**B7154: Python for EMBAs**
**Summer 2024**

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## Course Description

From the ads that track us to the maps that guide us, the twenty-first century runs on code. The business world is no different. Programming has become one of the fastest-growing topics at business schools around the world. This course is an introduction to business uses of Python for MBA students.

In this course, we'll be learning how to write Python code that automates tedious tasks, parses and analyzes large data sets, interact with APIs, and scrapes websites. This might be one of the most useful classes you ever take.

## Required Prerequisites

Enrollment in this course requires completion of a Python qualification exam. For questions related to the qualification exam, please email python@gsb.columbia.edu.

## Required Course Material

- Students must have a laptop that they can bring to class – Mac or PC is fine, as long as your operating system is up to date (at least Windows 11 and Mac OS 14).
- This course does not require a textbook. (Optional Reading: *Python for MBAs*, Griffel and Guetta)
- Any required readings will be provided via Canvas.
- Slides and files will be uploaded to Canvas after each class.

## Course Schedule

| Session | Topic | Assignments |
|---|---|---|
| **Class 1**<br>Friday, June 14<br>8:30AM - 11:30AM | **Data Analysis, part 1**<br>• Dig Case | Read the Dig Case |
| **Class 2**<br>Saturday June 29<br>12:30PM - 3:30PM | **Data Analysis, part 2**<br>• Dig Case | Assignment 1 due night before Class 3 |
| **Class 3**<br>Friday, July 12<br>8:30AM - 11:30AM | **Data Analysis, part 3**<br>• Dig Case | Assignment 2 due July 19 |
| **Class 4**<br>Saturday, July 13<br>3:45PM - 6:45PM | **APIs**<br>• FRED | Assignment 3 due night before Class 5<br><br>Read the BuiltWith Case |

| Class 5<br>Saturday, July 26<br>3:45PM - 6:45PM | **Web Scraping**<br>• BuiltWith Case | Read the Bail Fund Case |
| Class 6<br>Friday, August 9<br>3:45PM - 6:45PM | **Automation with Python**<br>• Bail Fund Case | Final Project |

**Grading**

Final grades in the class will be calculated as follows:

*Participation (30%)*

- Students are expected to actively participate in class by posting solutions to challenges on a Slack group (an online messaging tool) for the course.

*Assignments (40%)*

- There will be three homework assignments due the *night before* some classes.
- Each assignment should be completed individually.
- Late assignment will be accepted with a 20% penalty until the final class. No late assignments will be accepted after the final class.

*Final Project (30%)*

- There will be a take-home final project.
- The final project must be completed individually.
- **Note:** Completion of the final project will be necessary to receive a passing grade in the course.

**AI Policy**

You may use AI tools, such as ChatGPT or GitHub Copilot, as part of your approach to generating solutions for your work in this course (just as any programmer would do), but any code submitted for in-class challenges and assignments must be your own.

This means that it is acceptable to use AI tools to help you understand and come up with a solution, but you must take the time to learn why any bit of code works and rewrite it on your won using style conventions we will learn in this class. Simply copying and pasting code generated by AI, or found online, is not acceptable (and it is often quite easy to tell).

Please contact me if you have any questions about this policy before submitting your work.