IS 597-MLC - Machine Learning Pipelines Using Cloud-Based Platforms

Instructor: Jenna Kim & Kevin Trainor

**Assignment: Model Training** 

**Course Component: Coding Assignments** 

**Grading Rubric** 

### **Base Point Allocation**

#### **Base Points (23 available points)**

#### Requirements

Assignment submitted on-time or within the allowable late period.

Percent Credit	Description
100	Meets all expectations.
0	Not submitted or submitted too late.

### **Submission**

#### Timeliness (16 available points)

#### Requirements

Must be submitted by date and time indicated in the weekly schedule.

Percent Credit	Description
100	On Time
0	Late
0	Not submitted or submitted too late

#### File Submitted (10 available points)

# Requirements

Submit only 1 file.

File type must be .ZIP.

File name must conform to all requirements stated in assignment instructions.

Percent Credit	Description
100	Meets all expectations.
50	Meets nearly all expectations.
0	Does not meet expectations.
0	Not submitted or submitted too late.

# **Exercise 1 (Regular)**

### Completeness (7 available content points)

### Requirements

Must include at least 1 research question.

Must include a modules.py file.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

#### **Technique (8 available content points)**

# Requirements

Description of research question must be well-written with professional prose including appropriate spelling, grammar, and choice-of-words.

modules.py file should include functions for data loading and pre-processing.

Python code in modules.py should conform to best practices for Python coding including comments, docstrings, etc..

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

# **Exercise 2 (Regular)**

### **Completeness (7 available content points)**

### Requirements

Must include function for fitting data.

Must include function for evaluating model.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

#### **Technique (8 available content points)**

# Requirements

Function for model fitting must take the required parameters.

Function for model evaluation must take the required parameters.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

# **Exercise 3 (Regular)**

### **Completeness (8 available content points)**

### Requirements

Must include the main function.

Main function must call functions for entire processing beginning with data loading and ending with model evaluation.

The notebook code must call the main function and produce the expected output.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

# **Technique (8 available content points)**

# Requirements

Code for main function must follow best practices for python functions and not produce style warnings or syntax errors.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

# **Exercise 4 (Challenge)**

### Completeness (3 available content points)

### Requirements

Must include moldules\_updated.py.

modules\_updated.py must include all functions including the main\_function.

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

#### **Technique (2 available content points)**

# Requirements

Notebook code should import and call all functions from modules\_updated.py including the main function.

Code must follow best practices for Python functions

Percent Credit	Description
100	Meets all expectations.
90	Meets nearly all expectations.
75	Meets most expectations.
50	Meets some expectations.
25	Meets few expectations.
10	Meets nearly no expectations.
0	Meets no expectations.
0	Not submitted or submitted too late.

#### **Total Available Points = 100**

Please Note: This grading rubric allows for adjustments to be made to your content point score. The total number of content points available to be awarded on this assignment is 51. An adjustment of up to 36 content points may be made for submissions that have a low content point score and yet meet the following criteria: Assignment must be submitted on time. Work submitted must show good faith effort on all REGULAR EXERCISES. It is possible to qualify for the points adjustment without having submitted work on the CHALLENGE EXERCISE.