

PIC 16 – Python with Applications – Winter 2018 Regarding Tracks...

For the first five weeks, students are responsible for completing all readings, quizzes, and assignments. There are three exceptions: to reduce workload, students will only be required to complete one from each of the following pairs of assignments:

- 1/12 or 1/17
- 1/19 or 1/22
- 1/24 or 1/26

Some of these assignments – particularly those of 1/12 and 1/24 – will be more mathematically oriented than others. This foreshadows what is coming later in the course: beginning in week 6, the course will split into two “tracks”:

- Track A: Mathematical Applications
- Track B: “Less Mathematical” Applications

You are only required to complete one track. If you are interested in completing both tracks, your grade will be calculated separately for each track and your final course grade will be the higher of the two. You must make your choice (Track A, Track B, or both) by Friday, 2/9.

Beginning Monday, 2/12, lecture activities, readings, quizzes, and assignments will alternate between the two tracks. You are only required to do the work that corresponds with your selected track.

For instance, for Friday, 2/23, the readings will be about the SciPy module, and specifically on data input/output and the Fast Fourier Transform. The quiz and lecture activities that day will correspond with the reading. The assignment for Friday, 2/23 (due Wednesday, 2/28) will have you eliminate the sound of the annoying “Woo Guy” from Super Bowl 50 audio. If you have selected Track A, you will be responsible for completing this work; if you have selected Track B, you are not required to complete this work.

The readings for the next class, Monday, 2/26, will be about Plotly, an API for creating interactive plots. The quiz and lecture activities on that day will correspond with the reading. The assignment for Monday, 2/26 (due Friday, 3/02) will have you read in a list of dates in which bridges were built in California and create a plot of the cumulative number of bridges in California by year. Of course, plots like this involve some math – it’s unavoidable in normal programming applications – but the level of math required is minimal. If you have selected Track B, you will be responsible for completing this work; if you have selected Track A, you are not required to complete this work.

If you choose Track A, please do not complete Track B quizzes or submit Track B assignments. If you choose Track B, please do not complete Track A quizzes or submit Track A assignments. If you choose both tracks, please make an honest effort to complete all Track A and Track B quizzes and assignments.

Students will take a version of the final exam corresponding with their selected track. Students who have completed both tracks will choose to take either the Track A or Track B version of the final. Both versions of the exam may cover *all* material from the first five weeks.

A tentative schedule of dates for Track A material is: 2/12, 2/16, 2/23, 2/28, 3/05, 3/09, and 3/14

A tentative schedule of dates for Track B material is: 2/14, 2/21, 2/26, 3/02, 3/07, 3/12, and 3/16

Any changes to this schedule will be announced in class, on CCLE, and/or by email.