CMPT 120L116 Introduction to Programming

Fall 2015

Course Information

Instructor: Dr. Bowu Zhang
Email: bowu.zhang@marist.edu
Class Time:
12:30 pm - 1:45 pm, Mondays (Hancock 0004) and Thursdays (Hancock 0004)
Lab Time:
9:30 am - 10:45 am, Mondays(Hancock 0004)
My Office: Hancock 3014
My Office Phone: 845-575-3523
My Office Hours:
Monday: 3:30 p.m. to 5:00 p.m.
Tuesday: 12:00 p.m. to 2:00 p.m.
Friday: 2:00 p.m. to 4:00 p.m.

Other hours by appointment. Please do not hesitate to contact me for any question through emails or talk to me after class. I encourage you to seek help sooner than later, as confusion and problems tend to escalate.

Course Description

This course is a broad introduction to computers, the Internet, information representation, and the art of computer programming. Students learn to design, develop, test, debug, and document a program with good code style.

Prerequisites

There are no prerequisites for this course.

Course Objectives

Throughout the course, you will be required to demonstrate the ability to:

- know software development as both art and science [1, 2a]
- understand how data is represented in a computer [2a, 2b]
- develop a mastery of basic Web markup and presentation technologies [1]
- know and use correctly data types, operators, and control structures [2a

- correctly use selection and repetition control structures [2a]
- believe in the wisdom of encapsulated objects [2e]
- design and implement simple classes for problem solving [2a]
- declare and manipulate arrays in at least two dimensions [2a]
- get practice in finding some answers for themselves, because capable problem
- solvers never stop learning. [1, 2a]

[References] refer to Department of Computing Technology Goals available at http://www.labouseur.com/courses/goals.pdf.

Course Materials

Required Textbook:
Internet and WWW How to Program
5th edition, by Dietel, Dietel, & Dietel ISBN 978-0132151009
(table of contents at http://www.deitel.com/bookresources/iw3htp5/toc.pdf)

Other Useful Resources:
HTML Tutorial
http://www.w3schools.com/html/
CSS Tutorial
http://www.w3schools.com/css/
JavaScript Tutorial
http://www.w3schools.com/js/
Eloquent JavaScript second edition
http://eloquentjavascript.net/
In addition, I will provide you with course notes as we cover each topic.

Required Software

Google Chrome is the standard browser for this course.
Though you can use Nodepad/Wordpad (Windows) or TextEdit (Mac) for programming in this course, I recommend
Nodepad++ if you are using Windows
https://notepad-plus-plus.org/download/v6.8.1.html
Sublime Text if you are using Mac
http://www.sublimetext.com/2
Both can open various scripts and have color coded syntax checking support.

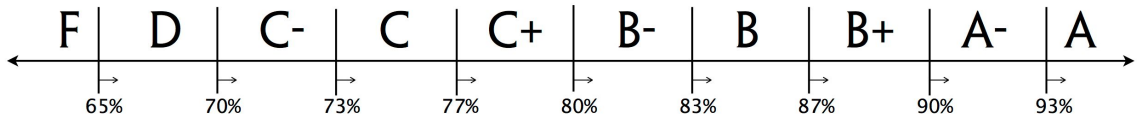
Grades

Your final grade will be calculated as follows:

- Lab Assignments: 25%

- Final Project: 15%
- In-class Exercises: 10%
- Quizzes: 10%
- Midterm Exam: 20% -- cheat sheet allowed
- Final Exam: 20% -- cheat sheet allowed

Your letter grade will be determined according to the department grading scale:



Lab Assignments

There will be a lab every week that reinforces the material we're covering in class.

