

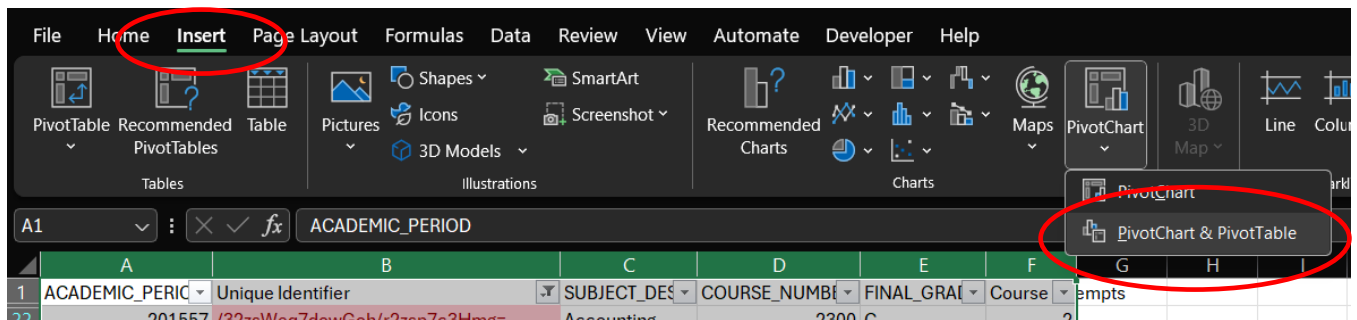
Creating Pivot Charts & PivotTables

Problem Statement:

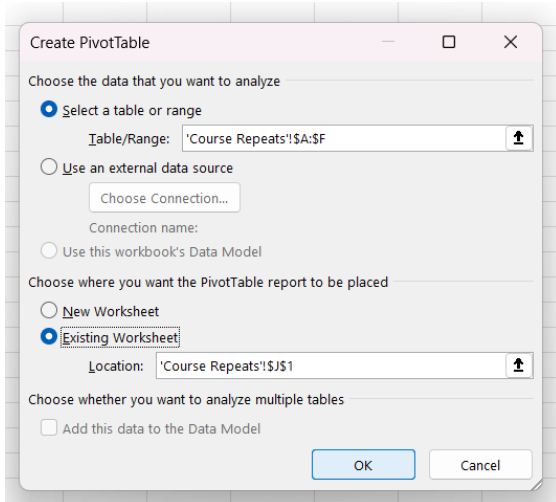
Pivot tables and pivot charts are an excellent way to analyze large, complex datasets. In this example, we will make both a pivot table and pivot chart to analyze the data of students who repeated a class.

Step 1 – Create a Pivot Table and Pivot Chart

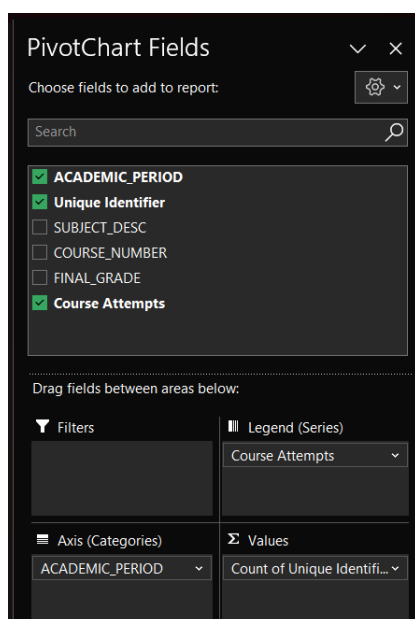
- a. Highlight the data you wish to analyze.
- b. Insert a pivot chart and table by clicking on Insert tab on the ribbon.
 - i. Insert > Charts > Pivot Chart > PivotChart & PivotTable



- ii. Select From Table/Range and place the pivot table in a new worksheet. Select OK.

