CS Algorithms and Algorithm Analysis **Fall 2020**

Instructor: Jerry Shultz

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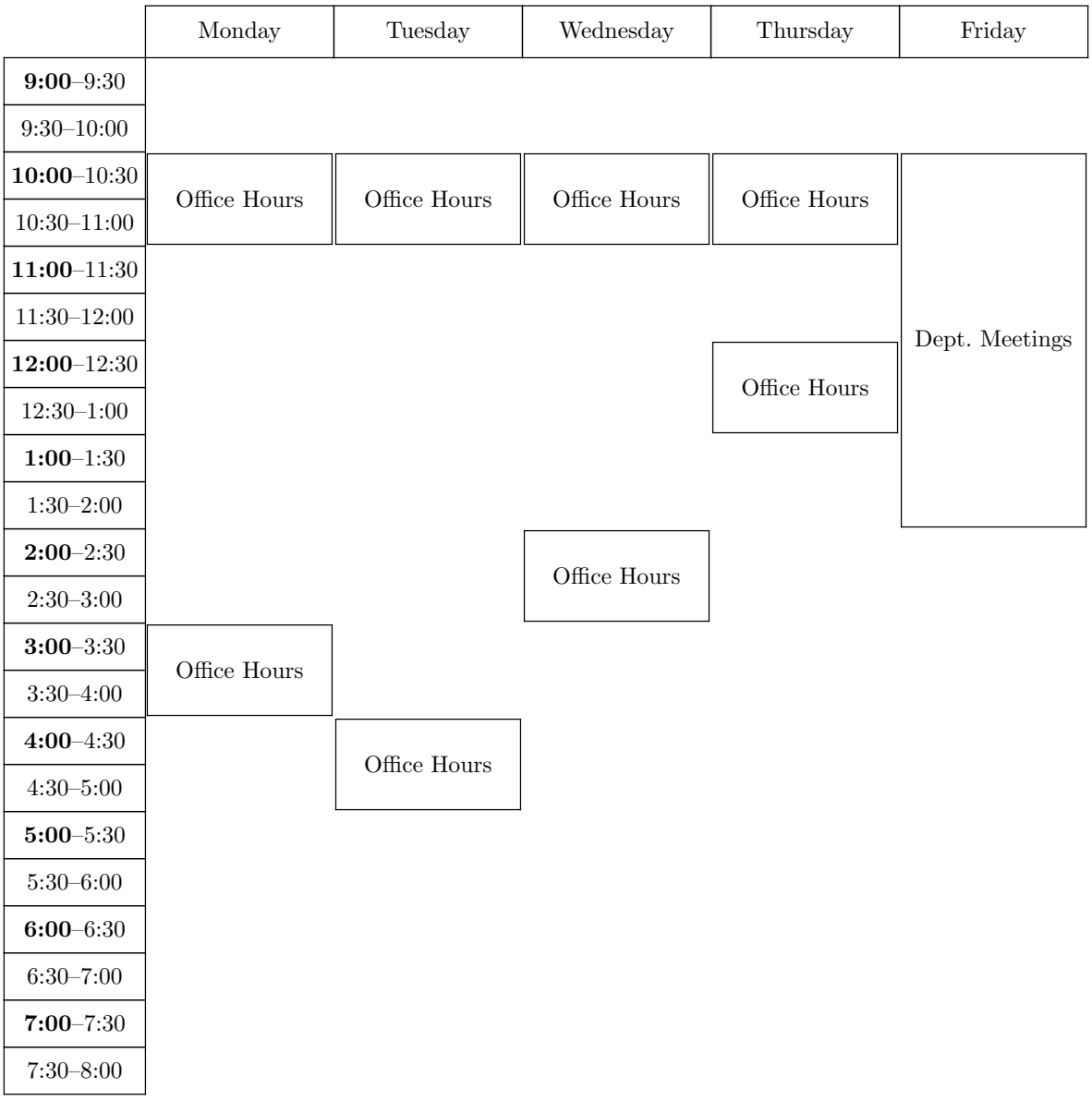
Phone: **303 615 1161** (only to leave messages—will be forwarded to my email)

Office Hours



The times listed as "Office Hours" are times that I will be sitting in a Microsoft Teams meeting named `Jerry Shultz Office Hours` waiting to help you when you join the meeting. Occasionally I may need to cancel one of these office hours, but I will try to announce that ahead of time.

I will check my Canvas messages and email every morning at about 10:00 a.m., Monday through Friday, and if you have asked to meet with me outside these office hours later that same day or farther in the future, at some specific time of your choosing, I will let you know whether we can meet then (using the same Teams meeting). If I have a conflict, I will let you know and we can arrange some other time to meet.

The only reason to call my office number is to leave a voice-mail message which will be forwarded to my email when you for some reason find phoning easier than sending a message through Canvas or email.

