CSI 201 – Computer Science I
Fall 2016

Section 10   Professor: Dr. Kyle Wilson
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Section 11   Professor: Dr. Shaun D. Ramsey
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Office hours posted on canvas

Course Description

Catalog Description: The objectives of this course are threefold: (a) to introduce problem-solving methods and algorithmic development; (b) to teach an object-oriented programming language; and (c) to teach how to design, code, debug, and document programs in an object oriented environment using techniques of good programming style.

Details: This course is an introduction to programming in the C++ programming language. At the end of this course you should be able to design algorithms for solving novel problems, explain step-by-step how a program works when it does run, translate an English description into code and correct/debug a computer program to produce desired results. This course will be even more challenging to those with weaker logic, algebra and problem solving skills. The course is designed to prepare students for CSI 202, which covers object-oriented design strategies.

Textbook: Liang, Y. Daniel. 2014. Introduction to Programming with C++, 3rd ed. Pearson.

Course Policies

Grading Policy

The course grade will be computed as follows:

- **20%**. Quizzes, Classwork, and Participation
- **20%**. Assignments
- **20%**. Exam 1 — **September 28**
- **20%**. Exam 2 — **November 11**
- **20%**. Final Exam

Quizzes.   Short quizzes will be posted to canvas. Quizzes will remain open for unpenalized retakes until the last day of class.

Assignments.   Some assignments may, by design, be difficult. We will strive to provide adequate support, through email, office hours, and help at the quantitative skills center. We encourage students to work on harder tasks in groups. Most assignments will be submitted through canvas. Late assignments will earn no credit.

Exams.   The first and second exams will be conducted in class. Each exam will be comprehensive. The score on the final exam may replace *exactly one* of the first two exams. This replacement will be computed automatically at the end of the semester in the way that most improves each student's grade.

The final exam will be administered during its scheduled slot during final exam week. An absence on the day of the exam will result in a grade of 0. Except in cases of very extreme emergency, exams must be taken on the day the exam is given. Before a make-up test is scheduled, documentation of the extreme emergency must be given. Make-up exams for tests missed due to an extreme emergency will be arranged for a time that is mutually convenient for the student and the professor.

Sample First Exam.   In an effort to offer clear expectations, we are providing a sample first exam, available from the beginning of the semester on canvas. We intend that this will closely resemble the real first exam, and will publically announce any departure from that plan.

Attendance Policy

Attendance: Attendance is mandatory in this course. On your sixth absence, you automatically fail the course. As a matter of courtesy, you are expected to notify your professor before class describing the reason of your absence. You must be present on the day of an exam or you will receive a 0. There is no distinction between excused and unexcused absences. It is quite likely that I will email you to discuss the reasons you have missed the class, but it is ultimately your duty to keep track of your absences and to contact me. Missing a class may result in missed classwork. There is no make-up classwork. It is your responsibility to obtain assigned homework, announcements and class notes from a classmate. Coming late to class will also count against you. In this case, every two late arrivals (lates) count as an absence. Thus you fail the course with 12 lates or 6 absences or any mix of the two that add up to 6. Examples are: 2 lates and 5 absences, 4 lates and 4 absences, 6 lates and 3 absences, and so on.

Electronic Distractions

We will often use laptops to program in class. At all other times, I encourage you to minimize distraction and keep phones and laptops put away. When we are programming in class, please avoid distractions such as email and facebook. If you insist on using your devices in class, please speak with me first, and then seat yourself somewhere where the screen won't be distracting to others.

Accomodations

If you have an accommodation that has been reported to the college, please let me know as soon as possible so I can work to meet your accommodation. You must notify me of any necessary accommodation at least two weeks prior to the requirement.

Ethical Behavior

In short, do not cheat. I will attempt to only assign fair and reasonable amounts of work, and will attempt to provide you enough support to complete it in a reasonable amount of time. Violations of the Honor Code of Washington College will be pursued according to College policy. If you find the workload to be unreasonably heavy, or the assignments too difficult, please bring your criticisms to me, and I will attempt to respond promptly.

While some forms of cheating are obvious, often students are unsure which actions constitute cheating in a programming course. This ethics statement is most emphatically not intended to discourage teamwork. As a rule of thumb, any part of an assignment that is not the work of the stated authors should have a citation. I do not require a particular citation format. However, the answer to the question "Who actually wrote this?" should always be clear.

Of course, it is not plagiarism to completely copy someone else's work and cite it appropriately. However, this does not show us that you have learned anything, hence is not worth credit.

Schedule

This schedule is subject to change as the semester progresses.

Week	Topics
1	Operators and variables
2	Conditions
3	Loops
4	Function Calls
5	Review, **Exam 1, 09/28**, Function Creation
6	Function Creation
7	Recursion
8	Arrays
9	Arrays and Pointers
10	Vectors
11	Review, **Exam 2, 11/11**, Classes
12	Classes
13	Classes, Functions, Constructors
14	Review
–	**Final Exam**