## Assigned Seats in Canvas Supplement for New Format Spreadsheets

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I recently made videos showing how to assign seats in Canvas. Part of it involved adding formulas to the room spreadsheets from the Academic Integrity Office (AIO). I made a new spreadsheet format with those formulas built in, plus new columns and filters to let you quickly choose patterns like every other row/seat, left/middle/right sections of the room, etc. There's no new video yet, so watch the existing videos and read this supplement for the changes.

Get a spreadsheet for your classroom number from this site:
https://mathweb.ucsd.edu/~gptesler/assigningseats.html
Get the PDF seating map drawing from the Classroom Details website:
https://blink.ucsd.edu/faculty/instruction/tech-guide/classroom/details.html
Watch these videos:

- Video 1 (Uploading a spreadsheet of text to Canvas).

This video is still good. Download your Canvas roster. Keep the first 4 columns and delete the others. The main change is to add TWO NEW COLUMNS ("Comments" and "Sequence", in that order) instead of just ONE NEW COLUMN ("Comments").

|  | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Student | ID | SIS User ID | SIS Login ID | Comments | Sequence |
| 2 | Points Possible |  |  |  |  |  |
| 3 | Aska, Al | 1234 | A11112222 | al_aska |  |  |
| 4 | Bama, Ala | 56789 | A22223333 | ala_bama |  |  |
| 5 | Rado, Colo | 234567 | A55556666 | colo_rado |  |  |
| 6 | Ware, Dela | 42 | A77778888 | dela_ware |  |  |
| 7 | Zona, Ari | 98765 | A88889999 | ari_zona |  |  |

- Video 2 (Seating Charts).
- The start of the video up to "Center 212: Sample plan..." is still good.
- The last part of the video about "Special seat assignments..." is still good, but l'll probably move it earlier.
- The part in-between, showing how to add formulas to the AIO spreadsheet, is superseded by my new spreadsheets with those formulas \& more built-in.
- Video 3 (Exam logistics) will stay the same.
- Skip Video 4 (How to sort the roster into seat order). The new spreadsheets have a "Sequence" column to let you sort all the seats into physical order.


## Filtering the room spreadsheet (left/right-handed, every other seat, etc.)

## Overview:

- Determine how many seats you need and use the PDF seating chart to pick a suitable pattern (like every other row/seat or more complicated patterns). Use spreadsheet filters in the green columns to achieve those seating patterns.
- Click the arrow at the top of the "Randomize" column + sort "Ascending" to randomize the seat order; or sort by "Sequence" to put this sheet into physical seat order.

|  | Randomize |
| :--- | :--- |
| Sort |  |
| $A$  <br> $Z$  <br> A Ascending  <br> $A$ $\downarrow$ Descending |  |

- CUT/COPY the number of seats needed from the two columns "Comments" and "Sequence" to your roster spreadsheet using PASTE SPECIAL as VALUES (not just regular PASTE). If you're copying 10 seats, this will be 10 rows $\times 2$ columns.
- If you're making multiple passes, then after copying a block of seats to your roster spreadsheet, you should delete those rows in their entirety from the room spreadsheet. The table of counts at the top of the room spreadsheet will still include those seats until you delete their rows entirely.

Sample roster spreadsheet after pasting a block of seats into it. Manually organize the roster into any applicable categories like the ones shown, and make multiple passes for the types of seats needed for each category.


Filters: Use filters on the green columns (Row, Seat, Left-handed, Notes, Every123, Zone) to make seating patterns (in conjunction with looking at a seat map and checking the room in-person beforehand). As you set the filters, look at the Counts table to see the number of Filtered seats (including breakdowns by zone and left-handed). Cut/copy the number of seats needed from the "Comments" + "Sequence" columns to your roster spreadsheet. Then delete the block of rows you used from the room spreadsheet, reset the filters, and make another pass.

- Row ( $A, B, C, \ldots$ ) and Seat ( $\mathbf{1 , 2 , 3}, \ldots$ ): Since seat numbers may be inconsistent in different rows, see Every123 as an alternative way to pick patterns like every other seat.
- Left-handed?: I recommend asking your students in advance to let you know if they want a lefthanded seat, and to only assign LH seats to students who prefer them. Consider removing lefthanded seats from the assignments by filtering this column to "(Blanks)"; or use this filter to do two separate left- and right-handed passes.
- Zone: For rooms with three sections: Zone 1=left, 2=middle, 3=right.

Two sections: 1=left, 2=right. One section: just Zone 1.
(Left/Right are as depicted on the seat drawing; usually stage left/right.)
You can do multiple passes for different patterns in each zone.

