

## CIT110 – Final Project Directions (50 Points Possible)

You will be creating a grading workbook for a college-level course. The steps to create this workbook are as follows:

### 1. Download the start file and save it as an “Excel Workbook” using the filename “LastNameFirstInitial.xlsx|” (2% or 1 point)

Download the Grade Book Data CSV file (Final\_Exam\_Grade\_Book\_Data.csv) to your computer. You can double-click on the filename and it should open up in Excel. Resave your worksheet as an “Excel Workbook” with the .xlsx extension and make sure to use your name for the filename (ex: "LastNameFirstInitial.xls(x)"). **Warning: If you don't resave your workbook as an “Excel Workbook” but continue to save it as a .csv file, you will lose your work.**

### 2. Add three worksheets to the workbook. (2% or 1 point)

There will be a total of four worksheets in the workbook. Name each worksheet tab in this order: “Details”, “Essays”, “Pivot” and “Grading Scale”. Make each tab a different color.

### 3. Complete the “Details” worksheet (18% or 9 points)

This worksheet contains the scores for all the assigned work (Essays, Exams and Final Exam).

- a. If a score is not assigned, make sure to enter a “0” for the score. (.5 point)
- b. Create a column listing the average essay score for each student. (1.5 points)
- c. Create a column listing the average exam score (include the final exam) for each student. (1.5 points)
- d. Create a column listing the total points earned. (1.5 points)
- e. Create a column listing the percentage score (total points earned/total points possible). Round to the nearest whole number, but make sure to round the result so that the correct percentage will be used when determining the letter grade. Hint: Use the ROUND function. (1.5 points)
- f. Create a column listing the assigned letter grade for the percentage score. Use a formula to determine the letter grade based on the grading scale provided. (See “6. Grading Scale”). (1.5 points.)
- g. Add a filter to each of the columns and sort the data by last name. (1 point)

#### 4. Complete the “Essays” worksheet (32% or 16 points)

This worksheet will contain the grades for just the essay assignments as well as some statistical formulas.

- a. The columns should be organized according to essay order. (.5 point)
- b. The scores for the essays should be paste linked from the “Details” worksheet. (1.5 points)
- c. The rows should be organized by student last name (A-Z). (.5 point)
- d. Calculate Statistical Information for Each Essay (.5 points each for a total of 3.5 points) -  
At the bottom of the column listing each essay, include the following statistical information:
  1. Maximum points possible
  2. Highest score
  3. Lowest score
  4. Average score
  5. Median
  6. Percentage score: To determine the percentage score, use the “Average score” result and divide that by the “Maximum points possible”. Round to the nearest whole number.
  7. Letter grade: Use a formula to determine the letter grade based on the grading scale provided. (See “6. Grading Scale”).
- e. Calculate Statistical Information for Each Student (1 point for each item or a total of 6 points) – To the right of the individual essay scores, **the following columns** of information should be included:
  1. Total points: List each student’s total points earned for the essays.
  2. Percentage score: List each student’s percentage score. Round to the nearest whole number.
  3. Letter grade: Use a formula to determine each student’s letter grade received for the percentage score based on the grading scale provided. (See “6. Grading Scale”).
  4. Revised total points: List the total points earned if the students’ lowest essay score is dropped. Hint: Use the MIN function.
  5. Revised percentage score: Calculate each student’s revised percentage score with the lowest essay score dropped. Round to the nearest whole number.
  6. Revised letter grade: Use a formula to assign each student a revised letter grade now with the lowest essay score dropped based on the grading scale provided. (See “6. Grading Scale”).

- f. Add a chart (4 points) – Create on this same “Essays” worksheet a beneficial chart of your choosing that displays at least two of the statistical information items from letter e above. Make sure to add a title and legend.

**5. Complete the “Pivot” Worksheet (20% or 10 points)**

This worksheet will contain a pivot table and a pivot chart.

- a. Create a pivot table (5 points). Remember that a pivot table is used to highlight data by summarizing it in a variety of ways. Select the data from the “Details” worksheet to display in this pivot table. There are many options for summarizing the data but for this step, please display the list of possible letter grades and the total count of students currently earning that letter grade.
- b. Create a pivot chart (5 points). Insert a pivot chart on the same worksheet to add visual emphasis to the data on the pivot chart. Make sure to add a title and legend.

**6. Complete the “Grading Scale” worksheet (5% or 2.5 points)**

Please enter the grading scale listed below on the “Grading Scale” worksheet. You will use this grading scale when calculating the letter grades.

0%	F
60%	D-
63%	D
67%	D+
70%	C-
73%	C
77%	C+
80%	B-
83%	B
87%	B+
90%	A-
93%	A

**7. Format the Worksheets (15% or 7.5 points)**

Format the worksheets by adding colors, borders, font styles, etc. It is important for to make

the worksheet data easy to read and navigate. Make sure the worksheets have a professional look and avoid using too many varieties of color as it can be distracting.

**8. Add Your Personal Touch (5% or 2.5 points)**

You are invited to go beyond the basic project requirements and add an extra element to the project. In the past, some students have added a macro assigned to button to allow the instructor to sort the data in a different way; other students have added text links to allow easy navigation between the worksheets.

**9. Submit the Finished Project File (1% or .5 point)**