# CS-125 Python Scripting

## University of Wisconsin-Stout

## 2 Credits

## Instructor contact information

### Instructor name:

Ian Edhlund, PhD

### Instructor email:

edhlundi@uwstout.edu

### Office Hours/Instructor Availability:

Remote via Zoom or Teams by request

## Required Materials and Textbooks

*Python for Everybody: Exploring Data in Python 3, ISBN-13: 978-1530051120*

*Freely available online at* [*https://www.py4e.com/book*](https://www.py4e.com/book)

## Course Description

*Introductory course that provides an overview of the Python Programming language with an emphasis on functions, files and data processing.*

## Course Learning Objectives

1. Create basic Python programs using variables, expressions and control structures.
2. Use and implement functions to perform a specified task.
3. Use files for input and output within a program.
4. Write code that uses built in data structures to process data.

## Grading Policies

Grading will be based on 500 course points divided into two categories: 200 points for Exercises, 150 points for Surveys / Quizzes, and 150 points for the Final Project. Grades will be assigned according to the following scale:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grade | A | A- | B+ | B | B- | C+ | C | D | F |
| % Score | ≥ 93 | ≥ 90 | ≥ 87 | ≥ 83 | ≥ 80 | ≥ 77 | ≥ 70 | ≥ 60 | < 60 |

## Course Outline

## Unit 1: The Basics

1. Python Introduction
2. Variables, Expressions, and Statements

Unit 2: Control Flow

1. Conditional Execution
2. Functions
3. Iterations

Unit 3: Data Processing

1. Strings
2. Files
3. Lists
4. Dictionaries
5. Tuples

Unit 4: Advanced Topics (Student Chooses One of the Following)

1. Regular Expressions
2. Networked Programs
3. Python and Web Services
4. Object-Oriented Programming
5. Using Databases and SQL

## University Policies

Please see the university website regarding policies that affect all classrooms on campus.

https://liveuwstout.sharepoint.com/sites/2022/034/SitePages/Campus-Policies.aspx

## Course Policies

Assignments and quizzes must be submitted by 11:59pm Central Time on their specified due date to earn credit. Late assignments or quizzes will be given a zero grade. Contact the instructor via email at edhlundi@uwstout.edu for extenuating circumstances.

## Student Expectations

Students will receive announcements on Canvas and emails from the instructor. Emails will be sent to your UW-Stout email account only, even if you enter another email address during the registration process. Materials will be visible in Canvas as they are made available, including slide presentations and videos to accompany the book and assignments.

Assignments will be turned in via the link on Canvas. Pay careful attention to ALL of the deliverables for each assignment. There is a Quiz link which contains the online quizzes and pertinent information (e.g. due dates and time limits).

Questions for the instructor can be posted under Discussions, by email at edhlundi@uwstout.edu, or via online video conference upon request. I don’t have specific office hours, so please feel free to contact me with your issues at any time; I will respond as soon as possible. I am here to help you learn the material. Additional tutoring may be available in the labs, but I encourage you to come to me first with issues.

## Syllabus Change Policy

The instructor reserves the right to make changes throughout the semester to the syllabus and schedule if necessary. It is each student's responsibility to be present and regularly review the course management system for updates.