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1.1 Welcome

Welcome

Welcome to Introduction to Programming in Python! In this course you will learn about the fundamentals of the Python language and its features to control program flow and to manipulate data sets. You will develop Python scripts that extract and manipulate data from unstructured data sources using Python libraries.

This course uses the zyBooks learning resource, which contains all the necessary reading materials and interactive learning activities. For the best understanding of the course content, complete each assigned module.

Programming is a skill best honed through practice. The embedded Python compiler and learning activities will help you understand and remember concepts.

Use the Table of Contents from the left menu to navigate through each chapter of the course.

1.2 Course Competencies

Introduction to Programming in Python: Course Competencies

- **Python Programming Elements and Syntax**
  The graduate integrates Python elements including data types, constants, variables, operators, and expressions to create programming solutions.
- **Functions and Control Structures in Python**
  The graduate constructs functions and control structures to interact with data structures and direct program flow.
- **Libraries and the Python Environment**
  The graduate writes code in the Python environment, incorporating libraries to support data analytics tasks including data collection, manipulation, and storage.

1.3 Pacing Guide

Introduction to Programming in Python: Pacing Guide

Use the pacing guide below to stay within the suggested course completion timeframe: five weeks for the course content, and one week to prepare for and complete the objective assessment.

Table 1.3.1: Pacing guide.

Week	Chapters
Week 1	• Chapter 1 - Getting Started • Chapter 2 - Introduction to Python 3 • Chapter 3 - Variables and Expressions
Week 2	• Chapter 4 - Types • Chapter 5 - Branching
Week 3	• Chapter 6 - Loops • Chapter 7 - Functions
Week 4	• Chapter 8 - Strings • Chapter 9 - Lists and Dictionaries • Chapter 10 - Exceptions
Week 5	• Chapter 11 - Modules • Chapter 12 - Files
Week 6	• Pre-assessment • Review • Objective assessment

Feedback?