

# Syllabus: Comp 112

Dept. of Mathematics and Computer Science

Wesleyan University

Winter Session 2018

## 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*. It is available for free online at <http://greenteapress.com/wp/think-python-2e/>. 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 2, not Python 3. 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: <b>while</b> loops	Chapter 7
5	Loops: <b>for</b> 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.