-participation in the class which includes not turning in assignments or quizzes, not completing exams, participating in class, etc. It is the responsibility of the student to communicate with me regarding your active participation. Missing several consecutive assignments or quizzes, missing an exam, not participating online, etc. may result in you being dropped.

Availability of the Instructor

Contact information is provided at the beginning of the syllabus. I will respond to e-mail messages Monday through Friday during normal business hours unless otherwise noted in class. I should be able to respond within 24 to 48 hours.

Class Expectations on Behavior

- It is expected that students will treat one another and the instructor with dignity and respect at all times.
- It is expected that you will show up to class on time. The studies for this course are rigorous. This includes face-to-face and online class time.
- Please no food or drink in the classroom except water.
- Do not pack your class materials before class ends. It is very disruptive to the class environment.
- Please make sure you do pick up after yourself when class ends, that your area is clean, ready for the next class.

MJC Student Conduct Report Form

Inappropriate conduct by students can be reported by faculty and staff through the use of the "MJC Student Conduct Report Form". Inappropriate conduct includes, but is not limited to, cheating/plagiarism, disruptive behavior, obstruction or disruption of teaching, smoking in prohibited areas, and willful misconduct. Please conduct yourself in an academic, professional, and courteous manner.

Computers and similar electronic devices in Class

Please keep your computers off during our face-to-face time unless I indicate you can turn them on. This includes the computers in the classroom and any personal computers, smartphones, cell phones, and devices you bring to class. Not following these instructions will be considered disruptive behavior.

The Difference Between Individual Work and Working Together

All submissions of assignments, quizzes, exams, etc. are considered to be "Individual Work". There is a definite difference between understanding concepts and submitting your own work. Any student suspected of cheating will receive a zero on the assignment or exam in question. Everyone has their own style of problem solving and writing. No two assignments will ever look exactly alike if you are working on the assignment as "Individual Work". Also see section on Academic Standards of Conduct.

Academic Standards of Conduct
Students at MJC are obliged to follow the Standards of Conduct as outlined in the Academic Standards section of the college catalog. There are a number of standards described as well as indicating your rights as a student.   Please know that cheating and plagiarism will not be tolerated. Appropriate action will be taken if these offenses occur.

Schedule of Readings, Assignments, Exams, etc.
A "Schedule" of readings, assignments, and exams is available through your syllabus. You must understand that the course textbook is required and that you will need to read and conduct studies outside of class. The process for submitting assignments and quizzes will be discussed in class. Knowing due dates is your responsibility as a student.

Regarding Deadlines
Staying on task will be very important for your success in the course. **There are no make-ups for exams and no assignment will be accepted late. No exceptions will be allowed**.

Grading
Exams, quizzes, assignments and discussion postings all have point scores. The final grade in this course will be determined by total points possible. Your scores will be available through the LMS.

Activity	Points	Grades (out of ~800 pts)
Two Exams (100 points each)	200 points	**A**: 720 and above
Final Exam (200 points)	200 points	**B**: 640 – 719 points
10 Quizzes (10 points each)	100 points	**C**: 560 – 639 points
Assignments and Discussion Posts (variable pts each)	~300 points	**D**: 480 – 559 points
Total Possible Points	**~800 points**	**F**: Below 480 points

Examinations
There are **two examinations and one Final Exam**. **Exams are in-class. There are no makeups on exams. Please plan accordingly.**

Quizzes
Quizzes will cover concepts from the textbook. You will have a time limit for each quiz. You have multiple attempts on each quiz. Quizzes are available for a certain duration of time. The highest scoring attempt on each quiz is used towards your grade. Quizzes are taken online. **There are no makeups on quizzes.**

Assignments and Discussion Postings
There are a number of assignments and discussion postings in the course and are designed for you to learn the material. It is very important to work on assignments during the prescribed time and not working on assignments at the last minute. Each assignment builds on your previous assignments. Submitting assignments on time is important to understanding the material and successfully completing the course. Assignments and Discussion postings are submitted on Blackboard.

Assignments and Discussion Postings will cover concepts in the course and are designed to assist in learning the material in depth. **All programs submitted for assignments must contain commenting throughout the code as discussed in class to receive full credit**.

