

Week 14: Ecology project- data analysis and poster preparation

Preparation:

- Bring your laptop and your power cord

By the end of this lab you should be able to:

- Explain the results of your ecology project

Organization:

There is no eLN this week as the results of your analysis will end up in your mini-poster.

Point distribution:

- Participation- 25 points

NOTE: This is a computer-based lab. Only one group member should have the Jupyter Notebook open. Make sure that you are taking an active role in the protocol AND in the discussion around the mini-poster. If your TA notices you are not participating in the work, s/he will deduct participation points.

Context:

This week you will be using the data you and your classmates have been collecting over the past several weeks to address our ecological questions. Your TA will have given you feedback on your questions, statistical methods and visualization plans. This week you will perform the appropriate analysis based on that feedback.

Protocol outline:

1. Analyze class data by generating plots and statistical output relating to your specific questions
2. Interpret the output and synthesize your results into your final poster

Detailed protocol:

1. All members of your group should take an active role in this process. The Jupyter Notebook will open in a Google environment called Colaboratory and those with access should be able to view the Notebook in real-time.
2. Download the "Ecology.csv" file from Blackboard. This file contains the entire dataset from all groups across all sections. Your selected questions involve portions of this data.
3. In your group Google folder, you will find the Jupyter Notebook "Colab version Week 14 notebook 2019.ipynb". As you did in Week 11, double-click on this item and select "Open with Colaboratory" when given the option.
4. This notebook contains detailed instructions on what you need to do for each step. Please take the time to read the instructions given in each cell. There are a few general "rules" to follow when using a Jupyter Notebook
 1. Read the instructions in each cell.
 2. Execute each cell in order!
 3. **Only one person should have the Notebook open!**
5. With the remaining time, work on building your mini-poster. Only one person from the group needs to navigate to the Google Slides Template gallery and find the "Mini-poster backbone" and download it to your group's Google folder.
6. Refer to the Mini-poster guidelines in the Week 13 Blackboard folder for all the details.

Your TA will halt all editing on April 29 at 5:00pm. You will be graded on the poster as it looks at that point! Please submit your peer evaluations on Blackboard! You can find the information on peer evaluation in the Blackboard "Mini-poster project" folder in the Weekly Lab Protocols area.