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| Class |  | Topic |  |
| 1 |  | Syllabus, **Python Installation, and IDE Setup** |  |
| 2 |  | **Basic Syntax and Expressions, Names and Variables** | Chapter 4 exercises assigned |
| 3 |  | **Data Types** | Chapter 5 exercises assigned |
| 4 |  | **Control Structures: Conditional Statements** | Chapter 6 exercises assigned |
| 5 |  | **Control Structures: Loops (for and while)** | Chapter 7 exercises |
| 6 |  | **Functions: Definition, Arguments, Return Values** | Chapter 8 Exercises |
| 7 |  | **Introduction to Modules and Libraries** | Chapter 9 exercises |
| 8 |  | Data Structures (Lists, Tuples) List comprehension |  |
| 9 |  | Data Structures (Dictionaries, Sets) |  |
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| 10 |  | JSON Files |  |
| 11 |  | Intro to NumPy (Arrays) |  |
| 12 |  | Intro to Pandas (DataFrames and Series) |  |
| 13 |  | Reading and Writing Data with PandasIn |  |
| 14 |  | Exception Handling (try, except, finally) and Debugging Techniques |  |
| 15 |  | String Manipulation and Methods |  |
| 16 |  | Introduction to OOP, Classes, and Objects |  |
| 17 |  | Attributes and Methods, |  |
| 18 |  | Inheritance, and Encapsulation |  |
| 19 |  | Writing Clear and Effective Documentation (Docstrings, Comments) and PEP 8 |  |
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| 20 |  | Introduction to Web Scraping |  |
| 21 |  | Understanding HTML and CSS Basics |  |
| 22 |  | Introduction to Git and GitHub |  |
| 23 |  | Collaborative Programming with GitHub |  |
| 24 |  | Best Practices for Collaborative Coding |  |
| 25 |  | Introduction to SQL |  |
| 26 |  | Connecting Python with SQL Databases (SQLite) |  |