Guide for Creating Accessible Tables

Use Word’s built-in functionality to create Tables

- Create tables by inserting them. **Avoid creating tables by drawing boxes** and lines or by using tabs and spaces. Screen readers have difficulty understanding tables with odd cell sizes.
- Simple Data Tables only.
- Tables have a logical reading order from left to right, top to bottom.
- Tables are labeled with alternative text.
- Provide Title (i.e. Caption) and Summary before the Table.
- Use Table Tools editor to identify the different types of rows and columns such as **Header Row and First Column**.

Keep your table simple

- Simple tables are easier to interpret for all students and screen readers.
- **Avoid** merging cells, split cells, no blank cells, as well as tables nested within a cell.
- Use tables to organize data not format information. Never use table for layout.
- The complex a table (merging cells, nesting multiple headings under one, adding blank lines, etc.) the worse it will be for accessibility.
- Sample of **Simple Tables vs. Complex Tables** by Penn State.

Step 1: Create a Table

A. Go to **Insert** and go to the “table” dropdown.

B. Select **insert a table**
Step 2: Select Table Header Row

A table header row contains column headings that provide context and aid navigation of the table. People who can’t see the table can have column headings read aloud.

Example of Header Row

<table>
<thead>
<tr>
<th>Design Tab &gt; Header Row</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade</strong></td>
</tr>
<tr>
<td>A plus</td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>A minus</td>
</tr>
</tbody>
</table>

Example of Header Row and First Column

<table>
<thead>
<tr>
<th>Design Tab &gt; Header Row and First Column</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
</tr>
<tr>
<td>Student 1</td>
</tr>
<tr>
<td>Student 2</td>
</tr>
<tr>
<td>Student 3</td>
</tr>
</tbody>
</table>
Step 3: Table Headers Properties

Proper table headers help readers understand how tables are organized into columns and rows. Avoid solely using text and cell formatting, such as making the text big or bold to mimic the visual appearance of a table header, as this provides no underlying information about the structure of the table.

Table Properties Options: Row and Alt Text tabs

- Deselect “Allow row to break across pages”
- Select “Repeat as header row at the top of each page”
- **Note:** If empty cells intentionally left blank to fill in answers, mention in Alt Text, Description box. See next page.

Example of empty cells intentionally left blank to fill in the answers, mention in Alt Text, Description box.

<table>
<thead>
<tr>
<th>Social Work Rubrics</th>
<th>1 = very weak</th>
<th>2 = weak</th>
<th>3 = average</th>
<th>4 = strong</th>
<th>5 = very strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student critiqued the relevance of the research question to social work practice.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Student critically appraised the Introduction of the study.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is “Allow row to break across pages”? 

When inserting a table at the bottom of a page in Word, the table break across two pages show two repeating header rows. Users with visual or cognitive challenges or screen readers, breaking table content across two pages causes readability and comprehensive barriers.
How to keep table rows on the same page?

1. Select the table which breaks across two pages then select **Layout** tab (under **Table Tools**) then **Properties**.

![Layout tab](image1)

3. In **Table Properties**, select **Row** tab then
   a. uncheck **Allow row to break across pages** and
   b. check **Repeat as header row at the top of each page**, select then **OK** button.

![Table Properties](image2)

3. Select the table rows, **Home** tab, select two arrows icon **Line Spacing Options**.

![Line Spacing Options](image3)

4. In the **Paragraph** settings, select **Line and Page Breaks** tab, check **Keep with next** option, then **OK** button. Now table rows are on the same page.

![Paragraph settings](image4)
Step 4: Table – Insert Caption

Adding a caption or summary of your table is universal and accessible for everyone.

- Select the table, then right-click to select Insert Caption or
- Go to References tab, then select Insert Caption
- In the popup window, type the title of the table in the Caption textbox
- In the Label textbox, select Table
- Position textbox, select Above selected item then select OK

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A plus</td>
<td>960 to 1000</td>
<td>96 to 100%</td>
</tr>
<tr>
<td>A</td>
<td>930 to 959</td>
<td>93 to 95%</td>
</tr>
<tr>
<td>A minus</td>
<td>900 to 929</td>
<td>90 to 92%</td>
</tr>
<tr>
<td>B plus</td>
<td>860 to 899</td>
<td>86 to 89%</td>
</tr>
<tr>
<td>B</td>
<td>830 to 829</td>
<td>83 to 85%</td>
</tr>
<tr>
<td>B minus</td>
<td>800 to 829</td>
<td>80 to 82%</td>
</tr>
<tr>
<td>C plus</td>
<td>760 to 799</td>
<td>76 to 79%</td>
</tr>
<tr>
<td>C</td>
<td>730 to 759</td>
<td>73 to 75%</td>
</tr>
<tr>
<td>C minus</td>
<td>700 to 729</td>
<td>70 to 72%</td>
</tr>
<tr>
<td>D plus</td>
<td>660 to 699</td>
<td>66 to 69%</td>
</tr>
<tr>
<td>D</td>
<td>630 to 659</td>
<td>63 to 65%</td>
</tr>
<tr>
<td>D minus</td>
<td>600 to 629</td>
<td>60 to 62%</td>
</tr>
<tr>
<td>F</td>
<td>599 points or lower</td>
<td>59% or lower</td>
</tr>
</tbody>
</table>
How do screen readers read tables?

