Course Syllabus

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COMP 660: Programming with Python I
Fall 2020

Part 1: Course Overview

Instructor Information

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Course/Program Description and Purpose

Python is a language with a simple syntax, and a powerful set of libraries. It is an interpreted language, with a rich programming environment, including a robust debugger and profiler. While it is easy for beginners to learn, it is widely used in gaming applications, computer-numerically controlled machining, business intelligence, web application development, robotics, genomics, and more. This course is an introduction to the Python programming language for students without prior programming experience. We cover the spectrum of Python programming ranging from the essentials of the language to control statements, function and modules, basic data structuring techniques, and more. The examples and labs used in this course are drawn from diverse areas such as financial data processing, gaming applications, and more.

Recommended Skill Level (Optional)

Recommended skill level

Student Learning Outcomes (SLOs)

SLOs are the knowledge, skills, and attitudes that students possess and can demonstrate upon completing a course or program of study. The SLOs for the institution and each program (Links to an external site.)   **(http://slo.sdce.edu/)** are located on the SDCE website.

Institutional SLOs

Institutional SLOs

Social Responsibility: SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.

Effective Communication: SDCE students demonstrate effective communication skills.

Critical Thinking: SDCE students critically process information, make decisions, and solve problems independently or cooperatively.

Personal and Professional Development: SDCE students pursue short term and lifelong learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

Diversity: At SDCE students have many different cultures, religions, language backgrounds, and races. We promise to respect each other's cultures and differences. These differences make our community strong. If you do not respect other students' differences, you may be asked to leave the course. You can sign a promise to respect others equally at SDCE Diversity Pledge. **(http://www.sdce.edu/organization/diversity/pledge/list)**

Program SLOs

Upon successful completion of this program, you will be able to:

- Students completing a BIT software course will be able to demonstrate the use of the software tools to effectively communicate with others in person, with paper documents or online.
- BIT students will demonstrate the capability to work in teams of other diverse individuals to apply Information Technology solutions to a problem.
- BIT students will demonstrate the ability to use Information Technology and software tools to support decision processes and critical thinking.
- BIT students will pursue continued Information Technology education to complete short term goals such as website development, and also continue with long term programs that will keep them current in this rapidly changing field.

Course SLOs

Upon successful completion of this course, you will be able to:

CO 1: Install and configure Python and its development environment

CO 2: Demonstrate a basic understanding of the essentials for working with Python

CO 3: Use control statements to handle iterative and conditional logic

CO 4: Componentize code by utilizing functions and modules

CO 5: Utilize common data types in various capacities

CO 5: Utilize common data types in various capacities

CO 6: Work with data structures

Course Resources

Required

Textbook and other resources: The program text, *VMware vSphere: Install, Configure, Manage*, will be used as the main resource for concepts and instruction on the vSphere environment. The weekly labs will be available only using NetLab. Additional resources include web links to VMware documentation, videos, and other useful sites, including Quizlets for several modules.

Basic Technology Requirements

Canvas Technical Requirements

This is a list of basic computer system requirements to use Canvas. It is always recommended to use the most up-to-date versions and better internet connections. Canvas will still run with the minimum specifications, but you may experience slower loading times.

- **Computer Specifications**
  Canvas and its hosting infrastructure are designed for maximum compatibility and minimal requirements.
  - **Screen Size**
    - A minimum of 800x600. That is the average size of a netbook. You probably won't want to view Canvas on a smaller screen than that.
  - **Operating Systems**
    - Windows XP SP3 and newer
      Mac OSX 10.6 and newer
      Linux - chromeOS
  - **Mobile Operating System Native App Support**
    - iOS apps require version 11 or later
      Android apps require version 5.0 or later .All Android and iOS both support the two most recent versions of their respective operating systems.
  - **Computer Speed and Processor**
    - Use a computer 5 years old or newer when possible
      1GB of RAM
      2GHz processor
  - **Internet Speed**

    - Along with compatibility and web standards, Canvas has been carefully crafted to accommodate low bandwidth environments.
      Minimum of 512k
  - **Screen Readers**

■ The latest versions of JAWS and VoiceOver

Notice* Canvas recommends a minimum bandwidth of 512K which is basic DSL. Dial-up internet access is no longer a viable option for online learners.

Which browsers does Canvas support?

 Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, & Android or any other device with a modern web browser. However, Internet Explorer is no longer supported

If you are interested in minimums here they are:

Chrome 19
Safari 5
Firefox 12
Flash 9 (if you want to use the audio/video recording or viewing feature, the Chat feature or upload files)

But rather than focusing on minimums, we highly recommend updating to the newest version of whatever browser you are using as well as the most up to date Flash plug-in.

Other Notes:

Flash is required in several places in Canvas: media recording/streaming and viewing, chat, and uploading files to a course or an assignment. Other than these features, Flash is not required to use most areas of Canvas.

The Java plug-in is required for screen sharing in Conferences. Otherwise, there are no other browser plug-ins used by Canvas.

The Canvas UI was optimized for desktop displays, small form factors such as phones may not be as pleasant to use Canvas with. We recommend trying out our Mobile App (instructure.com/mobile) if you are on an iPhone or have an iPad.

There are only 2 hard requirements:

You have to have JavaScript enabled in your browser.
Do not use Internet Explorer (IE). IE is unsupported in Canvas.

Course Structure (optional)

This program is based on the industry course "VMware vSphere: Install, Configure, Manage (ICM)." The course features hands-on training that focuses on installing, configuring, and managing VMware vSphere 6.7, which includes VMware ESXi and VMware vCenter Server.

