home (index.html)   course materials (handouts.html)   submit homework (http://homework-davidbpython.rhcloud.com/)   quizzes* ()

source data (python_data)   sec. 1 videos (https://www.youtube.com/playlist?list=PLMSYnjOjlErcMBOCb-HphhHuNggXYk0uY)

sec. 2 videos (https://www.youtube.com/playlist?list=PLMSYnjOjlErcLyXXwY2aw-ExaVX22uGCr)   intro solutions (intro_solutions.html)

Advanced Python INFO1-CE9986

Exceptions Reference	Syllabus	Code Quality	Python 2 Quicksheet
html (supplementary/exceptions.htm) pdf (supplementary/exceptions.pdf)	html (syllabus/INFO1-CE9986-Sp17-Advanced-Python.htm) pdf (syllabus/INFO1-CE9986-Sp17-Advanced-Python.pdf)	html (supplementary/code_quality.htm) pdf (supplementary/code_quality.pdf)	html (supplementary/python2_quicksheet.htm) p (supplementary/python2_quicksheet.pdf)

Class Slides

Note: the slides are presented in two forms: the "Single Topic Pages", each of which cover a specific topic; and the "slideshow", which is a continuous sequence of slides spanning all topics. The material contained in each is the same.

Session 1 -- Objects, Types, Functions, Methods, Conditionals, Looping

Executive Summary	pdf (supplementary/executive_summary_session_1.pdf) htm (supplementary/executive_summary_session_1.htm)
Slides	slideshow (slides/slide-01-001-2.html)
Slides as Single Topic Pages	Objects, Object Types, Function Arguments and Return Values (slides/handout-01-2.html) Object Methods (slides/handout-02-2.html) Conditionals (slides/handout-03-2.html) Practical: Parsing Tabular Data with Strings, Lists and Files (slides/handout-04-2.html) Containers: Lists, Sets, Tuples; Functions (slides/handout-05-2.html) Practical: Parsing CSV or Internet Tabular Data (slides/handout-06-2.html)
Homework	pdf (homework/Advanced_Python_Session_01_homework.pdf) htm (homework/Advanced_Python_Session_01_homework.htm)

Session 2 -- Dictionaries, Sorting, Multidimensional Containers and Power Tools

Executive Summary	pdf (supplementary/executive_summary_session_2.pdf) htm (supplementary/executive_summary_session_2.htm)
Slides	slideshow (slides/slide-08-001-2.html)

Slides as Single Topic Pages	Dictionaries and Sorting (slides/handout-08-2.html) Booleans (slides/handout-09-2.html) Complex Sorting (slides/handout-10-2.html) Reading Multidimensional Containers (slides/handout-11-2.html) Sets, List Comprehensions, Lambdas, Building and Sorting Multis (slides/handout-12-2.html) File, Directory and External Program Input / Output (slides/handout-13-2.html) Exceptions (slides/handout-14-2.html)
Homework	pdf (homework/Advanced_Python_Session_02_homework.pdf) htm (homework/Advanced_Python_Session_02_homework.htm)
Homework Discussion	pdf (homework/Advanced_Python_Session_02_homework_summary.pdf) htm (homework/Advanced_Python_Session_02_homework_summary.htm)

Session 3 -- Functions, Modules and Classes

Executive Summary	pdf (supplementary/executive_summary_session_3.pdf) htm (supplementary/executive_summary_session_3.htm)
Slides	slideshow (slides/slide-16-001-2.html)
Slides as Single Topic Pages	Functions (slides/handout-16-2.html) Modules (slides/handout-17-2.html)
Homework	pdf (homework/Advanced_Python_Session_03_homework.pdf) htm (homework/Advanced_Python_Session_03_homework.htm)
Homework Discussion	pdf (homework/Advanced_Python_Session_03_homework_summary.pdf) htm (homework/Advanced_Python_Session_03_homework_summary.htm)

