

# Syllabus: CS 110 Imperative Problem Solving - Spring 2024

**Class Time:** Section 01: MWF 10am – 10:50am in Taylor 200  
Section 02: MWF 11am – 11:50am in Taylor 200  
**Website:** <http://csweb.wooster.edu/dguarnera/cs110/>  
**Professor:** Drew Guarnera ([dguarnera@wooster.edu](mailto:dguarnera@wooster.edu))  
**Office:** Taylor 313  
**Office Hours:** [By Appointment](#)

**Textbook:** The textbook is available online [via O'Reilly](#). You can buy a physical copy if you like, but it is not required. See the course web page for a link to the book.

- [Programming in C, Fourth Edition by Stephen G. Kochan \(ISBN: 0321776410\)](#)



**Course Description:** This course emphasizes the imperative view of problem solving, supported by problem solutions implemented in the C programming language. Topics include: procedural design, algorithm development for various problems, functional decomposition, recursion, the fundamentals of C and its standard library, pointers and addressing, binary number representation, and the distinction between stack allocated and heap allocated memory.

**Course Goals:** Upon completion of this course, a successful student will be able to:

- Design and implement small to moderate-sized programs in C using appropriate imperative programming design principles
- Apply functional decomposition to solve programming problems and promote code reuse
- Understand the memory model of a C program during execution
- Use the basic functionality of Git

**Prerequisites:** CS 100 or CS 102

**Grading:** Your final grade will be calculated as follows.

- 15% **Quizzes.** Regular Moodle quizzes assess whether you are engaging with the material outside of class, and to highlight important takeaways from the material. Quizzes, which are to be completed individually, will typically close at 10:00am on class days to encourage everyone to complete readings prior to class.
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- 10% **Engagement.** You are expected to attend class, arrive on time, ask and answer questions, and participate in group work/discussion. Attendance will be taken using Plickers and you **MUST** bring your Plicker QRCode to class every day or you will not receive engagement credit! Each class session will be worth three points. If you arrive to class on time, you will receive the first point. You may be asked to answer a question (using Plickers) or work on in-class activities to practice some course concepts. If you submit a complete activity, you will receive the second of the three points. If your question/activity submission is correct, you get the third point. If no question or in-class activity is assigned for that day, you will automatically receive all points for attending class and arriving on time. If you miss class or attend late, you will receive zero engagement points for the class session. You will **NOT** be able to make up engagement points.
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- 15% **Exercises.** These assignments will generally consist of a coding or written assignment. **All exercises are to be completed *individually*, unless otherwise explicitly stated in the instructions.** Exercises will vary in length and relative difficulty and due dates set accordingly. All exercises must be submitted on or before the due date. Late submissions will result in grading penalties (see Late Policy).
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- 30% **Exams.** There will be two intermediate exams. See course website for tentative dates.
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- 30% **Final Exam.** A cumulative exam scheduled during the College final exam period.


This class uses the standard grading scale:


A	A-	B+	B	B-	C+	C	C-	D	F
100-93%	92-90%	89-87%	86-83%	82-80%	89-77%	76-73%	72-70%	69-60%	<=59%


Note that the main purpose of homework assignments is to provide opportunities to practice what you learn. It is expected that much of your learning will come from practice! I hope that you understand the value of this work, and do not regard it solely as a grading source. With this in mind, the instructor may choose to grade a subset of homework assignments. The remaining subset may be graded partially or based on whether the work was submitted.


**Pass/Fail option.** Students are permitted to elect the equivalent of four courses (in addition to Senior Independent Study) graded S/NC out of 32 courses required for graduation [excluding courses taken S/NC in Spring 2020, Fall 2020, and Spring 2021]. The minimum equivalent grade to earn S in courses graded S/NC is C-. The deadline for electing a Pass-Fail grading option is Tuesday, February 20, 2024.


**Course Drop.** Students may drop any course without petition or switch to an audit by Tuesday, February 20, 2024. Students may drop a course with petition by Tuesday, April 30, 2024. The minimum enrollment of 3.0 credits remains in effect. Requests to drop enrollment below 3.0 credits will require additional documentation via [Other academic petitions](#).


**Attendance:** We work best as a learning community when everyone participates. As such, it is expected that you will attend  class at scheduled times and in accordance with health and safety protocols. If you are unable to attend, I encourage you to check the course website and get notes from a classmate to catch up on missed materials. I will communicate to you in a timely manner any changes to this schedule. **Per college policy, a student may not miss more than 25% of class meetings (e.g., ~3.5 weeks of class for a full-credit course in fall/spring semesters), through any combination of excused and unexcused absences.** If this occurs, the instructor will notify the Dean for Curriculum and Academic Engagement and the Dean of Students for consultation.

**Technology:** Our class works best when we use our devices to further our learning. I encourage you to only use technology  during class time to enable, rather than to distract from, our learning and community building. During class, we'll write code. Bring your laptop to class every day.

**Communication:** Communication is the key to success. Contact me as soon as possible if you are struggling with material or  if a conflict arises. The best way to contact me outside of class is by coming to my office hours, or asking a question via email. I primarily read emails between 9am and 5pm Monday through Friday. Please allow at least 24 hours response time for any communication. I usually respond faster than that, but you should not rely on this. Please keep in mind when contacting me over the weekend that the response time may be longer (allow for roughly 48 hours).

