

Part 1: Python for Beginners

ONLINE

Course Instructor

Amruta Warwatkar, B.E (Electronics) & M.Ed Learning Technology

Office hours by appointment (virtual or in person)

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Course Description & Outcomes

This course aims to teach everyone the basics of programming computers using Python. We'll cover the basics of how one constructs a program from a series of simple instructions in Python. We'll also cover the basic building blocks of programming and write a few simple programs.

Time: 2- 4 hours/ week

Current session: 27th April- 8th June 2016

The course has no pre-requisites and only requires simplest mathematics. This class is specifically built for those students who have no prior programming experience. Anyone with moderate computer experience will be able to master the materials in this course. This course will cover Chapters 1- 5 of the textbook "[Python for Informatics: Exploring Information](#)" by Charles Severance. Once you complete Part 1, you will be ready to take more advanced programming courses.

Part 2: Python- Data Structures (chapter 6- 10)

Part 3: Using Python to Asses Web Data (chapter 11- 13)

Part 4: Using Databases with Python (chapter 14- 16)

We'll have virtual office hours or face-to-face office hours from time to time so we have a chance to talk one way or another. Keep an eye out in your email for any announcements.

➤ **Equity, Diversity, Equal Opportunity, and Affirmative Action**

The course provides equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.

Additionally, there are working assumptions for this online course in order to position it as an online learning community:

1. We will treat one another with respect

Our beliefs, values, and ideas often differ from one another because we all draw upon different life experiences. In this class, we will discuss, question, and challenge ideas, but we will be careful not to attack individuals and create an unwelcoming, unsafe, or unproductive space. We challenge ideas, not individuals.

2. We will challenge our own beliefs, values, and ideas

We need to be open to challenging our own prejudices, biases, assumptions, and interpretations. We also need to expect to discuss things we may not often get the chance or take the time to discuss publicly and feel strongly about. It is okay to feel uncomfortable when we do so, but the more opportunities we have to articulate our perspectives and opinions on controversial issues, the more comfortable we will become with doing so.

3. We are here for a positive educational experience

Please carefully read/view/listen to and engage with the course content; thoughtfully prepare commentary and questions to share in class discussions. Ask questions, share your perspectives and ideas, and strive to make this class meaningful to your interests or future goals.

4. We will keep an open mind and be open to a change in perspective

In the give-and-take of collaborative learning that will ground this course, we are not only open to learning from our peers' knowledge and experiences, but we also allow others and ourselves a safe environment to critique our assumptions, learn, and grow. And sometimes that means we may change our minds about things. We'll position those things as productive contradictions.

Course Website (an interactive online learning environment)

Log in to the course web page by visiting <https://www.schoolology.com/>. You will log in using an **Access code**. Once you login click on the **Courses** tab, the course and section should be listed for you to click on. You will be responsible for becoming familiar with the course's online learning environment (course website), as this will be used regularly. You will be invited to this private, secure network and you will be using it to communicate with others, find assignments, submit assignments and many other activities within the course. You may want to bookmark it on your computer so that you can access it easily throughout the semester.

Turning in Assignments via Schoology

Students are required to post assignments on Schoology and **not via email**. Please note the due dates set on the course and the syllabus. Assignments are turned in the session after they are assigned unless otherwise noted by the instructor. Most assignments are accompanied by a Programming portion. Please turn in files with your name, project name and correct extension (.py, .jpg, .png, .pdf, etc.). Example: Amruta_assg1_firstprog.jpg >>

Email Correspondence

Please feel free to email me when you have course questions at warwa001@umn.edu . **You can expect a response to your emails within a reasonable time frame of 24- 48 hours. Responses likely will not be immediate, so do not wait until the last minute to complete your assignments in case you have questions or need clarifications.**

Course Structure

➤ Textbook

1. Severance, C. (2013). [Python for Informatics: Exploring Information](#) (**Download**)
2. Downey, A., Elkner, J. & Meyers, C. (2008). [How to Think Like a Computer Scientist Learning with Python](#)

➤ Course Readings

All of the supplemental required readings will be provided for you and available via links on our Schoology course website.

➤ Weekly Modules

This course is held completely online, which means there will not be any face-to-face (F2F) class sessions. It is also conducted asynchronously, so there are no live online class sessions. **Each weekly class Module will begin on Wednesdays and end on Tuesdays. You will receive specific directions and deadlines for assignments when course Modules are made available online at the start of each new week: new Modules will be posted every Wednesday by 12:00PM Noon, U.S. CDT.**

You are required to actively participate in the online activities each week and complete tasks as assigned. You will have the freedom to complete activities as per your convenience during the week and all module activities will generally be due at the end of the Module, on **Tuesday evening**. And then a new Module will begin on Wednesday again. Please consult each week's Module that will be posted on Schoology for more specific details about the learning tasks and activities planned for the week and the due dates for all assignments.

In addition to the weekly tasks, you will also have Programming Assignments. I will have target due dates established for each of these assignments to help keep you on task. Our learning together in this online community will be highly interactive and fun, but it is important to understand that it does require that you be a very self-motivated, independent learner in order to stay on top of assignments and coursework.