Session 4 -- Classes, Data Model

Slides	slideshow (slides/slide-19-001-2.html)
Slides as Single Topic Pages	Classes (slides/handout-19-2.html) Data Model (slides/handout-20-2.html)
Homework	pdf (homework/Advanced_Python_Session_04_homework.pdf) htm (homework/Advanced_Python_Session_04_homework.htm)
Homework Discussion	pdf (homework/Advanced_Python_Session_04_homework_summary.pdf) htm (homework/Advanced_Python_Session_04_homework_summary.htm)
Exercise Solutions	pdf (homework/Advanced_Python_Session_04_exercise_solutions.pdf) htm (homework/Advanced_Python_Session_04_exercise_solutions.htm)

Session 5 -- Attribute Access

Slides	slideshow (slides/slide-22-001-2.html)
Slides as Single Topic Pages	Attribute Access (slides/handout-22-2.html)
Homework	pdf (homework/Advanced_Python_Session_05_homework.pdf) htm (homework/Advanced_Python_Session_05_homework.htm)

Homework Discussion	pdf (homework/Advanced_Python_Session_05_homework_summary.pdf) (homework/Advanced_Python_Session_05_homework_summary.htm)	htm

Session 6 -- Functional Programming, Team Tools, Testing

Slides	slideshow (slides/slide-23-001-2.html)
Slides as Single Topic Pages	Functional Programming (slides/handout-23-2.html) Testing (slides/handout-24-2.html) Profiling and Efficiency (slides/handout-25-2.html) Team Tools (slides/handout-26-2.html) git (slides/handout-27-2.html)

Homework	pdf (homework/Advanced_Python_Session_06_homework.pdf) (homework/Advanced_Python_Session_06_homework.htm)	htm
Homework Discussion	pdf (homework/Advanced_Python_Session_06_homework_summary.pdf) (homework/Advanced_Python_Session_06_homework_summary.htm)	htm

Session 7 -- Flask and Persistence

Slides	slideshow (slides/slide-29-001-2.html)
Slides as Single Topic Pages	Flask (slides/handout-29-2.html) Persistence (slides/handout-30-2.html)

Homework	pdf (homework/Advanced_Python_Session_07_homework.pdf) (homework/Advanced_Python_Session_07_homework.htm)	htm
Homework Discussion	pdf (homework/Advanced_Python_Session_07_homework_summary.pdf) (homework/Advanced_Python_Session_07_homework_summary.htm)	htm

Session 8 -- Regular Expressions and Web Scraping

Slides	slideshow (slides/slide-32-001-2.html)
Slides as Single Topic Pages	Regular Expressions (slides/handout-32-2.html) Web Clients (slides/handout-33-2.html)

Homework	pdf (homework/Advanced_Python_Session_08_homework.pdf) (homework/Advanced_Python_Session_08_homework.htm)	htm
Homework Discussion	pdf (homework/Advanced_Python_Session_08_homework_summary.pdf) (homework/Advanced_Python_Session_08_homework_summary.htm)	htm

Session 9 -- pandas and matplotlib

Slides	slideshow (slides/slide-35-001-2.html)
Slides as Single Topic Pages	pandas (slides/handout-35-2.html)

Homework	pdf (homework/Advanced_Python_Session_09_homework.pdf) (homework/Advanced_Python_Session_09_homework.htm)	htm

Session 10 -- <u>Efficiency and Big O</u>

Slides	slideshow (slides/slide-37-001-2.html)
Slides as Single Topic Pages	Matplotlib (slides/handout-37-2.html) Benchmarking and Efficiency (slides/handout-38-2.html) Big O (slides/handout-39-2.html)

All Slides	All Slides on One Page (slides/handout-onepage00-2.html)

Instructions and Reference

Code Quality Requirements	pdf (supplementary/code_quality.pdf) htm (supplementary/code_quality.htm)

Getting Started Writing and Running Programs (Mac / Unix)	pdf (supplementary/getting_started_mac.pdf) htm (supplementary/getting_started_mac.htm)

Getting Started Writing and Running Programs (Windows)	pdf (supplementary/getting_started_windows.pdf) htm (supplementary/getting_started_windows.htm)