Task 1:

1. Complete introductory Python course: <https://www.codeschool.com/courses/try-python>.
2. When completed, **save a screenshot of your completion badge and email it to me by midnight Sunday, 1/22.**
3. Watch this video: <https://www.youtube.com/watch?v=LvmpDyFyS7o>. Download newest version of Anaconda Python 3 onto your laptop: <https://www.continuum.io/downloads>. If you don’t feel comfortable installing software by yourself just send me an email and I can meet with you.
   1. Open your command prompt like in the video and type “python”. **Save a screenshot of the open program and email it to me by midnight Wednesday, 1/25.**
   2. If you are still in the Python console, type “exit()” to leave it. Now open your command prompt like in the video and type “ipython”. **Save a screenshot of the open program and email it to me by midnight Wednesday, 1/25.**
   3. If you are still in the Python console, type “exit()” to leave it. Now type “spyder”; **save a screenshot of the open program and email it to me by midnight Wednesday, 1/25.**
4. Complete Progress Report 1.

\*You may crop any of your images before you submit them, if you desire.

Task 2:

1. From playlist <https://www.youtube.com/watch?v=q6PP-C4udkA&index=10&list=PL7A750281106CD067&t=519s>:
   1. Watch videos 10 What is DNA?, 45 DNA Replication, 46 Translation and Transcription, 66 Mutations, 69 Proteins, 70 Nucleic Acids
2. From playlist: <https://www.youtube.com/watch?v=R6La6_kIr9g&list=PLFCE4D99C4124A27A>:
   1. Watch videos 32 Gene Regulation and 33 Signal Transmission and Gene Expression.
3. Go to <http://www.phschool.com/science/biology_place/biocoach/index.html>. Work through the modules “DNA Structure and Replication”, “From Gene to Protein: Transcription” and “From Gene to Protein: Translation.” Type a summary of each module. Make sure you write up a good description of the **central dogma of biology**.
4. Watch <https://www.youtube.com/watch?v=o5ZSKb3PtPM> to get a sense of different ways you can run Python.

Task 3

1. Check in your Documents folder if you already have a folder with the name Python in it. If there is, it should be empty. If there isn’t, create a new folder named “PythonScripts”. Remember where this folder is.
2. Press the “Win + R” key to open RUN dialog box. Type cmd, and click/tap on OK.
3. Type “jupyter notebook”. Navigate to “PythonScripts”.
4. Watch: <https://www.youtube.com/watch?v=qb7FT68tcA8>.
5. Try copying the same code

Python References:

* [http://interactivepython.org/runestone/static/thinkcspy/index.html#](http://interactivepython.org/runestone/static/thinkcspy/index.html)
* <http://openbookproject.net/thinkcs/python/english3e/>
* <https://people.duke.edu/~ccc14/sta-663/IntroductionToPythonSolutions.html>
* <https://www.tutorialspoint.com/python/>
* <https://realpython.com/learn/python-first-steps/#1-what-is-python>
* <http://hamelg.blogspot.com/2015/12/python-for-data-analysis-index.html>