

Syllabus:Comp 112 Introduction to Programming

Dept. of Mathematics and Computer Science
Wesleyan University

Winter 2020

About the course

The course teaches the elements of programming using the very popular and successful Python programming language.

You will also learn how to design graphical user interfaces using Tkinter. This will enable you to create programs that display graphics and allow the user to interact with the program using a mouse, for example. You will use Tkinter to design a game for your final project.

The course Moodle page, available Dec. 26th, will contain the homework assignments, handouts, sample code for labs. The grade will be computed as follows: Quizzes: 10%, Midterm 35 %, Homework 35% Final project 20%.

The textbook for the course (referred to as "TP" in the syllabus) is *Think Python, 2nd Edition*. It is available for free online at <http://greenteapress.com/thinkpython2/thinkpython2.pdf>. The programming language, Python, must be downloaded to your computer. Python can be found here: <https://www.python.org>. **Take note:** You *must* download Python 3, not Python 2. A handout on Tkinter will be distributed to the class. You can also use the online book *Introduction to Tkinter* available at

<http://www.pythonware.com/media/data/an-introduction-to-tkinter.pdf>

Syllabus

Day	Topic	Reading
-1 (*)	Expressions, variables, assignments and Functions	Chapters 1,2,3 in TP
1	Functions with and without side effects	Chapter 3
2	More on Functions. Local variables. Conditionals	Chapter 5, Chapter 6
3	Conditionals (chained and nested). Boolean operators	Chapter 5
4	Loops: <code>for</code> loops, and strings	Class notes and chapter 8
5	Loops: <code>while</code> loops, and strings	Chapters 7,8
6	Lists. Introduction to classes	Chapter 10
7	Classes	Chapters 15-17.
8	Tkinter: Graphical interfaces	Tkinter handout
9	More on classes and Tkinter. Work in class on final projects	
10	Work in class on final projects.	

(*) This is work that must be completed before the first class meeting., This will include 2 homework assignments which will be posted on Moodle.