Check this page for updates on upcoming classes, our learning goals, and the lesson modules we'll use to get there.

← **return home**

Session Calendar and session guides (Fall 2019)

CIT-129: Python 2

Date	Topic	Notes/Status
Wk 1: WED 4-SEP-19	Setting up GIT	Create a github account and a repository for CIT-129 code. Create a simple readme.md describing your role in this class.
Wk 2: WED 11-SEP-19	Looping, and Methods	Creating, manipulating, looping over dictionaries and other objects 🔑 **Map-based data: all hail the `dict` type!** Writing code in sensible, bite-sized methods
Wk 3: WED 18-SEP-19	File I/O	Reading, writing, & transforming
Wk 4: WED 25-SEP-19	Data encoding	JSON (native to py), XML (foreign to py), HTML (foreign) parsers
Wk 5: WED 2-OCT-19	Implementing JSON-encoded query	Implement our JSON knowledge by collaboratively implementing a JSON-encoded search of Pittsburgh City Capital projects **Unified JSON-encoded search criteria:** {"fiscal_year": [-1], "start_date": [""], "area": [""], "asset_type": [""], "planning_status": [""]} ***Search Notes:***

		- For dates: We will throw out malformed dates that are not YYYY-MM-DD - A blank value in any specified query for a column/field will disqualify that record from inclusion in the results - Empty string: do not limit results by this criteria at all - Note: the "planning_status" key in the search JSON corresponds to the field named "status" in the csv ***Specs Due March 13*** Implement this search criteria such that, given a properly formatted JSON object according to the above specs, matching results are written to a file in JSON format
Wk 6: WED 9-OCT-19	**Overirew of multi-system interaction**	**TODO for Next week:** Please complete a working prototype for our capital projects JSON search assignment: your code should be able to ingest our JSON criterion and return a list of rows from the capital projects data list. ALSO: please browse Programmable Web and choose a possible API to tinker with. You may need to request an API key which can take some time.
Wk 7: 16-OCT-19	File system interaction	Alumni return! Adam Gutonski will be visiting class to explore how to wisely unleash the python interpreter on our underlying file system on disk
Wk 8: 23-OCT-19	- **The urllib package for python 3 provides a suite of tools for fetching URL data.** I believe it uses the Requests library in the back end. - **Requests library (http for humans)** - **Api directory at Programmable Web**	Complete your API mini-project
Wk 9: 30-OCT-19	HTML web document scraping	Scrape data from a site of your choosing using good function-based structures
Wk 10: 6-NOV-19	Peer teaching	**Developing peer teaching methods -- topics assigned:**