**Late Policy:** I do my best to grade and return assignments to you as soon as I can. Late submissions make timely grading  much more difficult. As such, late assignments will be subject to a 30% penalty if the assignment is turned in on the same day as the due date (e.g. an assignment due before class is turned in after class). **No late assignments are accepted after this point and the grade will be a zero.**

**Accommodations:** Your success in this class is important to me. We all need accommodations to learn effectively. If there  are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. You do not need to share specifics, but we can work together to develop strategies to meet both your needs and the requirements of the course, and to identify specific resources that may assist you.

**Names and Pronouns.** All people have the right to be addressed and referred to in accordance with their personal identity.  We include pronoun introductions to avoid gender-based assumptions and to ensure that the correct pronoun is used when referring to you. I will do my best to address and refer to all students by the names and pronouns shared in class, regardless of what is listed on the roster, and I support classmates doing so as well.

We will have the chance to indicate the name that we would like to be called and, if we choose, to identify pronouns with which we would like to be addressed. The name and pronoun(s) that you use may change and, if they do, please let us know you would like us to change how we address you. If you are interested in changing your chosen name and pronoun(s) in the College of Wooster system, you can find additional information [here](#).

**Class Policies:** For this class to be effective, you must be an active learner. You are expected to contribute to each class session. This includes arriving on time, actively working on the in-class activity, asking questions, and answering others' questions. Students that are successful in this course are those who are responsible in their preparation. This means reading the assigned chapters, checking the course website for updates and upcoming deadlines, and completing assignments in a timely manner.

Behavior that is discouraged includes but is not limited to disrespectful interactions such as yelling/cursing, intolerant language, tardiness, and misuse of technology for purposes unrelated to the class. Students that don't abide by my standards of classroom interaction and who engage in behaviors which disrupt and distract in the learning environment will be subject to the procedures laid out in Scot's Key.

**Academic Integrity:** You are expected to know and abide by the rules of the institution as described in The Scot's Key and the Handbook of Selected College Policies (found [here](#)). Dishonesty in any of your academic work is a serious breach of the Code of Academic Integrity and is grounds for an F in this course. Such violations include turning in another person's work as your own, sharing code, copying from other sources, and violating expectations for a group project. You may discuss **ideas** with your peers. Sharing implementation solutions, your code, or accepting code from other students is not allowed under any circumstance.

Additionally, my expectation is that you will not use any artificial intelligence (AI)-powered programs (e.g., ChatGPT, DALL-E, etc.) to help you with your assignments for this course. Any use of AI-generated work to outline, write, create, or edit your assignments will be considered an academic integrity violation. These programs may provide inaccurate or biased information, but more importantly, they do not serve your development as a student. In this course you will learn valuable skills from outlining, generating, and editing your own work. **If you have questions or are unsure at any time what is permissible, do not make assumptions, please contact me with any questions.**

**Conflicts with Academic Responsibilities:** When conflicts arise between academic commitments and complementary programs (including athletic, cultural, educational, and volunteer activities), students, faculty, staff, and administrators all share the responsibility of minimizing and resolving them. The College expects students to give the highest priority to their academic responsibilities. As a student you have the responsibility to inform me of potential conflicts as soon as you are aware of them, and to discuss and work with me to identify alternative ways to fulfill your academic commitments without sacrificing the academic integrity and rigor of the course.

**Title IX:** The College is committed to fostering a campus community based on respect and nonviolence. To this end, we recognize that all Wooster community members are responsible for ensuring that our community is free from discrimination, gender bias, sexual harassment, and sexual assault. In accordance with Title IX, Wooster is legally obligated to investigate incidents of sexual harassment and sexual assault that occur on our campus. Faculty who become aware of an incident of sexual violence, including harassment, rape, sexual assault, relationship violence, or stalking, are required by law to notify Wooster's Title IX Coordinator. The purpose of this disclosure is to ensure that students are made aware of their reporting options and resources for support. For more information about your rights and reporting options at Wooster, including confidential and anonymous reporting options, please visit [here](#).

**MCS Department:** The College of Wooster is committed to inclusive excellence in undergraduate education, and our department seeks to actively foster a welcoming learning environment in which diversity and individual differences are valued, respected, and celebrated. Diversity comes in many forms, including but not limited to, race, color, national origin, ancestry, sex, gender identity and expression, sexual orientation, socioeconomic status, religion, age, and physical and/or mental abilities. The diversity that students and staff bring to the classroom is an invaluable resource, strength, and benefit to everyone at the College of Wooster. As such, we are vigilant and attentive about issues of diversity, equity, and inclusion in the classroom. Expressions or actions disparaging others are contrary to the mission of the department and will not be tolerated.

**Additional Resources.** Please view the course website for additional links and resources, including information on Moodle, the Academic Resource Center, Library Support, health and safety guidelines, Title IX, and discriminatory or bias-related harassment reporting.

**We're All Human.** Let's all practice empathy, kindness, and understanding - towards each other and ourselves. Although every effort has been made to make this syllabus as complete as possible, changes may occur regarding the course schedule, grading, assignments, and office hours. I reserve the right to make changes to this syllabus and other course resources if necessary. Any changes will be communicated in a timely manner.