HW1

January 29, 2018

Make a Runestone Account:

For the first few HW assignments, you will work on the PHY325 Interactive Python page, hosted by Runestone Academy page. To do this: * Link to Interactive Python in Runestone Academy. You should see a Table of Contents with clickable links. Make sure you are at the new version of the page.
* Click the little person icon in the top right of the page, **click on Register**. I have had some trouble logging into this page because there is an older version that looks identical. Look for a green box with a heading that reads **"Welcome to the New Home of Runestone Interactive."**

- **Enter "PHY325" in the Course Name box** when you register.

1 Homework 1

1.1 Due Wednesday Jan 31, 2018, at 9:15AM

1.1.1 Exercises/Interactive Practice

1. Please do the Intro Survey. linked here
2. Take your reading notes however you'd like, either **on paper, in a text file, or you are welcome to try a Jupyter Notebook.** *In the future it will be important to do them in a notebook so you can practice new pieces of code. This week you will get plenty of practice on Runestone Academy (see below).* See the Complete Syllabus for some guidelines on reading notes.
3. Do HW1 on Runestone. A few general guidelines on Runestone:
    - Make an account (see above)
    - I will grade your submissions to the embedded questions within the Runestone software.
    - You do not have to watch the videos if you feel comfortable skipping them.
    - You should take notes, but don't be overly detailed. This is a book on scientific problem solving, but it focuses more on computer science vocabulary that I will. I am more interested in having you do interactive practice of the concepts with the embedded questions.
4. Read through both the Complete Syllabus (on Moodle and handed out) and the Short Syllabus link to GitHub answer the questions below.

1.2 Reading Assignment:

- Interactive Python Reading in HW 1 (on Runestone Academy as described above)
- Newman Reading.
  - First Paragraph Ch 2
  - Skip section 2.1 - however if you're interested in running Python outside of the Jupyter notebook, the IDLE software is a reasonable choice.
  - Section 2.2 - be sure to try out Example 2.1!

Reading Notes: (i.e. here is a Markdown cell to get you started. Add more cells as needed.)

1.2.1 Syllabus Assignment Questions

1. When and where are my office hours?
2. How do I feel about late work?
3. How do you submit assignments to be graded?
4. Where will I post your grades?
5. What is the pair programming model used for? After a day of trying it, do you think it helps produce better code? Why?
6. Which assignment category is subject to the revision cycle.
   Just a heads up, I will explain the revision cycle in more detail next week. It's awesome, it has made me a better teacher and my students better learners.
7. Read through the Student Learning Objectives in the Complete Syllabus. There are three categories as required by the Pacific University. I will ask about Course Level objectives later in the course. For now, select an SLO from the top two categories (the Natural Sciences Core and Physics Major sections) and pick one that stood out to you. Use it to answer either of the following prompts:
   - Briefly explain how you have met this student learning objective. Include an example.
   - Or conversely, briefly explain how you have NOT met this student learning objective, and how you think you can improve (and how I can help).
8. What does Academic Honesty mean in the context of writing and sharing computer code? Don't simply quote the syllabus (although please read it!) Why does academic honesty and ethical computing matter?
9. What questions do you have about anything - the syllabus, the course, the meaning of life?

I may ask more syllabus questions in the future as the class marches on. Be forewarned that I have been known to ask questions about the syllabus on midterm exams.

1.2.2 Last question

__ How long do you estimate this total assignment took you to complete? __