- Notes column: Can be used for mislabeled seats, broken seats, ....
- ALWAYS check the room in-person before assigning seats, preferably when it's empty, to see if the issues have been fixed and to see if there are any new issues. If there are broken seats or other new issues, then add them to the Notes column so you can filter them out. We also recommend you contact Facilities to report any issues, so that they can fix them.
- If seats are broken, don't assign them, but if any seat numbers are missing / mislabeled, consider taping corrected seat numbers on the seats.
- To remove seats with any Notes, set the Notes filter to "(Blanks)" and deselect "Broken" or whatever other text you used.
- Every123: Seat numbers in different rows may be staggered or inconsistent, depending on the room. To handle this, separate from the actual seat labels, I numbered the seats in each row segment left-to-right as $0,1,2, \ldots, 11,0,1,2, \ldots, 11$, (only 0 to 11 , and repeats as many times as needed), plus adjustments to roughly align adjacent rows. You can use this to achieve various patterns:

| Pattern | Select these on the Every123 filter |
| :--- | :--- |
| Keep every other seat | $0,2,4,6,8,10$ |
| Keep every third seat | $0,3,6,9$ |
| Keep every fourth seat | $0,4,8$ |
| Skip every third seat | $0,1,3,4,6,7,9,10$ |

I recommend using the above patterns rather than 1,3,5,7,9,11 or similar, because in most cases, starting at 0 as shown will maximize the number of seats (though there may be exceptions).


Example: Video 2, "Center 212: Sample plan, 81\% of capacity"


- Zone 1 (left): Set the "Zone" filter to 1 (and deselect 2 and 3). For "Row", deselect D and G.
- Zone 2 (middle): Reset the filters ("Clear Filter" in EXCEL, or "Select All" in Google Sheets). Then set the "Zone" filter to 2 (and deselect 1 and 3); set "Left-handed?" to "(Blanks)" and deselect "YES"; and for "Row", deselect D and G.
- Zone 3 (right): Reset the filters. Set "Zone" to 3 (deselect 1 and 2). For "Row", deselect D.

Screenshots for Zone 2 filters:


In the counts table at the top, the green section shows counts of all remaining seats in the spreadsheet, while the blue section counts just the seats specified by the filters.

| Counts | \# seats | \# LH seats | \# with notes |
| ---: | :---: | :---: | :---: |
| Z1 | 35 | 7 | 0 |
| Z2 | 76 | 9 | 0 |
| Z3 | 35 | 0 | 0 |
| All seats | 146 | 16 | 0 |
| $Z 1$ | 0 | 0 | 0 |
| $Z 2$ | 50 | 0 | 0 |
| Z3 | 0 | 0 | 0 |
| Filtered | 50 | 0 | 0 |

## Options in the top of the sheet (typically H5-H6):

- Click in the colored cells for "Seat format" and "Sequence type". On clicking, an arrow will appear. Click on the arrow for a dropdown menu and select an option.

|  | Click these cells \& select options from dropdown menus |  |
| ---: | :---: | :--- |
| Seat format: | Seat: A-123 |  |
| Sequence type: | By zone | (for sorting into physical seat order) |
|  |  |  |

- "Seat format":
- "A-123" (not recommended due to how it shows in Canvas)
- "Seat: A-123" (default; one room exam in the regular classroom)
- "[ROOM \#], Seat A-123" (multiroom exam or not the regular classroom)

- "Sequence type": Numbers all seats in the room in a single sequence $1,2,3, \ldots$, so you can sort them into physical order.
- "By row" (all of row A left to right, then all of row $B, \ldots$ )
- "By zone" (left section rows $A, B, C, .$. then middle $A, B, C, \ldots \&$ right $A, B, C, \ldots$ ). It's usually easier to hand out exams and check IDs by zone, so it's the default.
- On room spreadsheet: Use the built-in filters to sort by the "Randomize" column to randomize the order, or by "Sequence" to put it back in physical seat order.
- On your roster spreadsheet: Use Data > Sort to sort by "Student" for alphabetical order or by "Sequence" for physical seat order. I bring printouts of BOTH to the exam (with copies for each proctor). For the printouts, keep the Student, SIS User ID (PID), and Comments columns, and hide the others.


## Saving roster file to CSV

In the original $4^{\text {th }}$ video (How to sort the roster into seat order), at the step where you export the roster file to CSV format, I said to delete the Sequence column; save as CSV; and use UNDO to get the Sequence column back. It turns out that it is not necessary to delete the column; you can save the roster file to CSV and upload it to Canvas with the Sequence column included. The process of uploading the seat assignments to Canvas requires the first four columns and a column specifically called Comments, but it silently ignores extra rows and columns without giving any warnings or errors. This includes:

- It ignores extra columns, like Sequence.
- It ignores all rows where the ID columns are blank; we used this for blank rows and yellow header rows ("Left-handed", etc.).
- It ignores students who already dropped the class, even though they are still in the Canvas gradebook (though possibly hidden).

