

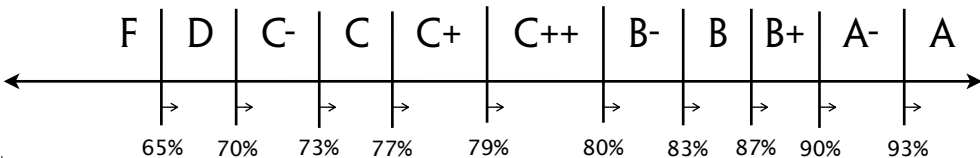
Computer Science I

CMSC 120 • Fall 2010

-Background

When	<i>Class</i> Monday and Thursday afternoons 2pm through 3:15pm <i>Labs</i> Section 113 Tuesdays at 3:30pm / Section 114 Wednesdays at 3:30pm	
Where	Lowell Thomas, room 135	
Required Text	<i>JavaScript, 5th edition</i> by Don Gosselin - ISBN 978-0538748872	
Optional Text	<i>Code Complete, 2nd edition</i> by Steve McConnell - ISBN 978-0735619678	
Web Site	labouseur.com/courses/cs1/	
Instructor	Alan G. Labouseur LT 101 (office hours posted)	Alan.Labouseur@Marist.edu 845-575-3000 x2831 <i>Marist phone</i> 845-440-1102 <i>home office phone</i>

-Grading

Letter Grades											
You can earn up to 1000 points over the course of the semester, broken down over the following areas:	Pop Quizzes	5%	50 points: 2 or more totaling 50 points								
	Homework	20%	200 points: 4 at 50 points each								
	Mid-term Exam	10%	100 points, covers material up to then								
	Mid-term Project	10%	100 points, requires all material up to then								
	Final Exam	10%	100 points, covers all material								
	Final Project - game	15%	150 points, requires all material								
	Lab Work	15%	150 points, see lab syllabus for details								
	Attendance	5%	50 points for consistently showing up								
	Participation	5%	50 points for constructive participation								
	Laziness Adjustment	3%	30 points for not being lazy								
	Whining Adjustment	2%	20 points for not whining								

-Objectives and Assessment

Assessment methods include assignments, quizzes, exams, discussions, presentations, and projects.

This course introduces a **disciplined approach** to the **craft of software** development. Students learn to design, develop, test, debug, and document a program with good code style. This helps to form in the student a foundation for further studies in computer science. The students will:

- come to know **software development as both art and science**
- understand how data is represented in a computer
- know and use correctly data types, operators, and control structures
- be able to correctly use selection and repetition control structures
- believe in the nature of objects as consisting of data and methods
- be able to design and implement simple classes for problem solving
- be able to declare and manipulate arrays
- get practice in finding some answers for themselves, because capable problem solvers never stop learning.

Computer Science I

CMSC 120 • Fall 2010

-Proposed Schedule

#	Week	Ch	Topic	Required
1	30-Aug	1	<i>Monday:</i> Course Introduction, Expectations, and Goals <i>Thursday:</i> Our environment / Simple HTML / FTP	<i>Presence</i>
2	6-Sep	1	<i>Thursday:</i> A brief history of the Internet / Client-Server architecture	<i>Hw1</i> Web page
3	13-Sep	1, 2	<i>Monday:</i> Student site structure / Text boxes / Wiring up the JavaScript <i>Thursday:</i> Base 2, 10 and 16 / Code structure / Vars and their declarations	<i>Attention</i>
4	20-Sep	2	<i>Monday:</i> Functions and Scope / Code structure: indenting, identifiers <i>Thursday:</i> More Scope / Data types / Assignment operations	<i>Attention</i>
5	27-Sep	3	<i>Monday:</i> Relational Operators / if-else / Nested if-else / switch-case <i>Thursday:</i> Other operators / Precedence	<i>Hw2</i> Game v0.2
6	4-Oct	-	<i>Monday:</i> Mid-term Exam part one <i>Thursday:</i> Mid-term Exam part two	<i>Attention</i>
7	11-Oct	-	<i>Monday:</i> Mid-term project active learning <i>Thursday:</i> Mid-term project due	Game v0.4
8	18-Oct	2, 3	<i>Monday:</i> Mid-term review / Using our tools to structure our game. <i>Thursday:</i> Repetition: While and For loops	<i>Attention</i>
9	25-Oct	3, 7	<i>Monday:</i> Arrays / Arrays practice <i>Thursday:</i> Iterating over arrays w/For and While loops / Parameters again	<i>Attention</i>
10	1-Nov	6	<i>Monday:</i> Loops and Arrays yet again <i>Thursday:</i> Our own classes, objects, and the Prototype	<i>Attention</i>
11	8-Nov	3, 7	<i>Monday:</i> Classes and Objects for our game project <i>Thursday:</i> Arrays of objects / the For-each looping construct	<i>Hw3</i> Game v0.6
12	15-Nov	-	<i>Monday:</i> OOP Principles: Fred Brooks's <i>Essence and Accidents</i> <i>Thursday:</i> OOP Principles: Aristotle's <i>Categories</i>	<i>Attention</i>
13	22-Nov	-	<i>Monday:</i> Game Development Active Learning	<i>Attention</i>
14	29-Nov	-	<i>Monday:</i> Catch up, review, and practice <i>Thursday:</i> Catch up, review, and practice	<i>Hw4</i> Game v0.8
15	6-Dec	-	<i>Monday:</i> Comprehensive Final Exam part one <i>Thursday:</i> Comprehensive Final Exam part two	<i>Attention</i>
16	13-Dec	-	Monday at 1pm: Final Project due / Demos	Game v1.0

