

## Worksheet 24: Pivot Tables

**Group names:** \_\_\_\_\_

1. Upload the data set `PivotTableDataSets - JillLeahCourses.csv` into Google Sheets. This data set contains all the courses that your Math F113X instructors Jill Faudree and Leah Berman have taught since Spring 2015.
2. Select the cells, and create a Pivot Table.
3. Under **Values**, add `COURSE_SECTION_NUMBER`. What does this pivot table tell you?

4. Under **Columns**, add `COURSE_INSTRUCTOR`. What does this pivot table tell you?

Who taught the most sections over the time in the data set? \_\_\_\_\_ How many sections did she teach? \_\_\_\_\_

5. Under **Rows** add `DISTINCT COURSE_TERM_CODE`. What does this pivot table tell you?
6. Add `COURSE_TITLE` under rows. What does this pivot table tell you? How many sections were taught in Fall 2023, and of what?
7. Delete `COURSE_SECTION_NUMBER` from **Values** and instead add `COURSE_ENROLLMENT`. What does this pivot table tell you?
8. Modify the pivot table by deleting `COURSE_TITLE` from rows, and then answer the following questions:
  - (a) Which semester had the greatest enrollment? \_\_\_\_\_
  - (b) Which semester did Dr Faudree teach the most students? \_\_\_\_\_
  - (c) Which semester did Dr Berman teach the most students? \_\_\_\_\_

9. For the following questions, modify your pivot table (change what is in the rows and columns and values) to answer the following questions:

(a) Which courses have both Dr Berman and Dr Faudree taught? How many sections? (Hint: use `COURSE_SECTION_NUMBER` in **Values**).

(b) Change your pivot table as necessary. What changes did you make?

How many total students<sup>1</sup> did Dr Berman teach? \_\_\_\_\_

How many total students did Dr Faudree teach? \_\_\_\_\_

(c) Pivot tables can do different things with values. Make a pivot table that has `COURSE_INSTRUCTOR` followed by `COURSE_TITLE` in Rows, and `DISTINCT COURSE_TERM_CODE` as **Values**. Notice that you get some big, meaningless numbers. Change the “Summarize By” from `SUM` to `COUNTA`.

What is this pivot table now showing you?

What is the course that Dr Berman has taught in the most semesters? \_\_\_\_\_

What is the course that Dr Faudree has taught in the most semesters? \_\_\_\_\_

(d) Put `DISTINCT COURSE_TERM_CODE` in Rows, `COURSE_INSTRUCTOR` in Columns, and `COURSE_COURSE.CODE` in Values. Uncheck the boxes that say “Show Totals.” Select the Pivot Table, and then go to **Insert > Chart** to make a chart.

What do you see?

10. Play around with putting different things into the rows, columns, and values in the pivot table. What is the most interesting way that you can summarize the data?

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<sup>1</sup>This counts the same student multiple times if they took multiple courses. That’s fine.