Each assignment and discussion posting are worth a variable number of points. Your assignments are submitted online on the LMS and are due by 11:59:00pm as noted on each assignment (no exceptions). Discussion postings occur weekly and are due on Fridays at 11:59pm. It is important for you to complete your assignments and postings in a timely manner. **No late assignments or discussion postings will be accepted.**

Disclaimer
This syllabus is a guideline for your participation in this course. The syllabus is subject to change. The instructor reserves the right to change the syllabus (i.e. add items, delete items, etc.) as necessary for the learning benefit of the students and to meet the prescribed objectives for the course.

CSCI 271 – Problem Solving and Programming 1 – Section 4771 – Hybrid Course – Spring 2015
Instructor: John A. Zamora   Updated Monday, March 16, 2015
Mondays, 6:30pm – 9:35pm, ELT 114 (East Campus) **and** Online
Textbook: *C++ Programming: Program Design Including Data Structures, 6th Edition by D.S. Malik. Cengage, 2013*
(ISBN: 978-1-133-52632-2) (Schedule subject to change as needed)

Dates of Class	Topics – By Chapter and Section (read before class)	Assignments Due on Class Date
Mon, Jan 12, 2015	Introductions, Syllabus, Schedule, Orientation to Class Chapter 1 – An Overview of Computers and Prog. Languages Using Visual Studio and C++	Be sure to log into Blackboard regularly Assign 01 due Fri 01/16/2015 Be sure to do your discussion postings
Mon, Jan 19, 2015	Holiday – No Class Look for Online Video Chapter 2 – Basic Elements of C++	Be sure to do your discussion postings Assign 02 due Fri 01/23/2015 Quiz 01 due Sun 01/25/2015
Mon, Jan 26, 2015	Chapter 3 – Input/Output	Assign 03 due Fri 01/30/2015 Quiz 02 due Sun 02/01/2015
Mon, Feb 02, 2015	Chapter 4 – Control Structures 1 (Selection)	Assign 04 due Fri 02/06/2015 Quiz 03 due Sun 02/08/2015
Mon, Feb 09, 2015	Chapter 5 – Control Structures 2 (Repetition)	Quiz 04 due Tue 02/17/2015
Mon, Feb 16, 2015	Holiday – No Class	
Mon, Feb 23, 2015	**Exam 1** plus Chapter 6 – User-Defined Functions	Assign 05 due Fri 02/27/2015 Be sure to post discussions as assigned
Mon, Mar 02, 2015	Chapter 6 – User-Defined Functions	Assign 06 due Fri 03/06/2015 Quiz 05 due Sun 03/19/2015
Mon, Mar 09, 2015	Chapter 8 – Arrays and Strings	Assign 07 due Tue 03/17/2015 Quiz 06 due Thu 03/19/2015
Mon, Mar 16, 2015	Chapter 8 – Arrays and Strings	Assign 08 due Fri 03/20/2015
Mon, Mar 23, 2015	**Exam 2** plus Chapter 10 – Classes and Data Abstraction	Assign 09 due Fri 03/27/2015 Quiz 07 due Sun 03/29/2015
Mon, Mar 30, 2015	Chapter 10 – Classes and Data Abstraction	Assign 10 due Fri 04/03/2015 Quiz 08 due Sun 04/05/2015
Mon, Apr 06, 2015	Chapter 11 – Inheritance and Composition	Assign 11 due Fri 04/10/2015 Quiz 09 due Sun 04/12/2015
Mon, Apr 13, 2015	Chapter 12 – Pointers, Classes, Virtual Functions, Abstract Classes, and Lists	Assign 12 due Fri 04/17/2015 Quiz 10 due Sun 04/19/2015
Mon, Apr 20, 2015	Chapter 13 – Overloading and Templates Chapter 15 - Recursion	
Apr 27 – 30, 2014	**Class meets on Monday, April 27th from 7pm to 9:50pm during Finals Week.** **All students must show up to their scheduled Final Exam session during Finals Week.** **Process for our final exam will be discussed in class.**	