Computer Science I

CMSC 120 • Fall 2010

-Policies

Tests	Tests cover material presented up to the class in which the test is given. No makeup tests will be given. Ever. If you anticipate missing a test, make arrangements with me in advance to hand in the exam prior to its due date.
Homework	All assignments must be handed in and/or uploaded at the beginning of class on the day they are due. If you're going to miss a class (which is, itself, a bad idea) arrange to submit your homework on schedule anyway.
Late Submissions	No assignments will be accepted late. Ever. The reason is that we may discuss some possible solutions in the class in which it's due. Discussion is an important part of the learning process, and once we cover the assignment in class, you clearly cannot hand it in after that.
Attendance and Communication	Students are expected to attend every class. Attendance may or may not be officially recorded, but it will always be noted, and I never forget. The official means of communication for this course will be in-class announcements. Missing class is no excuse for failure to act as required by these announcements.
Etiquette	Students are expected to be on-time for every class, return to class after breaks, and keep their cell phones turned off during class.
Appealing Grades	<p>I have an appeals process to handle any questions you might have about fairness related to my grading of your work. I will address each and every one of your concerns. To that end, and in order to be fair and efficient, you must to write a letter of appeal if you want me to alter your grade.</p> <p><i>Rules for Submitting an Appeal</i></p> <ul style="list-style-type: none">• Appeals must be in the form of a neatly written letter.• Appeals must be on a separate paper and stapled to the work in question.• Every appeal (if there is more than one) requires its own paragraph.• Appeals are due the next class period after the work is returned to you.• Appeals must be very specific.• Appeals must be content-based, not personal or emotional.• Insufficient time is not a basis for an appeal.• You must communicate what action you would like me to take, for instance give full credit, add points, etc. <p>This process empowers students, advances learning, and moves students toward academic maturity. As such, it benefits both the teacher and the student. Further, students are given a method to argue their points in an appropriate manner and explain their reasoning, while the teacher has an opportunity to learn whether or not he has understood students' reasoning.</p>

Computer Science I

CMSC 120 • Fall 2010

-Policies

Taking Notes

You are expected to take notes in class. Note what we talk about in class: what I say, what you say, what others say. Everything covered in class or assigned as homework is fair game for tests and quizzes. I do not often (if ever) distribute notes, so you must take them on your own; it's part of the learning process. To that end, a good way to prepare for an exam is to rewrite your notes, thereby reinforcing and organizing the material.

Lab Work

It's entirely possible that you may encounter some topics in lab prior to our discussing them in class. **Don't panic!** Our lab instructors are fine teachers as well as experts in this field. As such, they are extremely well equipped to introduce you to new topics. Then, when we get there in class, you can amaze me with your knowledge.

Learning to Learn

Capable professionals know how to solve problems, even -- perhaps most especially -- in the absence of complete knowledge. This is a large part of what I want to teach you. To that end, I will encourage and at times require you to practice finding things out for yourself. There will be occasions when you need to look things up and find things out *on your own* to complete an assignment. This is an important skill, and one that will serve you for the rest of your life, so we might as well begin practicing it now.

Students with Disabilities

Any student requesting or wondering about accommodations based on a disability should see the fine folks at the Office of Special Services in Donnelley 226 and online at www.marist.edu/specialservices.

