

# PROGRAMMING ON PURPOSE – SYLLABUS

CSC 120, Winter 2023

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## ADMINISTRATIVE DETAILS

### COURSE WEB SITE

<http://cs.union.edu/csc120>

### CLASS MEETINGS

The course will meet Mondays, Wednesdays, and Fridays 9:15am – 10:20am, with another meeting Tuesdays 10:55am – 12:40pm. All class meetings are in Olin 107.

### INSTRUCTOR INFORMATION

name: Aaron G. Cass  
e-mail: [cassa@union.edu](mailto:cassa@union.edu)  
web site: [cs.union.edu/~cassa](http://cs.union.edu/~cassa)  
office: Steinmetz Hall Room 220  
office phone: 388-8051  
home phone: 382-9671 (before 10pm please)

### OFFICE HOURS

If you need help, or just want to chat, please:

- Come by during my scheduled office hours. See <http://cs.union.edu/~cassa/schedule.html> for up-to-date info on my office hours.
- Just stop by, especially if you think it will be quick.
- Schedule a meeting, especially if you think it will not be quick. To schedule a meeting with me, go to <http://cs.union.edu/~cassa/schedule.html> and follow the easy instructions. If you and a classmate have similar questions, feel free to schedule a meeting together with me.

## COURSE DESCRIPTION

From the course catalog:

An introduction to software design principles aimed at making software more efficient, robust, readable, maintainable, and reusable. An introduction to object-oriented programming and design, including classes, objects, methods, and sub-typing.

## GOALS

Your goals in this course should be:

1. Learn about the goals of good design
2. Develop skill in making good design decisions to write clear, well-structured, maintainable software.

3. Learn the basics of object-oriented programming and design.

My goal is to help you accomplish these goals by filling our class meetings with useful and fun exercises and discussion and by giving you plenty of practice outside class. I strongly believe that you will learn primarily from working on projects on your own and with others. I will give you plenty of practice with this, both in and outside of class.

## PREREQUISITE

**Introduction to Computer Science (CSC 10x or equivalent).** In your introductory course, you learned the basics of computer programming. In this course, you will build on those basics to make more complex programs that solve more complex problems.

## TEXTBOOKS

There is **no required** textbook, but if you have the book you used in your introductory computer science course, you might find it useful as a reference.

## GROUND RULES

### ATTENDANCE

I expect you to come to all class meetings. My goal is to fill our class time with activities that will help you to master the material, so it will therefore be worth your while.

In particular, attendance in lab is required to earn credit for lab, unless you have a pre-arranged excused absence.

### LATE WORK AND MAKE-UPS

Projects will typically be due at 10pm the night before a class meeting, and should be submitted via gradescope by then. Projects up to 4 hours late will be penalized 10%, while projects 4 to 24 hours late will be penalized 30%. Projects more than 24 hours late will earn a zero.

Labs are due at 4pm the day after the lab meeting, and should be submitted via gradescope by then. Submissions received after that time will earn a zero.

If you will be unable to take an exam on the scheduled date, you must **let me know ahead of time**, so we can schedule a different exam for you (perhaps before others take theirs). If you are unavoidably detained because of illness or family crisis, please let me know as soon as possible.

### ACCOMMODATIONS

I encourage students with disabilities to discuss with me, during the first two weeks of the course, appropriate accommodations that might help facilitate your learning. You will need appropriate documentation from the Office of the Dean of Students. All discussions will remain confidential.

## ACADEMIC INTEGRITY

### GENERAL STATEMENT

Union College recognizes the need to create an environment of mutual trust as part of its educational mission. Responsible participation in an academic community requires respect for and acknowledgement of the thoughts and work of others, whether expressed in the present or in some distant time and place.

Matriculation at the College is taken to signify implicit agreement with the Academic Honor Code, available at [honorcode.union.edu](http://honorcode.union.edu). It is each student's responsibility to ensure that submitted work is his or her own and does not involve any form of academic misconduct. Students are expected to ask their course instructors for clarification regarding, but not limited to, collaboration, citations, and plagiarism. Ignorance is not an excuse for breaching academic integrity.

Students are also required to affix and sign the full Honor Code Affirmation, or the following shortened version, on each item of coursework submitted for grading:

*I affirm that I have carried out my academic endeavors with full academic honesty.*

## SPECIFIC GUIDANCE FOR THIS COURSE

In this course, you will learn by doing. If you do not do things for yourself, you will not learn them. Therefore, I expect you to do your own work, and only turn in that which is yours. When you have questions, feel free to talk to me, the help desk students, or even other students in the class. However, do not leave these discussions with just an answer – you need to *understand* how to arrive at the answer.

For **projects**:

- **DO** your own work.
- **DO** struggle on your own before seeking help.
- **DO** seek help (after first giving a serious, honest attempt) from Help Desk, your professor, your fellow classmates.
- **DO** help your classmates by having conversations about general strategies.
- **DON'T** help your classmates by telling them what code to write.
- **DON'T** look at someone else's code, except when you are trying to help *them*.
- **DON'T** give your code to anyone else (on paper, electronically, or in any other way).
- **DON'T** type or write code for anyone else.
  
- **DO** ask your professor if you are unsure what's permissible or not.
- **DO** put the Honor Code Affirmation in a comment at the top of each program file you submit.

For **labs**, I expect you to still do your own work, but it's accepted to get and give more help on labs than would be appropriate for projects.

For **exams**, of course, you should work completely alone.

## EVALUATION

### PROGRAMMING PROJECTS (50%)

There will be four (4) programming projects assigned throughout the term. This is the main opportunity for "learning by doing" in the course – the projects will reinforce in practice the theory we have discussed in class.

I expect you to put in a good-faith effort on all the projects (i.e. turn in a reasonably complete submission). If you do not do so **on at least 50%** of the programming projects, you will automatically fail the course, regardless of your other scores.

**LABS (10%)**

After each weekly lab session, you will turn in some written work. It will most often be a small program that demonstrates a newly-learned skill, but sometimes will be something else.

**EXAMINATIONS (40%)**

There will be an in-class mid-term exam (15%) and a final exam (25%), covering all material from the class.