



# **CSE 6040/x**

# **Overall Course and Data**

# **Analysis in Python**

# **Bootcamp Introductions**

Overview – 1<sup>st</sup> Session

# Agenda

- Course Introduction – Professor Richard Vuduc
- TA Introductions
- Introduction of Data Analysis in Python Bootcamp Series

# TA Introductions

- Chris Kinkade – Head Instructor
- Mengmeng Lui – Adjunct Instructor, MSA section
- Jen Sherwood – Head TA
- Albert Waldron – Head Technical TA
- Bootcamp TAs
  - Christopher Carbonaro
  - Katie Nelson
  - Larry Heckel
  - Nawida Hussaini
  - Guest TAs, per topic

# Purpose of the Data Analysis in Python Bootcamp

- Introduce and demonstrate Python data analysis techniques, approaches, and methodologies to help the students **pass the course exams** .
- Some of the steps are specific to this class and its tools, but they can be generalized to other scenarios and toolsets.
- The Bootcamp is NOT to help with specific homework notebook problems. Piazza and the Notebook Office Hours sessions (on Thursdays) are for that.

# Purpose of the Bootcamp

- The Bootcamp is intended for students who may not have a rigorous programming background.
- The Bootcamp covers topics that are helpful for the students in passing (and doing well) on the exams, and that are not part of the formal class materials.
- **All Bootcamp sessions and materials are OPTIONAL, at each student's discretion. There is no requirement to attend any sessions or watch any of the posted videos.**

## Should I Attend the Bootcamp?

- Each student must decide for themselves whether attending the Bootcamp would be helpful for them.
- We have provided self assessment notebooks at the beginning of Modules 0 and 1, to help the students with this decision.
- The self assessment notebooks are **OPTIONAL** and are **NOT GRADED**.



## Should I Attend the Bootcamp? – 2

- Bootcamp Attendance Decision for each student steps.
  1. Review the Self Assessment page on Canvas/edX.
  2. Work through the Self Assessment notebook on Google Colab, adhering to the time restriction specified.
  3. Was I able to successfully complete the notebook in the recommended time?
    - YES – I probably do not need to attend the Bootcamp.
    - NO -- I should consider attending the Bootcamp and/or viewing the Bootcamp materials.

## Bootcamp Conduct

- There will be two Bootcamps during the course, one each in Module 0 and Module 1.
- Bootcamp schedules and session topics are on Canvas and the Course Calendar.
- Zoom link for all Bootcamp sessions is posted in the O/MSA Piazza post, for the Bootcamp. The live Bootcamp sessions are only available for the O/MSA students.



## Bootcamp Conduct – 2

- Additional materials from any live session, that are created during the session and not posted in advance on Canvas/edX, will be posted in the Bootcamp Piazza post.
- Any required announcements will be posted in the Bootcamp pinned Piazza post (both OMSA and VMM).

## Bootcamp Conduct – 3

- All Bootcamp sessions will be recorded, with the videos posted on Piazza, for students who are not able to attend the live sessions. The recordings will be posted in both O/MSA and VMM Piazzas.
  - The video for each session will be posted within 24 hours of the session end.
  - For VMM, we must ensure that all personally-identifiable information (FERPA) has been removed or obscured, so posting there may take an extra day.

## Bootcamp Conduct – 2

- Module 0 Live Session Content
  - Theory, code syntax, and Data Analysis programming in Python.
  - Code application and putting the concepts/syntax together for solutions on the exam exercises.
  - Techniques for troubleshooting exercises on the exam.
  - TA Walkthroughs of prior semester exams, illustrating thought processes and solutions of exam exercises.

## Bootcamp Conduct –3

- Module 1 Live Session Content
  - Theory, code syntax, and Data Analysis programming using Pandas, NumPy, and SQL in Python.
  - Code application and putting the concepts/syntax together for solutions on the exam exercises.
  - Techniques for troubleshooting exercises on the exam.
  - TA Walkthroughs of prior semester exams, illustrating thought processes and solutions of exam exercises.
- **Bottom line, all these sessions are designed to help the students to pass (and do well on) the exams.**

# Bootcamp Resources

- Videos
  - Posted on Canvas/edX/Piazza
  - Current and prior semester Bootcamp content.
- Bootcamp GitHub -- Public repositories
  - <https://github.com/gt-cse-6040>
  - Contains working and final versions of all Bootcamp materials.
  - Students are welcome to access the repository in read only mode.
- Colab NBs
  - Part of GitHub site.
  - Class-developed content, not for grading.