

ET574 Programming and Applications with Python

Fall 2022 Weekly Schedule

Dates	Topics	Session A Learning Activities	Session B Learning Activities	Assignments
8/25 & 8/30	00 - ET574 Start Here Introduction to Python	Course Overview Syllabus / Schedule Setup IDE	Introduction to Python	Email & Announcement Confirmation: 1-pt Practice Quiz: 1-pt DB 0: 1.5-pt Due before 11:59 PM on 8/31
9/1 & 9/6	01 - Variables & Numbers The <i>print</i> Function Variables Augmented Assignments Arithmetic Operators	VariablesPPT_PE VariablesExamples.zip Quiz 1B-1: 5-pt 1-ques/10-min	Programming Exercises Demo Participation Quiz 1B-2: 10-pt 1-ques/10-min	DB 1: 1.5-pt Quiz 1A: 10-pt 10-ques/15-min Due before 11:59 PM on 9/7
9/8 & 9/13	02 - Strings String Literals String Concatenation String Repetition String Functions and Methods Indices and Slices	StringsPPT_PE StringsExamples.zip Quiz 2B-1: 5-pt 1-ques/10-min	Programming Exercises Demo Participation Quiz 2B-2: 10-pt 1-ques/10-min	DB 2: 1.5-pt Quiz 2A: 10-pt 10-ques/15-min Due before 11:59 PM on 9/14
9/15 & 9/20 9/26 -9/27 No Class	03 - Formatted Output Optional <i>print</i> argument <i>sep</i> Optional <i>print</i> argument <i>end</i> Justifying Output in a Field Justifying Output with Format Method	BasicIOPPT_PE IOExamples.zip Quiz 3B-1: 5-pt 1-ques/10-min	Programming Exercises Demo Participation Quiz 3B-2: 10-pt 1-ques/10-min	DB 3: 1.5-pt Quiz 3A: 10-pt 10-ques/15-min Due before 11:59 PM on 9/21
Notes	All DB activities are due before 11:59 PM on the due date	Quizzes B will be given during the last ten minutes of each session	Practice Quiz and all Quizzes B are allowed for only one attempt	All Quizzes A are allowed for two attempts and due before 11:59 PM on the due date

Dates	Topics	Session A Learning Activities	Session B Learning Activities	Assignments
9/22 & 10/6 <i>9/29 Th Follow Mon class</i>	04 - Lists The <i>list</i> Object Slices The list methods and functions Immutable and Mutable Objects Indexing, Deleting, and Slicing Out of Bounds	ListsPPT_PE ListsExamples.zip Quiz 4B-1: 5-pt 1-ques/10-min Formatted Output & Calculations	Programming Exercises Demo Participation Quiz 4B-2: 10-pt 1-ques/10-min Using Input	DB 4: 1.5-pt Quiz 4A: 10-pt 10-ques/15-min Due before 11:59 PM on 10/10
10/11 & 10/13 <i>10/4 - 10/5 & 10/10 No Class</i>	05 - The for Loops Looping Through an Arithmetic Progression of <i>Numbers</i> Step Values for the <i>range</i> Function Looping Through the Characters of a <i>String</i> The <i>tuple</i> Object Looping Through the Items of a <i>List</i> or <i>Tuple</i>	ListsIIPPT_PE ListsIIEExamples.zip Quiz 5B-1: 5-pt 1-ques/10-min Lists Functions/Methods	Programming Exercises Demo Participation Quiz 5B-2: 10-pt 1-ques/10-min Lists	DB 5: 1.5-pt Quiz 5A: 10-pt 10-ques/15-min Due before 11:59 PM on 10/17
10/18 & 10/20	06 - Decision Structure <i>if</i> Statements <i>if-else</i> Statements Nested <i>if-else</i> Statements The <i>elif</i> Clause Input Validation with <i>if-elif-else</i> Statements	IfStatementsPPT_PE IfExamples.zip Quiz 6B-1: 5-pt 1-ques/10-min For Loops	Programming Exercises Demo Participation Quiz 6B-2: 10-pt 1-ques/10-min List Comprehension & Strings/Lists/Tuples	DB 6: 1.5-pt Quiz 6A: 10-pt 10-ques/15-min Due before 11:59 PM on 10/24
10/25 & 10/27	07 – User Input & Loops The <i>while</i> loop The <i>break</i> Statement The <i>continue</i> Statement The <i>else</i> Statement Infinite Loops	InputWhilePPT_PE LoopsExamples.zip Quiz 7B-1: 5-pt 1-ques/10-min If Else	Programming Exercises Demo Participation Quiz 7B-2: 10-pt 1-ques/10-min Elif	DB 7: 1.5-pt Quiz 7A: 10-pt 10-ques/15-min Due before 11:59 PM on 10/31

