

Syllabus

These are the topics we covered at each lecture. The readings labeled *text* are from the text *How to Think Like a Computer Scientist: Learning with Python 3 Documentation*, by Wentworth, Elkner, Downey, and Meyer. The readings labeled *text2* are from the text *Linux Command Line: A Complete Introduction*, by Schott.

lec	date	topic	reading	due
1.	Mon, Jan 7	Course introduction, how to write a program	<i>text</i> , §1	
2.	Wed, Jan 9	Variables, expressions, exceptions	<i>text</i> , §2	
3.	Fri, Jan 11	Basic graphics; for loops	<i>text</i> , §3.1, 3.4.1	
	<i>Discussion</i>	Linux file system		
4.	Mon, Jan 14	Conditionals, iteration	<i>text</i> , §3	
5.	Wed, Jan 16	Functions, refactoring code	<i>text</i> , §4.1–4.4	
6.	Fri, Jan 18	Scope, printing		Homework 1
	<i>Discussion</i>	Linux shells		
	Mon, Jan 21	University holiday: Martin Luther King, Jr. Day		
7.	Wed, Jan 23	Putting a program together: simulation		
8.	Fri, Jan 25	Conditions, iterations, exception handling	<i>text</i> , §3.2, 4.14, 12	
	<i>Discussion</i>	Linux processes		
9.	Mon, Jan 28	Linux, exception handling	<i>text</i> , §12; <i>text2</i> , §1–4	
10.	Wed, Jan 30	Sequences, strings	<i>text</i> , §5.1	
11.	Fri, Feb 1	Strings, lists	<i>text</i> , §5.2–5.3	
	<i>Discussion</i>	Review for midterm		
12.	Mon, Feb 4	Recursion	<i>text</i> , §10	Homework 2
13.	Wed, Feb 6	<i>midterm examination</i>		
14.	Fri, Feb 8	More recursion	<i>text</i> , §10	
	<i>Discussion</i>	Linux shell wildcards, utilities		
15.	Mon, Feb 11	More recursion; searching; timing execution		
16.	Wed, Feb 13	Character representation, files	<i>text</i> , §7	
17.	Fri, Feb 15	Dictionaries	<i>text</i> , §5.4	Homework 3
	<i>Discussion</i>	More Linux utilities		
	Mon, Feb 18	University holiday: Presidents' Day		
18.	Wed, Feb 20	Modules, namespaces, searching	<i>text</i> , §8	
19.	Fri, Feb 22	Binary search, putting a program together	<i>text</i> , §8	
	<i>Discussion</i>	Linux shell programming		
20.	Mon, Feb 25	Sorting		
21.	Wed, Feb 27	Sorting, pattern matching		
22.	Fri, Mar 1	Regular expressions, pattern matching	<i>text</i> , §9.2	
	<i>Discussion</i>	More Linux shell programming		
23.	Mon, Mar 4	Miscellaneous; classes and objects	<i>text</i> , §9.2, 11.1	Homework 4
24.	Wed, Mar 6	Linux shell patterns	<i>text2</i> , §4	
25.	Fri, Mar 8	Review of sorting, more classes and objects	<i>text</i> , §11.1–11.2	
	<i>Discussion</i>	More shell programming		
26.	Mon, Mar 11	More classes and objects	<i>text</i> , §11.3–11.4	
27.	Wed, Mar 13	Overloading operators, copying, inheritance	<i>text</i> , §11.3–11.5	
28.	Fri, Mar 15	Multiple inheritance		Homework 5
	<i>Discussion</i>	Review for final		
	Thu, Mar 21	<i>final examination (1:00pm–3:00pm)</i>		