- You are encouraged to finish lab assignments during the lab, and you need to show your instructor what you have done before the lab ends, in order to receive full credit. You should expect to spend several hours (minimum) working on these assignments. Do not wait until the night they are due to get started or ask questions.
- For each lab, lab attendance and your work during lab 40%, lab report 60%.
- All assignments are due by midnight of the due date provided. Your assignment code, along with all required files (such as images) must be included. Your assignments must be uploaded to iLearn (https://ilearn.marist.edu) before due date. It is your responsibility to make sure that all files have been uploaded to the correct folder and that all files are included.
- You are not permitted to work together on these assignments. All code should be your own - it's important that you understand the code you have submitted. Work submitted that is not your own will receive a grade of 0. Providing your work to other students is not permitted, and will result in a grade of 0 for both the provider and the beneficiary. The only way to learn the material is by doing your own work.
- A rubric will be provided for each assignment.
- For each day your assignment is late, 10% will be deducted from your score. Assignments will NOT be accepted after one week.
- Occasional bonus points will be offered throughout the semester. These will typically require doing a little extra work on an assignment. Other extra credit (to improve your grade alone) is not available.
- In case of family emergencies, illness, university sports meets, a doctor's note or other written explanation will be required. In particular, a written note must be handed to the instructor at least one week in advance of a university sport meet. A late penalty might be still applied.

Final Project

After learning the basics of JavaScript, HTML, and CSS through the smaller weekly assignments, you'll start to work on your own larger project.

- You will be given some time to work on your projects in class/lab, but you'll need to spend a significant amount of time working outside of class as well.
- You are not permitted to work together on final project. This is an individual project.
- There will be weekly progress checks on your project. These checks count towards your final project grade, and will help ensure that you are not procrastinating too much (a final project cannot be completed in one night). Your project should be close to completed by the final check - the last week should be used to polish and perfect your app, not begin work on it. Guidelines for exactly what I'll be looking for in each check will be provided.
- All work submitted for your final project must be your own. There are many examples and tutorials available online - do NOT simply submit someone else's work as your own. In many cases, using or adjusting snippets of code for your project is perfectly fine, and is how most programming is done. If you are unsure whether "borrowing" or modifying code you have found constitutes plagiarism, see me.
- You'll be given a chance to present your project to the class at the end of the semester. A final report is expected after your presentation as well. This is an opportunity to show off your hard work!

Quizzes

There will be a number of quizzes in this course (Time will be announced in advance). Quiz problems are related to lecture notes. Submitting the quiz problems outside of the class will not be accepted for credit.

In-class Exercises

There will be hands-on work associated with lectures in every class. Exercise results must be reported to your instructor before the class ends. To get credit, you must attend and participate in the class. Submitting the in-class problems outside of the class will not be accepted for credit.

Exams

We will have a midterm exam and a final exam.

- Both will be a written exam that checks your knowledge of HTML, CSS, JavaScript, and programming concepts in general.
- One page (8'*11') cheat sheet allowed.

- NO MAKEUPS will be allowed except for major documented life events (e.g., major medical illness, family emergency, etc.) or university sports meets. A written note must be handed to the instructor at least one week in advance of a university sport meet to arrange an alternative time.
- The time and date for the midterm exam is scheduled for TBD, and will be announced in class.
- The time and date for the final exam for this class is to be announced by the school.

Attendance

Attendance in lecture is required.
Completing the reading assignments, carefully listening to the lectures and doing the Homework and additional problems on your own is the best way to understand the material. Students who miss more than **two lectures** without permission from the instructor should expect to receive a failing grade in the course. If you do miss a class, it is your responsibility to find out materials covered in the class.

E-mail Policy

Electronic mail or "e-mail" is considered an official method for communication in this course because it delivers information in a convenient, timely, cost effective and environmentally aware manner. Students are expected to check their official Marist e-mail on a frequent and consistent basis in order to remain informed of university-related communications. The instructor recommends checking email daily. Students are responsible for the consequences of not reading, in a timely fashion, university-related communications sent to their official Marist student e-mail account. Due to school policy, the instructor will **NOT** reply to student e-mails from **non-Marist** accounts. Students are required to use Marist e-mail accounts to contact the instructor/staff at school.

Class Schedule

This is a tentative schedule, and is subject to change throughout the semester.

Week	Topic
1	Introduction
2	Basic HTML and CSS
3	JavaScript Basics (Code Structure, Variables, Assignment, Memory)
4	Booleans and Conditional Execution
5	Functions

6	DOM and Functions
7	Review and Midterm
8	For and While Loops
9	Objects
10	Arrays
11	JQuery
12	Recursion
13	Review
14	Project Presentation
15	Final