➤ Internet Access

This course will require that you have ready and reliable access to the Internet for all communications and coursework. In an online course it is imperative that you are prepared with the tools you will need

to succeed. **An online course does not necessarily mean a “from home” course. If your home computer does not have the necessary capabilities or is experiencing technology difficulties, you must find alternative computer resources.** “My computer (or Internet) wasn’t working” is not an acceptable excuse for missed assignments or deadlines.

Do not wait until the last minute to complete your work and submit it, in case you do experience technology problems. If you are learning from a distance, you can arrange to use a friend's or relative's reliable computer or those at your local library or community center. However, be aware that some of these agencies use filtering software to block some of the websites you will need to access for course assignments.

All registered students should have an e-mail that you use regularly. All official class communications will be sent to your email address or posted to the Schoology course. Be sure that you are checking your email often. Stay connected. You are responsible for all necessary communications.

Technology Tools

Numerous technology tools will be used or explored in this course, such as:

1. Online learning platforms (eg., Schoology, etc.)
2. Screen capture tools (eg., Camtasia, Screencast-o-matic, etc.)
3. Screen shot tools (eg. Snipping tool for windows, Preview for Macintosh)
4. Various other online tools & mobile applications

You will have the opportunity to gain competence in the use of a variety of technology applications for this course that you would like to learn to effectively integrate into your own course(s).

Technology Questions & Troubleshooting

Need help with common technology issues??

****Please note that individual instructors cannot help you with issues or problems with your personal computer, network or Internet connection**

I strongly suggest exchanging phone numbers and email addresses with someone in class for when hurdles present themselves. Your list of resources for dealing with tech troubleshooting:

1. Check and carefully review the video for step-by-step instructions.
2. Check for help available for the software at the site (e.g., apple.com, windows.com etc.)
3. Search for tutorials at YouTube.com. Amazingly, many common fixes are posted here!
4. Call a peer from class.
5. Lastly call, text or email me.

Class Participation, Assignments & Grading Policy (all assignments are subject to change)

➤ Class Participation

Class participation equals 40% of your grade, so it is incredibly important. Students are expected to be actively involved in the course and to:

1. Complete all readings and assignments as assigned.
2. Offer constructive feedback to class peers over the course of the semester.
3. Showcase and demonstrate their knowledge through the numerous assignments in class.

➤ **Assignments**

Below is a summary of the assignments that will be completed over the course of the semester. Detailed guidelines and instructions expectations will be provided online. These assignments are subject to change as necessary according to our collective goals, your individual goals and special learning needs, and any new directions that we determine together.

➤ **Grading Policy**

The weighted grading policy is as follows:

Class Participation + Discussions	35%
Quiz	15%
Programming	30%
Student-Curated Notes	20%

Deadlines & Late Assignments

Deadlines are an important, ubiquitous part of our lives- personally, academically and to meet the professional demands of employers and colleagues. Deadlines hold us accountable to meet our responsibilities and on track toward accomplishing our goals. I have set deadlines for all assignments and they are clearly communicated throughout the syllabus and will be on Schoology. However, I recognize that as adult learners, we all have competing life demands that can present scheduling and time management challenges. I would like to try to help personalize this course experience for you as much as I reasonably can, so the following is my course policy on deadlines and late assignments:

If you find that a specific deadline does not work for you or you need more time for an assignment, **if you contact me in advance prior to the initial deadline**, you can establish your own new deadline. To change an assignment deadline, you must email me and propose an alternate deadline (provide me with a specific date). I will then make note of it in my records and will expect it on that date. **Please note that because the last day of the course is Tuesday, June 14, 2016, no extensions will be granted beyond this date. This is a firm deadline.**

Grading System

➤ **Definition of Grades:**

A	Achievement that is outstanding relative to the level necessary to meet course requirements.
B	Achievement that is significantly above the level necessary to meet course requirements.
C	Achievement that meets the course requirements in every respect.
D	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
S	Achievement that is satisfactory.
I	Incomplete.

A	95 - 100%	B+	87 - 89%	C+	77 - 79%	D+	67 - 69%	S	50- 59%
A-	90 - 94%	B	84 - 86%	C	74 - 76%	D	64 - 64%	I	< 50%
		B-	80 - 83%	C-	70 - 73%	D-	60 - 63%		

➤ **Receipt of Final Grade**

Grades will be provided **one week after** you finish the course via e-mail and also on Schoology.

➤ **Scholastic Dishonesty**

Academic dishonesty, including plagiarism, in any portion of the academic work for a course shall be grounds for receiving a grade '**I**' for the entire course. You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without permission; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, professional endorsement. If you have additional questions, please clarify with the instructor for the course.

**** Class concludes on June 14, 2016**

IMPORTANT: The last day of instruction for the courses will be June 14, 2016. Therefore, all assignments must be submitted by the end of the evening on this date. This is a firm deadline, no extensions will be granted for any assignments beyond this date.