Preparing for Software and Data Carpentry Instructor training

Hi all,

Thank you again for signing up for the Software and Data Carpentry Instructor Training class on September 28-29.  We have created a one-page website for the class at <https://christinalk.github.io/2016-09-28-ttt-sesync/> and will update details there.

Importantly, class will be from 9:00 am - 4:00 pm EDT both days. SESYNC will provide lunch for everyone, as well as a mid-morning and mid-afternoon coffee break. There will also be optional happy hour at the end of day 1 if you are interested in chatting with the instructors, organizers, and other participants.

**In order to prepare for the workshop**:

1. Please read the following two articles before September 28:

* "Success in Introductory Programming: What Works?" (<http://swcarpentry.github.io/instructor-training/papers/porter-what-works-2013.pdf>)-
* "The Science of Learning" (<https://swcarpentry.github.io/instructor-training/files/papers/science-of-learning-2015.pdf>)

2. Please carefully read through *one lesson episode*listed below. You will use the content of this episode during some exercises on the first day of instructor training.

Data Carpentry

* [Basic Queries in SQL](http://www.datacarpentry.org/sql-ecology-lesson/01-sql-basic-queries.html)
* [Faceting and Clustering in OpenRefine](https://datacarpentry.org/OpenRefine-ecology-lesson/01-working-with-openrefine.html)
* [Starting with Data in R](https://datacarpentry.org/R-ecology-lesson/02-starting-with-data.html)
* [Starting with Data in Python](https://datacarpentry.org/python-ecology-lesson/01-starting-with-data)

Software Carpentry

* [Exploring Data Frames in R](http://swcarpentry.github.io/r-novice-gapminder/05-data-structures-part2/)
* [Repeating Actions with Loops in Python](https://swcarpentry.github.io/python-novice-inflammation/02-loop/)
* [Selecting Data in SQL](https://swcarpentry.github.io/sql-novice-survey/01-select/)
* [Tracking Changes in Git](https://swcarpentry.github.io/git-novice/04-changes/)
* [Working with Files and Directories in the Unix Shell](https://swcarpentry.github.io/shell-novice/03-create/)

**What to bring:**

1. A cell phone or tablet that can record audio and video. We will breakout into groups of three to practice teaching. These practice teaching session will be recorded by a group member on your phone or table so that you can see for yourself how you teach. If you do not have a phone or tablet, please let us know so that we can make arrangements.
2. Please bring a laptop with the capacity to compute in the language of the episode you selected to study (i.e. SQL, Git, Python, R, or Unix) and a power cable. You will need this laptop for some of the exercises on both day of the instructor training.

**After the instructor training workshop**

Please note that after this course is over, you will be asked to do three short follow-up exercises online in order to finish qualifying as an instructor: the details are available at <http://swcarpentry.github.io/instructor-training/checkout/>. Also, you will hear about many ways to stay engaged with each other and with Software and Data Carpentry Instructors around the world, so we look forward to your continued participation!

If you have any questions about the workshop, the reading material, or anything else, please get in touch.

Cheers,  
Rayna Harris and Christina Koch

p.s. If you are interested in doing more reading, you may enjoy:

* How Learning Works (<http://www.amazon.com/How-Learning-Works-Research-Based-Jossey-Bass/dp/0470484101/>), which is an excellent summary of current research in teaching and learning
* Building a Better Teacher (<http://www.amazon.com/Building-Better-Teacher-Teaching-Everyone/dp/0393081591/>), a well-written look at why educational reforms in the past 50 years have mostly missed the mark and about what we should be doing instead.
* Teaching What You Don't Know (<http://www.amazon.com/Teaching-What-You-Dont-Know/dp/0674066170/>), which is a situation many of us find ourselves in more often that we'd like.