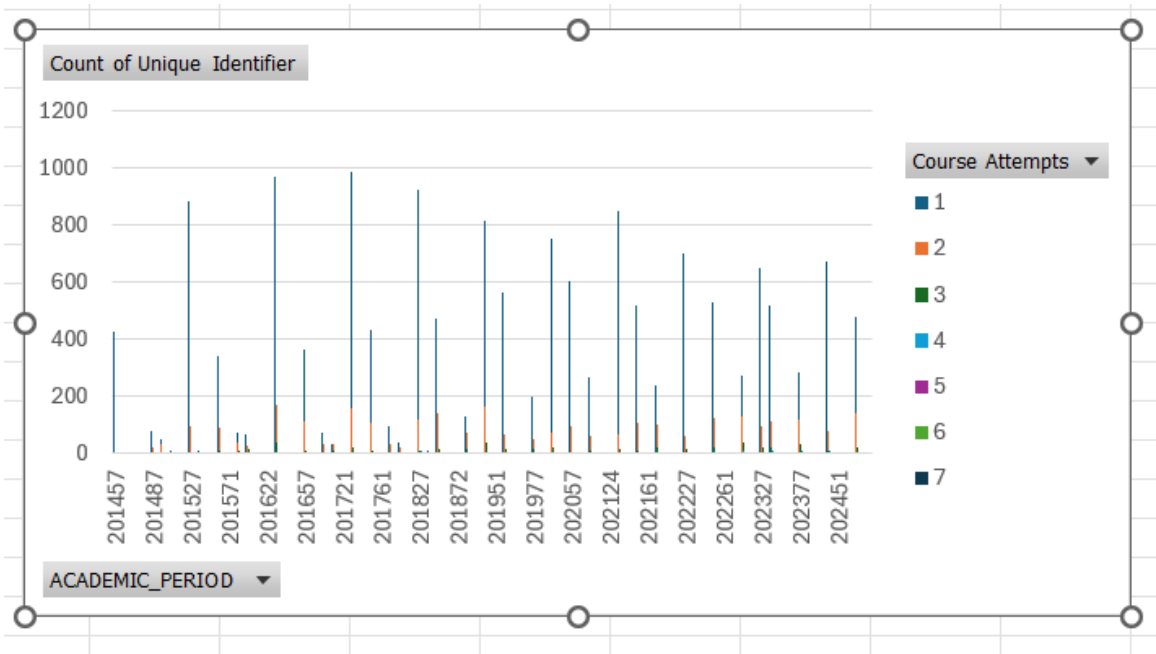


- iii. Select how the data will be displayed in the pivot table. For this example, we are looking at the total number of times students took the course.



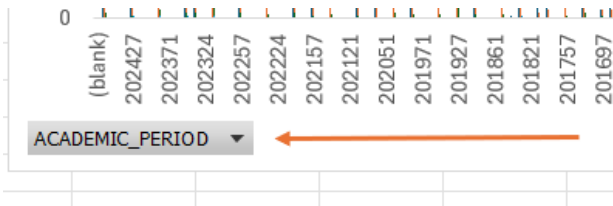
- ii. The data is now displayed in the existing worksheet as a pivot table and pivot chart.

Count of Unique Identifier	Column Labels	1	2	3	4	5	6	7 (blank)	Grand Total
201457		426	6	1					433
201471			1						1
201477		6							6
201481		2							2
201487		76	21						97
201497		49	33	2					84
201521		10	2						12
201522		2							2
201527		882	95	5					982
201551		10							10
201552		3							3
201557		343	87	8	1				439
201571		4							4
201587		73	39	11					123
201597		66	26	15	2				109
201621		4							4
201622		3							3

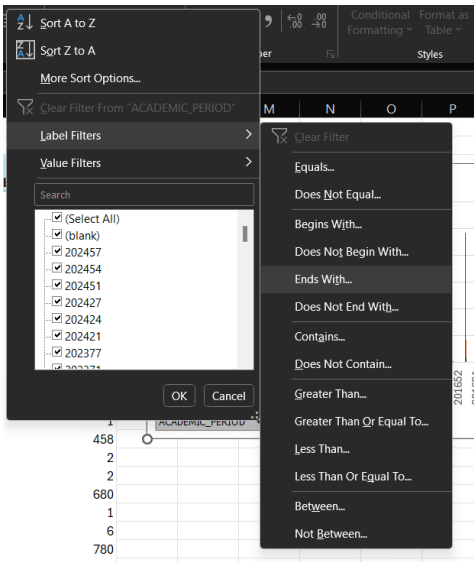


Step 2 – Use Built-in Filters to Analyze Trends

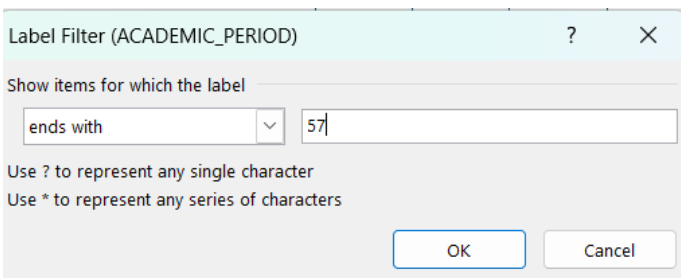
- Analyze the courses that occurred in the Fall over the past 10 years. For this example, we will use the built-in filters in the chart.