 Part 2: Course/Program Completion Requirements and

Grading

Course Grading Distribution			
Assignment Category	**Number**	**Point Value**	**Total Points**
Discussions	7	40	280
Python Assignments	7	40	280
Quizzes:			
Module 1 and 2 Quiz	1	40	40
Module 3 and 4 Quiz	1	40	40
Module 5 and 6 Quiz	1	40	40
Module 7	1	20	20
Live Sessions	2	25	50
		Total Course Points	**750**

Grade	Percentage
A	90% -100%
B	80% - 89%
C	70% - 79%
D	60% - 69%

F	Less than 59%

Support

Technical Support

Our technical support team supports services for technical issues, such as course logins, course software support, and online learning training.

Online Learning Pathways **(https://www.sdccd.edu/about/departments-and-offices/instructional-services-division/online-learning-pathways-1/index.aspx)** : 619-388-6750

Technical Requirements **(https://www.sdccd.edu/about/departments-and-offices/instructional-services-division/online-learning-pathways-1/students/technical%20requirements%20for%20online%20learning.aspx)**

Instructional Services

Instructional services provides support for online learning.

Contact: **Training for Online Learning** **(https://www.sdccd.edu/about/departments-and-offices/instructional-services-division/online-learning-pathways-1/students/student%20training.aspx)**

Counseling/Student Services

Student services provides If you need help with a personal problem or advice about your studies, you can make an appointment with a counselor. For example, a counselor can help you make a plan to reach your goals: improving your English, getting your GED, enrolling in a job training class or attending college. If you need help finding a job, you can contact the Career Development Services Counselor

Contact **Career Services** **(http://cds.sdce.edu/)**

Disability Support Programs and Services (DSPS)

If you have a disability or think you might have a disability, you can contact the counselor in the Disability Support Programs and Services (DSPS) at your campus. DSPS can provide services and special equipment that will make it easier for you to study in our classes. An example of special equipment is a machine that enlarges the print for people who have a vision disability. Since it takes time to provide

services, we recommend that you contact the counselor at least two weeks in advance. DSPS services are confidential and voluntary.

Contact DSPS **(https://www.sdccd.edu/about/departments-and-offices/student-services-department/dsps/index.aspx)**

SDCE Policies

Course Attendance

Regular attendance is expected in all courses. For online courses the expectation is that you will check into the course at minimum 3 times a week. Any student frequently absent from the course may, at the discretion of the instructor, be dropped from the course. Those students receiving Veteran's Benefits or CalWORKS must comply with the attendance requirements specific to these programs.

Drops/Withdrawals

Students must communicate with the instructor if they can no longer attend the class. It will be up to the instructor to drop each student from their roster.

Commitment to Integrity and Academic Dishonesty Policy

- Students should actively participate in course activities.
- Our college has rules about academic dishonesty:
  - Students are not permitted to cheat on course assignments or tests.
  - Students are not permitted to use false information.
  - Students may not copy the language or ideas of another person and use them as their own ideas.
- An instructor will take the following steps if he/she thinks a student has been dishonest in completing a course assignment or test:
  - Discuss the situation with the student. Make sure that the student understands why his/her action is dishonest.
  - If the student did not understand that his action was dishonest, the instructor can give the student a warning.
  - If the student knew that his action was dishonest, the instructor can give him/her a failing grade.

Course Summary

Note that live sessions fall on the day of the week and at the times provided to you before the term start, and proceed in a weekly manner. All assignments for a particular session are due at 11:59 PM PST on the last day of the week for that module. Live sessions will not be held on SDCE holidays. If a live session for this course falls on an SDCE holiday, the live session will be cancelled, and your instructor

will inform you as to when the Live Session will be rescheduled or how the content will be covered. You will receive full points for the cancelled session.

Module Number	Assignments/Activities
Getting Started	Discussion: Introduce Yourself (ungraded) Survey: Course Preparation Survey (ungraded)
Module 1: Getting Started with Python	Module 1 Video Lectures and Video Activities Module 1 Discussion Module 1 Assignment Live Session
Module 2: Python Essentials	Module 2 Video Lectures Module 2 Assignment Module 2 Discussion Module 1 and 2 Quiz
Module 3: Control Statements	Module 3 Video Lectures and Video Activities Module 3 Assignment Activity: Interactive: Control Statements: If, Elif, While and For Statements (ungraded) Module 3 Discussion
Module 4: Functions	Module 4 Video Lectures and Video Activities Module 4 Assignment Module 4 Discussion Module 3 and 4 Quiz
Module 5: Modul	Module 5 Video Lectures and Video Activities Module 5 Assignment

Module 5: Modules	Module 5 Assignment
	Module 5 Discussion
Module 6: Strings	Module 6 Video Lectures and Video Activities
	Module 6 Assignment
	Module 6 Discussion
	Module 5 and 6 Quiz
Module 7: Numbers	Module 7 Video Lectures and Video Activities
	Module 7 Assignment
	Module 7 Discussion

Course Summary:

Date	Details	
Wed Sep 9, 2020	📝 **1.6 Live Session** (https://sdccd.instructure.com/courses/2409076/assignments/18905587)	due by 11:59pm
Sun Sep 20, 2020	📝 **1.4 Module 1 Discussion** (https://sdccd.instructure.com/courses/2409076/assignments/18905585)	due by 11:59pm
	📝 **1.5 Module 1 Assignment** (https://sdccd.instructure.com/courses/2409076/assignments/18905586)	due by 11:59pm
	📝 **2.4 Module 2 Assignment** (https://sdccd.instructure.com/courses/2409076/assignments/18905588)	due by 11:59pm
	📝 **2.5 Module 2 Discussion** (https://sdccd.instructure.com/courses/2409076/assignments/18905584)	due by 11:59pm
	📝 **2.6 Module 1 and 2 Quiz** (https://sdccd.instructure.com/courses/2409076/assignments/18905573)	due by 11:59pm