Dates	Topics	Session A Learning Activities	Session B Learning Activities	Assignments
11/1 & 11/3	08 – Dictionaries Dictionaries Dictionary Operations The <i>dict</i> Function The <i>zip</i> Function Nested Dictionaries Looping Through the Items of a Dictionary	DictionariesPPT_PE DictionariesExamples.zip Quiz 8B-1: 5-pt 1-ques/10-min For & while Loops	Programming Exercises Demo Participation Quiz 8B-2: 10-pt 1-ques/10-min Loops with Indefinite Iterations	DB 8: 1.5-pt Quiz 8A: 10-pt 10-ques/15-min Due before 11:59 PM on 11/7
11/8 & 11/10	09 – Functions I Built-in Functions & Modules User-Defined Functions Creating/Calling Functions Functions with Parameters Functions with Return Values Arbitrary Arguments Arbitrary Keyword Arguments	FunctionsIPPT_PE FunctionsIExamples.zip Quiz 9B-1: 5-pt 1-ques/10-min Dictionaries Functions/Methods	Programming Exercises Demo Participation Quiz 9B-2: 10-pt 1-ques/10-min Loop with Dictionaries	DB 9: 1.5-pt Quiz 9A: 10-pt 10-ques/15-min Due before 11:59 PM on 11/14
11/15 & 11/17	10 – Functions II Scope of Variables Named Constants Functions Calling Other Functions Functions with Returning Values Arbitrary Arguments Arbitrary Keyword Arguments Creating a Module	FunctionsIIPPT_PE FunctionsIExamples.zip Quiz 10B-1: 5-pt 1-ques/10-min Define Functions	Programming Exercises Demo Participation Quiz 10B-2: 10-pt 1-ques/10-min Create & Call Functions	DB 10: 1.5-pt Quiz 10A: 10-pt 10-ques/15-min Due before 11:59 PM on 11/28
11/22	Project I		Project I Due before 11:59 PM on 11/27	

Dates	Topics	Session A Learning Activities	Session B Learning Activities	Assignments
11/29 & 12/1	11 – Classes Classes and Objects Built-in Classes User-defined Classes	Programming Exercises Demo Participation Quiz 11B-1: 5-pt 1-ques/10-min Functions with Arbitrary Parameters	Programming Exercises Demo Participation Quiz 11B-2: 10-pt 1-ques/10-min void Functions VS Functions with Returned Values	DB 11: 1.5-pt Quiz 11A: 10-pt 10-ques/15-min Due before 11:59 PM on 12/5
12/6 & 12/8	12 – Files and Exceptions Files Reading from a File Accessing the Data Writing to a File OS Path Module Exceptions	FileExceptionPPT_PE FileExceptionExamples.zip Final Exam FYI	Programming Exercises Demo Participation Final Exam Topics Review	
12/13	Project II		Project II Due before 11:59 PM on 12/13	
12/15 & 12/20	Coding Final Exam 120-pt/120-min		Projects Q & A 4-group/50-min MC/TF Final Exam 25-pt/50-min	
Course Completion				