Safety and Security

If you see something, say something.

Report all emergencies or suspicious activity or persons to the Office of Safety and Security

Emergency - x5555 or 845-575-5555

All Other Calls - x2282

Outside Line 845-471-1822

SNAP Escort Service - x 7627 (SNAP)

All classrooms have a phone capable of calling Security in an emergency. The Building name and room number is posted on the inside of all classrooms. Tell Security your location and nature of the problem.

Classrooms have door locks on the inside to prevent entry of intruders. (Do not use these to keep your professors out. They hate that.)

Emergency Information placards have been placed in all classrooms close to the phone. Read them and note the evacuation routes.

Close all doors as you leave.

Computer Science I

CMSC 120 • Fall 2010

-Policies

Guidelines for Grading Programs and Projects

All programs and applications must be free of syntax errors to receive any credit. Programs that ((compile or interpret) and execute) cleanly but contain logic errors will be graded based on the severity of the errors and how well your work demonstrates your approach to solving the problem.

When evaluating your programming assignments I will ask myself the following questions about your program:

- Is it correct? I.e., free from faults in specification, design, and implementation?
- Is it usable? About the interface...
 - ▶ Is it “clean” and well-organized? Would Mr. Monk be proud?
 - ▶ Does it obey the Laws of Least Astonishment?
 - ▶ Is it accurate?
 - ▶ Is it easy to use?
- Is it reliable and robust? I.e., can it perform its functions without breaking down, even given unexpected input or other circumstances?
- About the readability and maintainability of the source code...
 - ▶ Are the comments plentiful, clear, meaningful, and helpful?
 - ▶ Are the identifier names accurate, clear, and meaningful?
 - ▶ How is its object-oriented architecture?
 - ▶ Does it compile or interpret cleanly?
- About the Design...
 - ▶ Is the solution well-designed?
 - ▶ Is it re-usable?
 - ▶ Does it illustrate the points made and principles discussed in class?
 - ▶ Have any lazy shortcuts been taken?
 - ▶ Can the program be unit and system tested?
- About the results, are they accurate? I.e., are the qualitative outputs free of error?
 - ▶ Does it perform as assigned?
 - ▶ Is the output well-formatted and meaningful?

Remember, neatness and style count. If you hand in a program that works, but that does not adhere to reasonable style standards, is inadequately commented, or is poorly designed, you will be penalized. Good habits are important and I want you to develop some.

Fire Alarms

Everybody must immediately evacuate the building when the fire alarm sounds. Do not use elevators during a fire alarm. Once outside, get to a safe distance from the building and do not re-enter until given the “all-clear” from the Fire Department or Security Officer. (Two fire drills are conducted each semester, so you have that to look forward to.)

Computer Science I

CMSC 120 • Fall 2010

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Academic Honesty

As a part this class, I will uphold and **vigorously enforce** the general policies of this institution on academic honesty and plagiarism. All examinations, papers, projects, and homework assignments are subject to the usual standards of academic honesty as described in the Student Handbook and/or other related publications.

All work must be your own. Period. End of story. This applies to homework, tests, quizzes, projects... anything and everything you do for this class. You are free to use reference material (including but not limited to text books and example code or other resources you find in person or online) as a guide or for inspiration. But you must cite all your sources and make the proper references in your work. Further, you may not under any circumstances copy even the smallest part of those materials and present it as your own work. Any violation of this policy will result in immediate dismissal from the class with a failing grade. There will be no second chances.

Furthermore, I expect my students to behave in a manner appropriate to Computer Science and Information Technology professionals. Professional ethics **demand** that you embrace traditional “thou shall not cheat” behavior, and also that you soundly reject additional forms of dishonesty and abuse which are uniquely possible working with computers.

Remember: Allowing someone to copy your work is every bit as dishonest as copying someone else's, and will be treated just as harshly.

Any violation -- actual or perceived (in my sole discretion) -- of this Academic Honesty policy will result in one or more of the following actions in addition to any other forms of recourse available as specified by the Student Handbook:

- You will be ejected from the course with a failing grade.
- A letter will be sent to your department chair, your Dean, and the president of the college.
- And more. (And worse!)

The bottom line is that I expect you to conduct yourself as a person of integrity. This means that **plagiarism in any form is completely unacceptable**. You are soon-to-be a computing professional, and I encourage you to consult the ACM professional code of ethics. See www.acm.org/about/code-of-ethics.

See also <http://www.labouseur.com/courses/honesty>