CS120: Computer Science I

Course Syllabus - Spring 2024

Instructor: Michael D. Wilder

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Office Location: JEB 226

Office Hours: MWF 12:30 – 1:20 or by appointment.

Catalog Description: Fundamental programming constructs, algorithms, and problem-solving; Fundamental data structures, overview of programming languages, virtual machines; Introduction to language translation, declarations and types, abstraction mechanisms, and object-oriented programming. This course includes a lab. Prerequisites: Math 143 with a grade of C or higher or CS 112 with a grade of B or higher; or sufficiently high ACT, SAT, or Math Placement Test score to qualify for Math 170.

Textbook: *A Project-based Introduction to C++*, Terence Soule, Kendall-Hunt Publishing Company, 2014. ISBN 978-1-4652-5114-5, available in the UI bookstore. The textbook is required for this course.

This course is an introduction to computer programming. C/C++ will be the language used to complete assignments and labs, but we will be covering general concepts that apply to a majority of programming languages. The goal is to help you become a better programmer in any language, and to make it easier for you to learn new programming languages, particularly imperative, procedural, and object-oriented programming languages.

Programming computers is often a challenging endeavor. Don't be afraid to ask questions and get help. The Computer Science department has a number of resources that are available to help you learn the material in this course:

- Ask your TA during lab.
- Go to the Computer Science Assistance Center (CSAC) in JEB 211. The CSAC is staffed with CS students, including your lab TA, from 9-5 Monday through Friday. The staff in the CSAC are CS undergraduate and graduate students who are there to answer your questions. They have all taken this course before. The CSAC is also a computer lab, so you can work on your assignments there.
- Talk to your colleagues who are taking the course. If you are stuck on a problem, ask your colleagues. Collaboration is encouraged, but you must turn in your own code.
- We have arranged for Supplemental Instruction (SI) for this course. The SI program is designed to increase your likelihood of success in this course. Your SI instructor will attend course lectures and meet periodically with students to iron out any difficulties that you may have. More information will be provided about this later.
- See your instructor during his office hours. He has taken this course before and has taught it more than a few times. His office hours are listed in bold typeface near the top of this syllabus.

Course Exams: There will be two midterm exams and a final exam in this course. The midterm exams are 50 minutes long and will be administered during class time on February 23 and March 29. The final exam is two hours long and will be administered on May 6 at 8:00 AM. All exams are administered in person. No remote exams are permitted in this course.

Course Structure: This course meets three times a week. You are required to attend a lab once a week. There is usually a programming assignment due every week, and a lab assignment that is to be completed during the prescribed lab time. There will be a brief quiz during each lab.

Grading Schema:

Two 50-minute exams (20% each)	40%
Final Exam	35%
Quizzes	5%
Labs	10%
Assignments	10%
Total	100%

The letter grade that you earn in this course will be determined from the following scale:

100% – 90% A 89.9% - 80% B 79.9% - 70% C 69.9% - 60% D 59.9% - 0% F

The instructor reserves the right to adjust these percentages lower if necessary.

Assignments: There will be a programming assignment and a lab assignment typically every week. In some cases previous assignments will be expanded upon in future assignments, so it is imperative that you do not skip any assignments. All programs you submit must represent your own work. You are encouraged to ask questions and collaborate with your colleagues, but all work that you submit must be entirely your own. All programs that you submit must compile and be accompanied by sample output. All programs you submit must start with a comment containing your name, your course section number, the date it is submitted, and the current assignment number (if applicable). All programs you submit should be adequately commented, should contain descriptive variable names, and should be partitioned into functions (or methods) where appropriate. You must *test your programs* to demonstrate that they behave correctly under reasonable conditions.

Late Assignments: Assignments are due on or before the date and time prescribed. Late assignments will not be accepted without a Very Good Excuse. A Very Good Excuse almost always contains a written note from a legal, medical, or university authority detailing reasons why you were not able to meet the deadline for that assignment. All submitted assignments must run and must be accompanied by output demonstrating the behavior of the program. If you submit a program that runs but only meets some of the assignment criteria, you may earn partial credit for that assignment. If you submit a program that does not run, you will not earn any credit for that assignment.

Labs: There will be separate assignments for the labs. You are required to submit the assignment for the lab before leaving the lab. Lab attendance is mandatory. In most cases the lab assignment will be posted prior to the start of the lab so that you may get a head start on the lab if you choose. It is acceptable to complete a lab assignment before the start of the lab, turn it in at the beginning of the lab, and leave the lab early.

Academic Honesty: As a student enrolled at the University of Idaho, you are bound by the UI Student Code of Conduct. Article II, Section A.1 of this code addresses academic dishonesty. This code states "Academic honesty and integrity are core values at a university and the faculty finds that even one incident of academic dishonesty may merit expulsion. Instructors and students are jointly responsible for maintaining academic standards and integrity in university courses. In addition to any disciplinary sanctions imposed under the Code, additional consequences for academic dishonesty may be imposed by the course instructor, including issuing a grade of F in the course. Any grade issued by the course instructor, whether as a result of academic dishonesty or not, constitutes an academic evaluation and is not disciplinary action." Academic honesty is vital in preserving the integrity of any academic institution. The Student Code of Conduct outlines the expected behavior of all students in all classes at UI. It can be found at http://www.uidaho.edu/student-affairs/dean-of-students/student-conduct/student-code-of-conduct.

Please do your own work in this course unless the instructor specifically directs otherwise. Academic dishonesty will be severely penalized.

CDAR Reasonable Accommodations Statement: Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through the Center for Disability Access and Resources located in the Bruce M. Pitman Center, Suite 127 in order to notify your instructor(s) as soon as possible regarding accommodations needed for the course.

Phone: (208) 885-6307E-mail: cdar@uidaho.edu

• Website: www.uidaho.edu/current-students/cdar

University of Idaho Classroom Learning Civility Clause: In any environment where people gather to learn, it is essential that people feel as free and safe as possible in their participation. To this end, it is expected that everyone in this course will be treated with mutual respect and civility, with an understanding that all of us (students, instructors, professors, guests, and teaching assistants) will be respectful and civil to one another in discussion, in action, in teaching, and in learning. Should you feel that our classroom interactions do not reflect an environment of civility and respect, you are encouraged to meet with your instructor during office hours to discuss your concern. Additional resources for expression of concern or requesting support include the Dean of Students office and staff (885-6767), the UI Counseling and Testing Center's confidential servies (885-6716), or the UI Office of Human Rights, Access, and Inclusion (885-4285).

Computer Science Support: For technical issues involving computing equipment or other resources administered by the Computer Science department, please contact support@uidaho.edu.