Tables have a logical reading order starting from left to right, top to bottom. With Header Rows is enabled in Table Properties, screen readers will announce when the tables are present.

**Example 1: Grading scale with table format**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A plus</td>
<td>960 to 1000</td>
<td>96 to 100%</td>
</tr>
<tr>
<td>A</td>
<td>930 to 959</td>
<td>93 to 95%</td>
</tr>
<tr>
<td>A minus</td>
<td>900 to 929</td>
<td>90 to 92%</td>
</tr>
<tr>
<td>B plus</td>
<td>860 to 899</td>
<td>86 to 89%</td>
</tr>
<tr>
<td>B</td>
<td>830 to 859</td>
<td>83 to 85%</td>
</tr>
<tr>
<td>B minus</td>
<td>800 to 829</td>
<td>80 to 82%</td>
</tr>
</tbody>
</table>

Different screen readers may read texts differently. The “+/−“ may not be read out loud. Screen readers will read + symbol for plus but not - symbol. Screen readers do not know whether - symbol is minus, hyphen, dash, en dash or em dash. It is always a good practice to spell them out and spell out any abbreviations or make a reference to your abbreviation when used for the first time. Visit Screen Readers: A Guide to Punctuation and Typographic Symbols.

Screen readers announce a table with a number of rows and columns. Screen readers repeat header rows associate with data cells.

different screen readers may read texts differently. the “+/-“ may not be read out loud. screen readers will read + symbol for plus but not - symbol. screen readers do not know whether - symbol is minus, hyphen, dash, en dash or em dash. it is always a good practice to spell them out and spell out any abbreviations or make a reference to your abbreviation when used for the first time. visit screen readers: a guide to punctuation and typographic symbols.

screen readers announce a table with a number of rows and columns. screen readers repeat header rows associate with data cells.

```plaintext
table with 7 rows and 3 columns
row 1 Grade column 1
Grade
Points column 2
Points
Percentage column 3
Percentage
row 2 Grade column 1
A plus
Points column 2
960 to 1000
Percentage column 3
96 to 100%
row 3 Grade column 1
A
Points column 2
930 to 959
Percentage column 3
93 to 95%
row 4 Grade column 1
A minus
Points column 2
900 to 929
Percentage column 3
90 to 92%
row 5 Grade column 1
B plus
Points column 2
860 to 899
Percentage column 3
86 to 89%
row 6 Grade column 1
B
Points column 2
830 to 859
Percentage column 3
83 to 85%
row 7 Grade column 1
B minus
Points column 2
800 to 829
Percentage column 3
80 to 82%
out of table
```
Example 2: Grading scale without table format

A+ = 100  B+ = 89  C+ = 79
A = 95  B = 85  C = 75
A- = 90  B- = 80  C- = 70

Screen readers read line by line like this:
A+ = 100, B+ = 89, C+ = 79
A = 95, B = 85, C = 75
A = 90, B = 80, C = 70 (Screen readers do not know whether - symbol is minus, hyphen, dash, en dash or em dash so it will not read it.)

Recommend this format

A plus = 100  A = 95  A minus = 90
B plus 89  B = 85  B minus = 80
C plus 79  C = 75  C minus = 70

Now screen readers read line by line in an appropriate format that makes sense to sighted and non-sighted students.

A plus = 100, A = 95, A minus = 90
B plus = 89, B = 85, B minus = 80
C plus = 79, C = 75, C minus = 70

Table Color

Avoid using color as the only means to convey information. For example, in the table below, the complete and incomplete items may appear the same to someone who is color blind:

<table>
<thead>
<tr>
<th>Project</th>
<th>Due Date</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1</td>
<td>March 15, 2020</td>
<td>X</td>
</tr>
<tr>
<td>Project 2</td>
<td>April 15, 2020</td>
<td>X</td>
</tr>
<tr>
<td>Project 3</td>
<td>May 15, 2020</td>
<td>X</td>
</tr>
</tbody>
</table>

A better option would be to provide another way of conveying information not just color alone:

<table>
<thead>
<tr>
<th>Project</th>
<th>Due Date</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1</td>
<td>March 15, 2020</td>
<td>N or No</td>
</tr>
<tr>
<td>Project 2</td>
<td>April 15, 2020</td>
<td>Y or Yes</td>
</tr>
<tr>
<td>Project 3</td>
<td>May 15, 2020</td>
<td>Y or Yes</td>
</tr>
</tbody>
</table>