# A note from August 27, 2016:

The course schedule page, syllabus, etc. have been updated for the fall term. There will be additional changes, but most of the things in the schedule for the first couple of weeks of the course are correct, and the rest of the term is approximately correct, although there may be some small changes to dates, assignments, topics, etc. as the course goes along. Slides, class notes, and announcements for each day will be added before that day's class.

Schedule: http://www.rose-hulman.edu/class/csse/csse304/201710/Schedule/Schedule.htm

Piazza: http://piazza.com/rose-hulman/fall2016/csse304/

## **Evening exams**

CSSE 304 exams have a written part, but also require you to write challenging code and get it working on your computer. A 50-minute in-class exam is not conducive to coding, testing, and debugging. Thus there will be **two evening exams** during the 10 weeks of the course, each 7::00-9:30 PM. They will Wednesday, September 23 and Tuesday, October 25. If you have a conflict with either of those times, please let me know within the next week. If you don't already have a conflict, don't schedule one. For Example, if another professor schedules an exam for one of those evenings and has not already told you about it, please tell her/him that you already have another exam and ask for an alternate time.

**Final Exam:** There will be a final exam, whenever it is scheduled by the Registrar during exam week. It could be scheduled on any day during exam week, including the afternoon of Thursday, November 17. Do not schedule a flight out of Terre Haute before then.

## Skipping the final exam (new for Fall, 2016)

If your course average is high enough to give me confidence that your final exam is unlikely to lower it below a certain grade level, I will allow you to skip the exam. If you take the final exam, it will count toward your course grade. See the <u>syllabus</u> for some details.

# Message sent May, 2016 and resent August 18, 2016 regarding textbooks and course startup:

Welcome to CSSE 304. We still have 3.5 months before the course begins, but I am already looking forward to working with you in the fall term. Several students have come to my office asking, "Can I do anything during the summer to make the course easier in the fall?"

I want to give you that information now, and a little bit more info about the course. Sometime in late August, I will send you an email to say that the syllabus and first week of the schedule page have been updated for the new term, and that the 304 Moodle and Piazza courses have been set up.

### Textbooks:

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

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)

- The Scheme Programming Language 4<sup>th</sup> edition by R. Kent Dybvig. You can buy the hardcopy book if you wish, <a href="http://www.amazon.com/Scheme-Programming-Language-Kent-Dybvig/dp/026251298X">http://www.amazon.com/Scheme-Programming-Language-Kent-Dybvig/dp/026251298X</a> But you may not have to buy this book at all. The entire book is available free online at <a href="http://scheme.com/tspl4/">http://scheme.com/tspl4/</a>. You can also download the Petite Chez Scheme interpreter from scheme.com.
- 2. (EoPL-1) Brief excerpt from *Essentials of Programming languages*, 1<sup>st</sup> 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 a good place to begin.

# Course Startup (and things you can do in advance):

The first 2.5 weeks of the course will concentrate on getting you up to speed on the course's "laboratory tools": the Scheme programming language, and a little bit of exploring programming language concepts. The rest of the course will concentrate on concepts, with Scheme as the main tool for exploring and implementing those concepts. We will also continue to explore more Scheme features that support those concepts.

In the first part of the *course* (I call it *Scheme-a-thon*) there will be an assignment due almost every day. Each assignment will ask you to write and debug several small Scheme procedures.

Things you can do to get ahead during the summer: First let me say that if you did well in CSSE 230 and it was recent, working ahead is probably not necessary. But if you feel inclined to work ahead, doing so will make the beginning of the term easier for you. 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.

There is a link below to the Spring, 2016 CSSE304 schedule page, which includes links to the assignments. During the summer, I will get the schedule page and syllabus for the fall term set up. I do not expect that the first couple of weeks will be very different than this term. Most of the procedures you will be asked to write for the fall term will be the same as in the spring term, so if you do some of the readings and problems from the first days of the Spring 2016 schedule page, you can count on all or almost all of them being required for fall term. The PLC server will not be available until just before the term starts, but you can use my off-line test programs to test your code.

http://www.rose-

hulman.edu/class/csse/csse304/201630/Schedule/Schedule.htm

## Install before the course begins:

Petite Chez Scheme: <a href="http://scheme.com/download/">http://scheme.com/download/</a> Depending on your OS, you probably want the 64-bit nonthreaded version. I have heard rumors that it does not work with the latest Mac OSX version, but see the info that I copied below from this term's Piazza discussions. Another alternative for Mac users is to do a dual-boot or a VM with Windows or Linux. Darryl Mouck, CSSE technician, may be able to help you with the dual-boot setup. Using a different version of Scheme is a possibility, but at times it will be a bit of a hassle in this course, since my grading server uses Petite Chez (It's a French word that rhymes with "play") Scheme.

## Installing Petite *Chez* Scheme on a Mac:

#### Adam Gastineau 2 months ago

It's actually rather easy to install and get working on OS X 10.11. The process is as follows:

- 1. Download pcsv8.4-a6osx-1.pkg.tar.gz from the Petite Chez Scheme website (or by clicking the provided link)
- 2. Disable rootless by booting into your Recovery partition and running "csrutil disable". Rootless is a security feature added in El Capitan that write protects /System, /bin, /sbin, and /usr, even when running programs from root. As a developer though, there isn't much point in leaving it enabled, as developers often modify those directories (in fact, most of the Apple employees I know disabled it as soon as they could).
- 3. Reboot normally, and install the downloaded package.
- 4. Run "petite" to verify your Scheme installation, and type "(exit)" to terminate the program.

5. (Optional) Reenable rootless by booting into your Recovery partition and running "csrutil enable". Again, if you are going to do any significant development work on your Mac, I would highly suggest leaving rootless disabled.



#### Xiangqing Zhang 2 months ago

If you are unfamiliar to the new rootless mode in El Captain, here's a quick workaround approach that even doesn't require rebooting OS X:

- 1. Download the tar.gz nonthreaded version of Petite Chez Scheme for Mac OS X
- 2. Unzip the tar.gz somewhere
- 3. Open your terminal
- 4. **cd** into the unzipped "csv8.4" folder
- 5. Type 'cd custom' (only the bold text, no quotes included)
- 6. Type `./configure --installprefix=/usr/local` (You can also choose another installation path; I prefer /usr/local here)
- 7. Type **`sudo make install**` (note the **sudo** is possibly needed)
- 8. Now you have successfully installed Petite Chez Scheme! Try to run `petite` in the terminal and see if it opens scheme. Once you finish playing with it, type `(exit)` to exit.

If you have further questions, please email me (zhangx2@rose) or talk to me in the next week's lab assistant hours.

Thanks, Jackie

Claude Anderson