

CSCI/MATH

243

Discrete Mathematics and Functional Programming

Spring 2020

MFW 2:15-3:25 pm

Meyer 133

<http://cs.wheaton.edu/~tvandrun/cs243>

Syllabus addendum for remote learning

Updated March 17, 2020

In light of Wheaton College's transition to *technology-mediated instruction* during the coronavirus / COVID-19 pandemic, the following modifications are made to the course.

GENERAL INTENT. Our goal is to get you through this course knowing the facts, understanding the concepts, and having mastered the skills of discrete mathematics and functional programming. We may need to be more casual on how the course is conducted and how the students are assessed, but we strive to preserve the content of the course. Specifically, the course's objectives remain unchanged, that at the end of this course, you should be able to

1. Manipulate symbolic logical forms.
2. Write mathematical proofs, especially for results from basic set theory.
3. Write simple programs in the ML programming language.

CLASS MEETINGS. In line with the college's expectations, the primary substitute for class meetings is live-streamed lectures delivered at the scheduled class time (2:15pm central time MWF), using Schoology's **Conferences** tool. These lectures will be recorded and accessible through Schoology for one week for the benefit of students who are unable to watch live because of extenuating circumstances such as being more than four time zones away; students in the Americas are expected to make every reasonable effort to join the conferences at the time they are being streamed.

I will aim at keeping these live-streamed sessions to about a half hour, not the full seventy-minute class period. The sessions will be supplemented with shorter videos that you can watch at your convenience. These videos will be similar to those for the material at the beginning of the semester, but they will be available *only through Schoology*, not the course website or YouTube. Students must remember that the videos cannot replace reading the textbook.

COURSE SCHEDULE. The revised course schedule can be found on the course website. The main changes are

- The start of B-quad has, of course, been moved to Monday, March 23.
- Each topic has been delayed about one week.
- Test 2 has been moved to Monday, March 30.
- Test 3 has been moved to April 29.
- The "stand-alone" programming topics of map and foldl, fixed-point iteration, and the Huffman encoding, originally scheduled for April 24 - April 29, have been dropped.

PROJECT. The modeling project will proceed as planned. Students are encouraged to communicate with their partners in whatever video conferencing tool they prefer. The deadline for the prototype is extended from April 3 to April 13, and the deadline for the final submission is extended from May 1 (the last day of classes) to May 4 (reading day). However, for your sake and

mine, you are strongly encouraged to submit these by their *original deadlines*, or at least to submit the prototype sometime during the week of Apr 6–10.

TESTS. As mentioned above, Test 2 and 3 are rescheduled, each pushed back one week. They, and the final exam, will be administered through Schoology. (I am considering replacing Test 3 with several, smaller quizzes spread through the last three weeks of the semester, but until you hear otherwise, assume that is not the case.)

TEXTBOOK. Let me know right away if you do not have access to your copy of the textbook. I can make excerpts available through Schoology as necessary, but I want to avoid posting the manuscript in its entirety.

ASSIGNMENTS. The set of assignments has not changed, except for dropping the programming assignments that go along with the three dropped topics.

The assignments appear as they always have on the course website. For more convenience, I am reorganizing how they appear on Schoology. They will be grouped by unit and named by topic, not just number.

Programming problems are to be turned in electronically, as before. Please refer to the “ML Programming Guide” on the course website (also directly linked through Schoology) for help on doing the programming problems on your own computer, if you previously have used the computer science lab. Let me know if being off campus presents any difficulty or inconvenience for you in doing the programming problems; I may modify the programming guide with suggestions once I know what students’ needs are.

For paper problems (mostly proofs), you will not submit your solutions. You need to do them, but you are under your own supervision. When you have completed an assignment, go to Schoology and indicate that you did the assignment by making an empty submission for that assignment. I will post a solution, and you are responsible for checking your answers against my provided solution for your own learning.

QUIZZES. I will have quizzes through Schoology approximately every other class session. These will be in the spirit of the old pair-quizzes, except they will focus more on how well you are understanding the recent material rather than enforcing the day’s reading. *These will be the primary means for me to gauge your engagement in the course.*

OFFICE HOURS. I plan to use Schoology’s **Meetings** tool to hold office hours by video. As needed, make an appointment using Calendly. I will try to make myself as available as possible, especially during the normally scheduled office-hours times.

COMMUNICATION. My preferred way for you to get in touch with me is through email, but you may also message me through Schoology.

All this, the Lord willing.