

Welcome to Python Basics

Getting Started!

In order to be successful in this course you will need to have a willingness to put in the time and engage with the material. This course has been designed with non-programming learners in mind so there is no expectation that you will know how to write code in python - or any other language! That being said, it doesn't hurt to have experience; learners who have taken the Python for Everybody specialization will already have a familiarity with some of the content that will be in the course, and others may find it useful to take that specialization before taking this course.

Week by week

In week one you will be introduced to programming in python through lectures and the Runestone textbook - an interactive online textbook built for this course. By the end of the module, you will have run your first python program, and learned how to draw images by writing a program.

In week two you will use the lectures and the Runestone textbook to understand the basics of a few python data types - lists, strings, tuples - as well as a control structure - for loops. By the end of this week, you will be able to write more complex programs that create drawings by incorporating for loops. Finally, we will present the basics of an accumulation pattern to you, which will be expanded on in each week for the rest of the course.

In week three you will learn a new python data type - the boolean - as well as another control structure - conditional execution. Through the use of video lectures and the Runestone textbook, you will learn what Binary, Unary, Nested, and Chained Conditionals are, as well as how to incorporate conditionals within an accumulation pattern.

In week four we will present deeper knowledge on using lists, strings, and python objects in general. We will also cover how to use the accumulation pattern with lists and with strings. The final assignment will test your knowledge and skills through application, much like previous assessments and assignments did, though with a more difficult set of tasks now that you have learned the basics.

Exercises

Throughout the course, there will be opportunities for you to practice your skills and test your understanding of the material so far. These are ungraded opportunities, and you can try them as much as you would like without penalty for any incorrect answers. For each lecture video, there will be an accompanying page or pages in the interactive textbook which have questions at the bottom for you to use. The questions, listed under "Check Your Understanding", are meant to help you tell if you're getting the main points from the material. There will also be a page at the end of almost every chapter labeled "Exercises". There will be questions here that you can practice with, which will be more similar to a graded quiz in both structure and difficulty. Finally, there will be a practice tool that you can access, which is hosted in the textbook. With this practice tool, you will be presented with the same questions that are in the textbook but following a "spaced repetition" algorithm to reinforce what you've learned.

- Interactive textbook - Check Your Understanding

- Interactive textbook - Exercises
- Interactive textbook - Practice Tool

At the beginning of each lesson, there is a link that does double duty: 1) it logs you into the textbook, enabling the rest of the textbook links; 2) it takes you the Practice Tool.

Quizzes

Once per lesson, there will be a graded quiz - sometimes referred to as a chapter assessment. The quiz is meant to provide a formal assessment of your understanding, and will mostly be a mix of multiple choice, fill in the blank, and short coding questions. These graded quizzes will be hosted in the interactive textbook, and the results will be sent back to Coursera automatically.

- Interactive textbook - Graded Quizzes

The quizzes have a due date very far in the future, just because all runestone assignments have due dates. You can ignore them. You'll be done with this Specialization way before the due dates.

Grading Formula for Python Basics

Our quizzes are all set up to give you automated feedback right away and to let you try as many times as you want until and to always grade your "best" answer (usually your last one). We've set a passing threshold of 100%, because mastery of the early material is critical to success on later material.

For the same reason, we strongly encourage you to use the practice tool every day. It's an easy way to review previous concepts and it's rewarding to see how topics that were once difficult become easy as you progress.

Passing Threshold: 100%

Week One: 20%

- Assessment - Programming in Python (10%)
- Assessment - Turtle Graphics (10%)

Week Two: 20%

- Assessment - Lists and Strings (10%)
- Assignment - Week Two (10%)

Week Three: 10%

- Assessment - Week Three (10%)

Week Four: 50%

- Assessment - Sequence Mutation (7.5%)
- Assessment - Methods: Lists and Strings (7.5%)
- Assessment - Accumulating Lists and Strings (7.5%)
- Assessment - Way of the Programmer Week Four (7.5%)
- Assignment - Final course assignment (20%)

Getting Help

If you are having problems logging in to the interactive textbook for the course, try logging in again via the "Log in to Textbook" page for the course. This should restore your access to the interactive textbook.

If the problem is with the Coursera platform, please check out the [Coursera Learner Support Forums](#).

If you have questions with the content of the course, or questions about programming in Python or with the toolkits described, you can contact your peers and the course instructors in the [Coursera Discussion Forums](#). If you have more general questions about Python (i.e., not specific to operating the Runestone textbook), go to [Stack Overflow](#).

While learning from each other is very important we all recognize the difference between collaboration and simply copying and pasting work done by others. We strongly encourage you to work collaboratively using good judgment. Similarly, please respect all copyright rules of all materials, including books, articles, etc. While we ultimately cannot monitor everything, Coursera and my team will monitor the forums for any activity that violates such codes of conduct and basic civility to each other. Participation in the discussion forum is not required, though it is strongly encouraged.

For more information, please reach out to Coursera learner support via our online chat forums in the [Learner Help Center](#).

Accessibility

We are committed to developing accessible learning experiences for the widest possible audience. We recognize that learners with disabilities (including but not limited to visual impairments, hearing impairments, cognitive disabilities, or motor disabilities) might need more specific accessibility-related support to achieve learning goals in this course. If you experience any accessibility barriers, such as missing or inadequate alt-text, screen-reader inaccessible navigation, erroneous or incomprehensible captioning, please use this [Accessibility Feedback Form](#) to notify our team, and we will be more than happy to help.

If you encounter other types of issues such as broken links, missing course resources, specific course content errors, or questions about the platform in general, please post and request staff help in the Discussion Forums instead of using the Accessibility Feedback Form to ensure your request most efficiently reaches its intended destination.

Contact with the Instructor

Given the large number of students in this course the teaching assistants or instructor(s) should not be contacted directly with any questions. While we appreciate the time and effort you put into the course, responding to questions is virtually impossible. But teaching assistants will monitor the forums and will keep the instructor(s) informed on a regular basis.