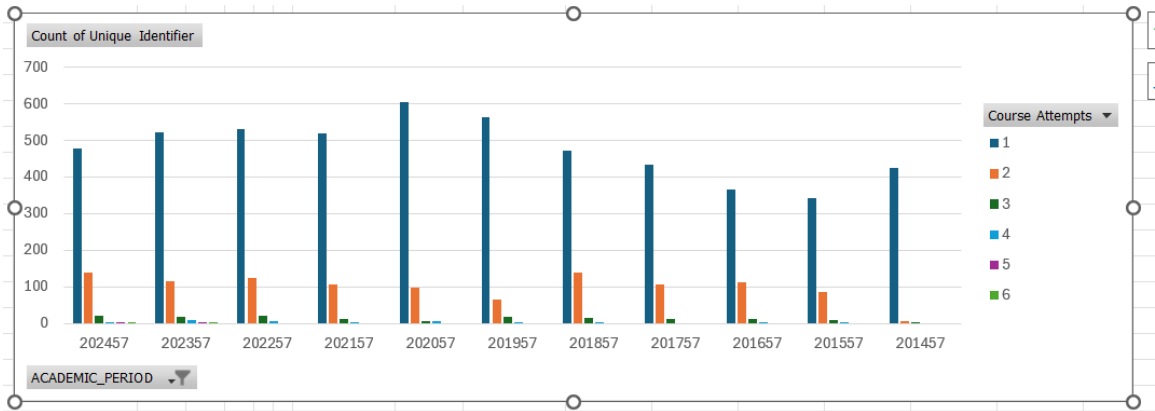
b. Click on the ACADEMIC_PERIOD filter. Select Label Filter > Ends With



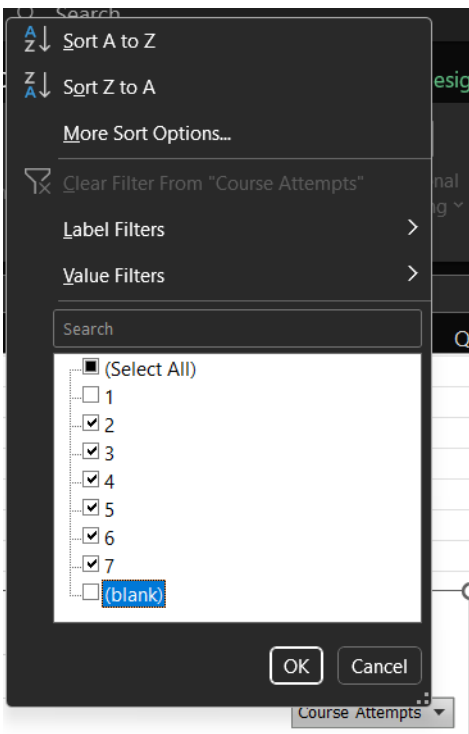
c. All TTU Spring terms end with a "57" so we will enter 57 in the search field.



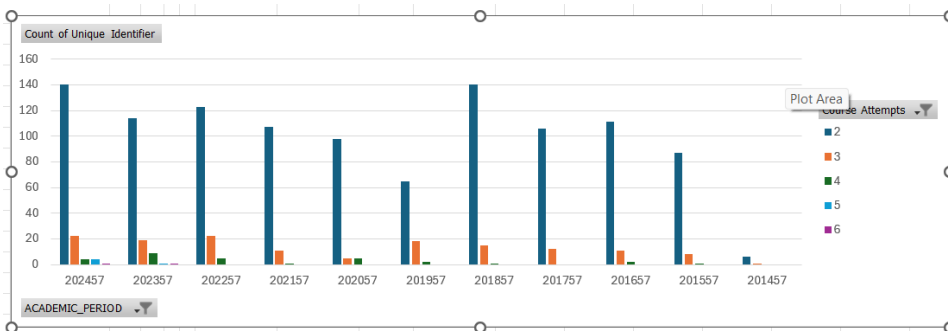
d. Now our chart only shows results for Spring terms over the past 10 years.



e. We can also filter the Course Attempts to show all attempts > 1.



f. Now we see all multiple attempts.



Step 3 – Merge the Course Data with Demographic Data

- Follow the instructions on how to merge two spreadsheets into one.
<https://appserv.itts.ttu.edu/RedRaiderResearchRegistry/helpdocs/Use%20Power%20Query%20To%20Combine%20Spreadsheets.pdf>
- Now we can analyze the data using demographic data by creating additional pivot tables. Here are some examples:

Analysis by Gender

Count of Unique Identifier	Column Labels	1	2	3	4	5	6	7	Grand Total
Row Labels									
F		5466	980	158	31	4	1		6640
M		9833	2024	378	60	13	3	1	12312
N		8							8
Grand Total		15307	3004	536	91	17	4	1	18960

Is an International Student

Count of Unique Identifier	Column Labels	1	2	3	4	5	6	7	Grand Total
Row Labels									
N		15008	2970	533	91	17	4	1	18624
Y		303	34	3					340
(blank)		148	5						153
Grand Total		15459	3009	536	91	17	4	1	19117