Text:
Written materials and videos provided by instructor, and online resources

If you would like a book for further reading, I have found the texts by Neapolitan and Naimipour, just Neapolitan, or Levitin pretty readable and matching how our course will go to some extent, and you should be able to find used copies of older editions pretty cheaply.

Prerequisites
CS 3240, CS 3250, and 4 additional upper division computer science credits, all with grades of "C-" or better, or permission of instructor. MTH 3210 is recommended.

Withdrawal dates

100% refund:	Monday, August 24
50% refund:	Wednesday, September 2
Last Day for W:	Friday, October 30

Holiday information:

Labor Day: Monday, September 7 (no classes, campus closed)
Fall Break: Monday, November 23–28 (no classes, campus closed on 11/26)

Some Pragmatic Policies

This course is taught asynchronously, which means that there is no fixed time that you have to do anything—just make every effort to stay caught up! You never have to physically be on campus for this course.

If you ever do need to be on campus for some reason separate from this course, please check the University rules online beforehand.

Students are responsible for full knowledge of the provisions and regulations pertaining to all aspects of their attendance at MSU Denver, and should familiarize themselves with these policies through online resources.

You do need to have a computer available to you that is able to run Canvas and Microsoft Teams, and on which you can run Java programs (phones, tablets, and Chromebook-like machines will probably not work for you). If this is a hardship for you, you can contact the University ITS (information technology services) office by phone and see what they suggest.

Course Organization and Rules

You are encouraged to discuss the course material and the Exercises with other students, me, or whomever you wish, but you may not receive any help from anyone on the tests. And, while you are allowed to discuss the Exercises with others, you may not directly copy the work of others—any work that you submit should, at a minimum, be "written in your own words." You may, if you wish, work on any Exercise in a group of at most three people and submit one solution (with everyone in the group getting full credit for completing the Exercise), but be sure that this is a true collaboration, with everyone contributing more or less equally.

Every Monday I will put material for roughly the upcoming week's work on Canvas (and/or OneDrive), including written documents, videos, and Java code.

Exercises will have suggested due dates (about one week after assigned for typical exercises), but the only firm due date is that I will not accept any Exercise work after the moment in time that I send you the Test over the material corresponding to the Exercise.

When you submit an Exercise, I will give you feedback: either I will say that it is good and you have full credit for it, or I will complain about something and demand that you fix it. If you have made a first serious submission of an Exercise before the corresponding Test, then you will be allowed to fix any problems for full credit after the time you receive the Test. Exercises for a given Test will stop at least one week before the Test time.

It is crucial for you success in the course that you read the written materials, watch the videos, and do the Exercises in a timely way.

We will have three "take home" Tests, each covering roughly the previous five weeks of material. The Tests will consist of problems similar to the Exercises. I will trust you to be on your honor to not get any inappropriate help on the Tests. Certainly it would be viewed as cheating to communicate with anyone about the specific Test questions, or to search the Web for information after you see the Test questions. You may, however, refer to any of the course materials I provided while working on the Tests. Also, if you have any questions about the directions on the questions, you are encouraged to communicate with me—I will decide what clarification is appropriate.

I will send you Test 1, which will cover the material from weeks 1–5, on Monday, September 28 (the beginning of week 7). You will need to complete it and send it back to me by midnight on Wednesday, September 30.

Similarly, Test 2 will cover the material from weeks 6–10, and will be made available to you on Monday, November 2, and will be due on November 4. And, Test 3 will cover the material from weeks 11–14 and will be sent to you on Monday, December 7, and will be due by midnight on Friday, December 11.

Here is how course grades will be figured:

> Your `testScore` will be computed by averaging your three test scores. Each test score is computed by dividing the points you got by the number of points possible (so test "points" have different values on each test—they are just a convenient way of doing the partial credit accounting on each problem).
>
> Your `exerciseScore` will be the number of Exercise points you got divided by the total number of Exercises points possible.
>
> Your course score is then computed as
>
> ```
> 0.4 * exerciseScore + 0.6 * testScore
> ```
>
> Your course grade is then computed according to this chart:

Score in:	`[0,57)`	`[57,60)`	`[60,63)`	`[63,67)`	`[67,70)`	`[70,73)`	`[73,77)`	`[77,80)`	`[80,83)`	`[83,87)`	`[87,90)`	`[90,100]`
Grade:	F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A

Schedule of Topics

I should have labeled this little section "Lack of Schedule of Topics" because I can't give you one at this point. I have taught this course a few times before, but I always make changes, and the pacing will be in part dependent on how students seem to be doing on different topics, so it would be silly to claim ahead of time that I know when we will be doing what! In fact, I'm not entirely sure exactly *what* we'll be doing.

Just know that we will be steadily working through the material of the course, and that you must work steadily in order to stay caught up and survive the course.

Also, with an online, asynchronous course like this, it is absolutely crucial that I get feedback on how things are going in office hours. I won't be standing in front of the class to see that people are baffled or confused, so if you don't let me know what's going on for you, then I won't know there's a problem until I notice one week that hardly anyone has turned in the Exercises for the previous week.