

# Excel Basics

*A Practical Introduction for Winthrop University Staff*

# What We'll Cover Today

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## Excel Orientation

Ribbon, rows, columns, navigation

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## Entering & Editing Data

Typing, editing, fill series, undo

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## Basic Formulas

SUM, AVERAGE, COUNT

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## IFS Functions

SUMIFS, COUNTIFS, AVERAGEIFS

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## Formatting Cells

Borders, number formats, merge

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## Conditional Formatting

Highlight rules, color scales

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## Sorting & Filtering

Organize and filter your data

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## Simple Charts

Visualize data quickly

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## Saving and Printing

Key habits to save time

# Excel Orientation

## Workbook

The entire file (.xlsx). Can contain multiple sheets.

## Worksheet

A single tab within the workbook — your grid.

## Cell

One box in the grid, named by column + row (e.g. B3).

## Ribbon

The toolbar at the top with all commands organized by tab.

## Formula Bar

Shows the content of the selected cell

## Quick Tips

- › Ctrl + Home → go to cell A1
- › Ctrl + End → jump to last used cell
- › Ctrl + Arrow Key → jump to edge of data
- › Click a tab at the bottom to switch sheets
- › Right-click a tab to rename or add a sheet

# Entering & Editing Data

1

## Click a cell and start typing

Press Enter to confirm and move down, or Tab to move right.

2

## Fill a series automatically

Type two values (Mon, Tue), select them, drag the fill handle (bottom-right corner) down.

3

## Undo & Redo

Ctrl+Z to undo. Ctrl+Y to redo. Works for most actions.

4

## Delete vs. Backspace

Delete clears cell contents. Backspace also clears but keeps you in the cell.

# Basic Formulas

The Golden Rule: Every formula starts with =

<b>=SUM(B2:B10)</b>	Adds up all values from B2 through B10	Use case: Total a column of numbers
<b>=AVERAGE(B2:B10)</b>	Calculates the mean of values in the range	Use case: Find an average score or amount
<b>=COUNT(B2:B10)</b>	Counts cells that contain numbers	Use case: How many entries are in a list
<b>=MAX(B2:B10)</b>	Returns the largest value in the range	Use case: Highest salary, top score, etc.
<b>=MIN(B2:B10)</b>	Returns the smallest value in the range	Use case: Lowest value in a data set

# IFS Functions: Formulas with Conditions

*Regular SUM adds everything. IFS functions only add (or count, or average) rows that match criteria you set.*

## =SUMIFS

Sum salary only where column C says "Athletics"

Example:

```
=SUMIFS(G2:G100, B2:B100, "Athletics")
```

## =COUNTIFS

Count how many employees in column E are Full-Time

Example:

```
=COUNTIFS(D2:D100, "Full-Time")
```

## =AVERAGEIFS

Average column E only for Part Time

Example:

```
=AVERAGEIFS(E2:E100, B2:B100, "Part-Time")
```

# Formatting Cells

## Number Formats

- ▶ Currency: \$1,234.56 — Format > Number > Currency
- ▶ Percentage: 45% — Format > Number > Percentage
- ▶ Date: MM/DD/YYYY — Format > Number > Date
- ▶ Comma style: 1,234 — click the comma icon in the ribbon

## Cell Appearance

- ▶ Bold (Ctrl+B), Italic (Ctrl+I), Underline (Ctrl+U)
- ▶ Fill color — paint bucket icon in Home tab
- ▶ Borders — border dropdown in Home tab
- ▶ Merge & Center — combines cells, centers text inside

## Column & Row Size

- ▶ Drag the line between column headers to resize
- ▶ Double-click the line to auto-fit column width
- ▶ Right-click a row number → Row Height to set exact size
- ▶ Select multiple columns, then auto-fit all at once

# Conditional Formatting

Home tab → Conditional Formatting → choose a rule type

## Highlight Cell Rules

*Color cells that meet a condition.*

- Greater Than / Less Than a value
- Between two numbers
- Duplicate Values

## Color Scales

*Apply a gradient — great for heat maps.*

- Green → Yellow → Red gradient
- Shows relative high/low at a glance
- Works well on scores or survey results

## Top / Bottom Rules

*Automatically flag best or worst performers.*

- Top 10 items or Top 10%
- Bottom 10 items or Bottom 10%
- Above / Below Average

## Data Bars

*Mini bar chart inside each cell by value.*

- Longer bar = higher value
- Instant visual comparison in a column
- No separate chart required!

# Sorting & Filtering

## Sorting

### Quick Sort

Click any cell in your column → Data tab → A→Z or Z→A

### Multi-Column Sort

Data → Sort → Add Level to sort by multiple columns (e.g. Dept, then Last Name)

### Watch out!

Always select your entire table (or let Excel detect it) — partial sorts can scramble your data

### Undo a Sort

Ctrl+Z immediately — or keep a helper column with row numbers before sorting

## Filtering

### Turn On Filters

Click any cell in your data → Data tab → Filter (or Ctrl+Shift+L)

### Use the Dropdown

Click the ▼ arrow on any column header. Check/uncheck values to show only what you want.

### Text & Number Filters

Use 'Text Filters' or 'Number Filters' for Contains, Greater Than, Between, etc.

### Clear a Filter

Click the ▼ arrow → Clear Filter. Or Data → Clear to remove all filters at once.

# Making a Simple Chart

**1** **Select your data**  
Click and drag to highlight your table. include headers and all values you want charted.

**2** **Insert → Charts**  
Go to the Insert tab. Choose Recommended Charts or pick a type directly (Bar, Pie, Line, etc.)

**3** **Choose the right type**  
Bar/Column for comparisons. Line for trends over time. Pie for parts of a whole (keep slices  $\leq 6$ ).

**4** **Customize it**  
Click the chart title to rename it. Use Chart Design tab to change colors and style.

**5** **Move & resize**  
Drag the chart to reposition. Drag corner handles to resize. It can sit on the same sheet as your data.

# Saving, Printing & Shortcuts

## Saving

### Ctrl + S

Save (overwrites current file)

### Ctrl + Shift + S

Save As — rename or change location

### .xlsx

Modern format — always use this

### .xls

Old format — avoid unless required

### AutoSave

Turn on (top-left) if using OneDrive/SharePoint

## Printing

### Ctrl + P

Opens Print preview — always check first

### Page Layout tab

Set orientation (Portrait/Landscape)

### Scale to Fit

Shrink data to fit on one page wide

### Print Area

Highlight cells → Page Layout → Print Area

### Headers/Footers

Insert tab → Header & Footer for page numbers

## Must-Know Keys

### Ctrl + C / V

Copy / Paste

### Ctrl + Z / Y

Undo / Redo

### Ctrl + F

Find (search your sheet)

### Ctrl + Home

Jump to cell A1

### F2

Edit the selected cell

# Questions?

*Thank you for attending!*

- ✓ Excel Orientation
- ✓ Entering & Editing
- ✓ Basic Formulas
- ✓ SUMIFS / COUNTIFS / AVERAGEIFS
- ✓ Formatting Cells
- ✓ Conditional Formatting
- ✓ Sorting & Filtering
- ✓ Simple Charts
- ✓ Saving, Printing & Shortcuts