Welcome to CSSE 304. I am looking forward to working with you.

Every term a few students ask, “Can I do anything before the class starts to make the course easier during the term?” First of all, for most students it is not necessary to do anything major. But the first couple of weeks of the course are very fast-paced, and a few students like to spread out the intensity a little bit by working ahead. Most students do not do this, and most of them do well in the course. If you did very well on the programming assignments in CSSE230 and if that experience is recent, you probably only need to watch the 5 brief introductory videos. If you did not find the programming in 230 to be straightforward or if it was a long time ago, perhaps you do want to try to read/work ahead a little bit.

I suggest that you read this brief message right away, so you will know what to expect at the beginning of the course. And you may want to read the (much longer) syllabus before the course starts. I may send another update (only one if you’re lucky!) a few days before the course begins.

One other thing that some of you may prefer to do in advance. You will watch a video of a talk given by Guy Steele called “Growing a Language,” and write a brief reaction paper, which is due on Wednesday of week 1.
https://www.rose-hulman.edu/class/csse/csse304/202020/Homework/Assignment_GS/Assignment_GS.pdf

Claude Anderson

Things everyone should do before the course starts:

1. Go to the course schedule page and bookmark it in your browser.
2. Install Petite *Chez* Scheme 8.4 and/or *Chez* Scheme 9.5 (I recommend both) The syllabus and the Assignment 0 document should be helpful here.
3. Go to the CSSE 304 Piazza course (https://piazza.com/rose-hulman/fall2020/csse304) and set your email preferences. I suggest “real-time” and “follow all”. I can’t predict what will happen this term, but typically there are 10-20 messages per week in the 304 Piazza course.
4. Go to the CSSE 304 Moodle course and watch the brief introductory videos. See details below.

Some other things to know about the course:

Evening exams: There are two (both are 7:00-9:30 PM):
Wednesday, Jan 8 (7:00-9:30 PM)
Wednesday, Feb 5 (7:00-9:30 PM)
If you have a conflict with either of these dates, please let me know by the end of Day 2. If not, please say “no” to other things that could become conflicts.
Everyone must take the **final exam** at whatever time the Registrar schedules it. Until the final exam schedule is announced, you should not buy plane tickets that would prevent you from taking a Thursday afternoon exam, just in case it the exam gets scheduled for that time.

Scheme introduction videos: I made series of five 2-minute videos, introducing the basics of the Scheme programming language. **You should view these before the first class meeting**. This should allow me more time in class to address trickier Scheme elements and more ideas that are relevant to programming assignments A1 and A2 (these will be due Tuesday and Wednesday of week 1).

Course schedule page: https://www.rose-hulman.edu/class/csse/csse304/202020/Schedule/Schedule.htm
The first few weeks have been updated for the new term, although there may be small adjustments as the term

goes on. Slides and announcements will be added for each class day. The assignment due dates that come before the first exam have all been updated, and their due dates should be correct. **If you want to work ahead,** work on the early reading assignments and homework assignments. I will give bonus points to students who find errors in the schedule page or in any other course materials and report them on Piazza.

Syllabus: https://www.rose-hulman.edu/class/csse/csse304/202020/syllabus.html

Course Startup:

The first 2.5 weeks of the course (a.k.a. *Scheme-a-thon*) will concentrate on getting you up to speed on the course's "laboratory tools": the Scheme programming language, and also a little bit of exploring programming language concepts. During that time there will be an assignment due every day (except Saturdays and Sundays). A typical daily assignment will ask you to write and debug 6-12 small Scheme procedures. Scheme-a-thon will be intense, but when you get through it, Scheme should be a springboard, not an impediment to further learning in the course.

The rest of the course will mainly concentrate on concepts, with Scheme as the main tool for exploring and implementing those concepts. We will also continue to examine and use additional Scheme features that support those concepts. Eventually you will write an interpreter for a substantial subset of Scheme

Textbooks:

Main text: *Essentials of Programming Languages, 3rd edition* by Friedman and Wand. Its title is often abbreviated EoPL. You will not need this book during the first 1.5 weeks of the course, so that gives you time enough to look for a good price on-line or on-campus.

That book (but not CSSE 304) assumes that its readers already know Scheme well. Thus in the first part of the course (and beyond), we will use two other books, mainly for getting up to speed on Scheme. Both are available online.

Other books (online and free)

1. *The Scheme Programming Language 4th edition by R. Kent Dybvig*. You can buy the hardcopy book if you wish, http://www.amazon.com/Scheme-Programming-Language-Kent-Dybvig/dp/026251298X **But you may not have to buy this book at all.** The entire book is available free online at http://scheme.com/tspl4/ .

2. (EoPL-1) Brief excerpt from *Essentials of Programming languages,* 1st edition. In this earlier edition, the authors did not assume that the readers already knew Scheme. It will be available on Moodle, it is attached to this email, and I will hand out printed copies on the first day of class.
   If you want to do some reading before the course starts, this is probably the best place to begin.

Attendance is expected.

There are many more course details in the Syllabus and Schedule Page.