### Introduction to Excel



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#### What is Excel?

Excel is a program that is used to create and edit spreadsheets. In Excel, data is organized into rows and columns; this data can be presented and analyzed using Excel's functions, such as pivot tables, charts, formulas, and more.





#### Why Excel?

Excel is an *excel*lent way to store, organize, and analyze data and metadata (data about data). Although it is particularly useful for budgeting, invoicing, and finance because many of its functions revolve around numerical data, Excel is used quite often to across the disciplines.

In a humanities and social science centered perspective, you might use Excel to pursue research interests, particularly for files that are provided as spreadsheets (census, bibliographies, and more).



#### My Case Study: Learning Excel in Grad School

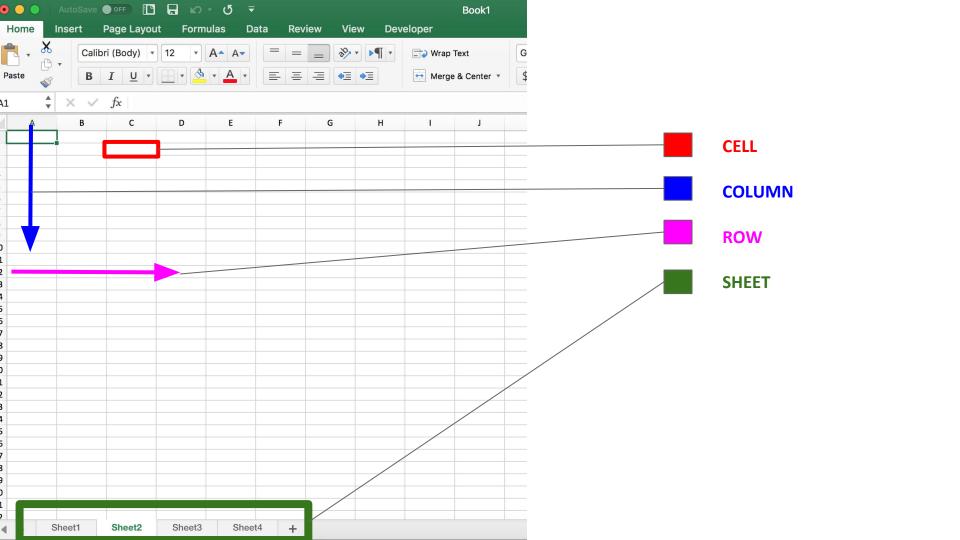
Excel and Google Sheets have become primary programs that I use *daily* in my graduate life (English PhD student). Here are just some of the ways that they have helped organize my administrative work and my research:

- Budgeting for planning events and for my personal life
- Collaborative task-tracking (Google Sheets is especially helpful for this)
- Outlining content to be written for a website
- Analyzing and data stored in .csv (comma separated value) files
- Collecting and analyzing survey information
- Learning programing languages like R and Python

- Workbook: The overall Excel file that you are creating
- Sheet: Excel workbooks can consist of multiple sheets (add at the bottom of the program) that you can rename
- Row: numerical (horizontal)
- Column: alphabetical (vertical)
- Cell: each box is called a cell and has an ID based on its row and column placement (A1, A2, A3, etc).



#### **Excel vocabulary**





#### **Your Interview Planner**

Learning goals of this project:

- A) help you become familiar with Excel and some of its functions
- B) organize your Coop applications and interviews information
- C) connect skills you have acquired to specific jobs for which you are applying



#### **Interview Planner Organization: Two Sheets**

#### **Job Information**

- Job Title
- Contact Information
- Application Deadline
- Application Website
- Did I submit my application?
- Useful skills for job
- Excitement range (1-5) to practice with numerical information/functions
- Qualification range (1-5) to practice with numerical information/functions

#### **Skills**

- Skill
- Where Acquired
- Illustration/Anecdote
- How it may apply
- Applicable job



#### **Excel Functions**

In this template, I used several different functions to show some of the potentials of Excel. You do not need to use these all exactly for your final project, but I highly recommend playing around with them. Functions:

- Conditional Formatting: Providing conditions to how information is presented
- Data Validation: Choosing which data is allowed and is not allowed to be in particular cells/rows/columns
- Pivot Tables: Analyze and calculate data
- Chart creation: Visualize data

## Live Demonstration

Open up the Excel file "excel-interview-planner-template.xlsx"





#### Wrap-up and Contact Information

The rest of the slides will provide links to Microsoft Office's videos about what particular functions are and how to use them. This way, you can do your own research, figure out what functions might work for you in this project, and decide how you want to organize your Coop interview information and skill set information.

Feel free to email me with questions or visit my office hours.

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# Conditional Formatting

https://support.office.com/en-us/article/Use-formulas-with-condit

ional-formatting-FED60DFA-1D3F-4E13-9ECB-F1951FF89D7F

## Data Validation

https://support.office.com/en-us/article/Apply-data-validation-to-

cells-29FECBCC-D1B9-42C1-9D76-EFF3CE5F7249

## Pivot Tables

https://support.office.com/en-us/article/Create-a-PivotTable-to-an

alyze-worksheet-data-A9A84538-BFE9-40A9-A8E9-F99134456576

## Creating Charts

https://support.office.com/en-us/article/video-create-a-chart-4d9

<u>5c6a5-42d2-4cfc-aede-0ebf01d409a8</u>