Frequently Asked Questions:

- Where can I find the Excel Word Assignment? Where can I find the tutorials?
  The assignment, rubric, practice, and tutorials can all be found on the following website.
  https://engineering.queensu.ca/Current-Students/First-Year-Studies/excel-word-video-tutorial.html

- Where do I submit the Excel Word Assignment?
  In the Module 1 onQ page

- Who do I contact if I have questions about the Assignment?
  Claire’s contact has ended (as of August 31\textsuperscript{st}, 2020) so she is no longer available to
  answer questions regarding the Excel Word Assignment. If your question is not answered
  in this FAQ, you should re-read the instructions and view the video or written tutorials.

- Do I include horizontal error bars for either question?
  No, you only need to include vertical error bars for Q1 and do not need to include error
  bars for Q2.

- How do I determine the number of significant figures/digits?
  If you are not instructed otherwise, for the purposes of this assignment, report all
  numerical values to 2 decimal places excluding error which should be reported to 1
  significant figure.

- Should I be using the correct number of significant figures/digits in my calculations or
  only for my final answer?
  Values in your report should be recorded with correct significant figures. For your own
  calculations you do not need to round numbers until your final answer, so you have a
  more accurate final answer.

- Do I need to type my equations in the report if they are included in the scatter plots?
  You still need to type them in the report. This should be done using the built-in equation
  editor in Word.

- Where do I number my equations? Which equations need to be numbered?
  You number your equations to the right of them. Your sample calculations should have
  the first use of each equation numbered. You can do this manually.

- Should I have more than one heading for each question?
You should have a heading for each question, but also subheadings for the Introduction, Results and Analysis, and Conclusion. All of your headings should be in the Table of Contents generated by Word.

- How should the title page be formatted?
  It should include a title, your name, student #, course number (APSC 100) and the submission date. You should format it similarly to the example solution for the practice assignment.

- Should both questions be in the same document? Can I hand in my spreadsheet too?
  You only hand in one Word document. Both questions should be in the same document and you cannot hand in your Excel spreadsheets.

- How do I know if a residual plot indicates a good or bad fit?
  If the plot appears random it is a better fit, but if it has a clear pattern it is a poor fit.

- Can I use more tables than the assignment says to?
  You should only include tables that the instructions ask you to.

Q1:

- How should I be finding the uncertainty for Samples A, B, C?
  You should use the same provided equation you used for the uncertainty of the Lake Average.

- Do I need to include the uncertainty for Samples A, B, C to the provided table?
  No, it is only used for error bars in your plot.

- Do we assume the algae removal solutions do not work during week 0? Do I subtract the amount removed throughout the weeks or from the total mass?
  For Step 7, assume the solutions are running for 12 weeks to find how much is removed and subtract that from the total algae mass calculated.

- The question says that each algae cell weighs 0.007 grams, that is quite heavy for a cell. Is this correct?
  Yes, that is the correct value to use in your calculations. In real life a cell would not weigh that much, but the data was created only for use in this assignment.

- What week/sample do I use to find the total mass of the algae?
  You should calculate this using the average concentration in week 12 because the average is assumed to accurately represent the lake.
Q2:

- What date’s data should I use for each location?

- On the x-axis should I use numbers or the dates?
  You should select the dates in the provided data for the x-axis, but if you used the number of days since the first case that is also okay. If you use the number of days you must explain this in your write up and still answer the question regarding why using dates results in the large negative y-intercept.

- Should both scatter plots have a trendline? Are both linear?
  Both scatter plots should include a linear trendline.

- Is the natural logarithm of cases LN(Total Cases)?
  Yes.

- I get an error when performing the regression analysis for New York, but not for Ontario. How can I fix this?
  A common cause of this is selecting the dates with no data for New York. You should only include the dates with the data for number of cases provided.

- My total number of cases for New York using the equation from the first graph (Not the LN one) results in a negative number of cases. Is that wrong?
  This is the result of the equation and you should discuss this in your conclusion. A very incorrect value indicates it is a poor fit for the data.

NOTE: Figure 3 is an example of referencing a date in excel. You do not always multiply by 204. Use the equation from your scatter plot to determine the number of cases.

If your equation was y=2x+3 and the date was in cell A1 you would enter it as =(2*A1)+3 For the ln equation you would need to use the EXP function on the result to get the number of cases.

- What does population percentage refer to in Conclusion (I)?
  The population percentage that tested positive for COVID-19 which you found in To Hand In (VI).

Last updated: August 31, 2020