



EXCEL BASICS

Introduce Yourselves:

- Name
- Pronouns
- Excel familiarity/Interests

Objectives:

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Identify and use different cursors	4
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Check out the **Community Workshop Series Workshop** website to learn more about the program and find out about upcoming classes!

<http://cws.web.unc.edu/>

This lesson is adapted from the Denver Public library:

<https://www.denverlibrary.org/ctc/microsoft-excel-basics>

Last Updated:

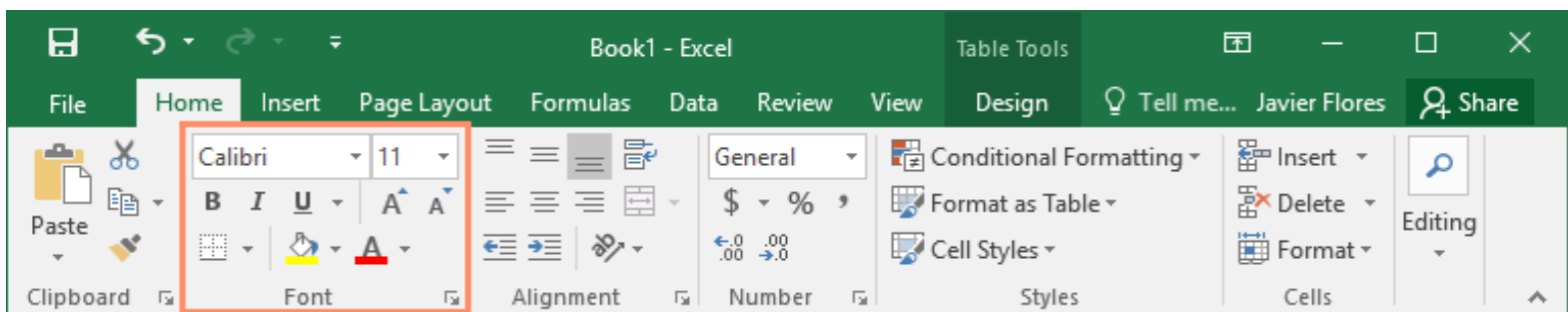
July 2019



NAVIGATING EXCEL

What is Excel?

Excel is a powerful spreadsheet software that allows users to: Organize data, perform complex mathematical equations, create charts for data and more.



Ribbon Menu System

The ribbon menu system allows users to navigate the features in Excel. This menu system consists of what we call tabs. For example, there is the "file" tab, the "home" tab, and the "formulas" tab. Each tab contains different features that can be used to format documents. Below is a description of the most used tabs.

File

When we click on this tab, we are able to perform functions such as create a new spreadsheet, open existing files, save files in a variety of ways, and print.

Home

The Home tab is the tab that has the most commonly used features in Excel. In this tab, we can change the font, size, color, alignment, organization and style of the text. We can also select a number style.

Insert

This feature allows you to include tables, images, graphs and other non-textual items into your spreadsheet.

Review

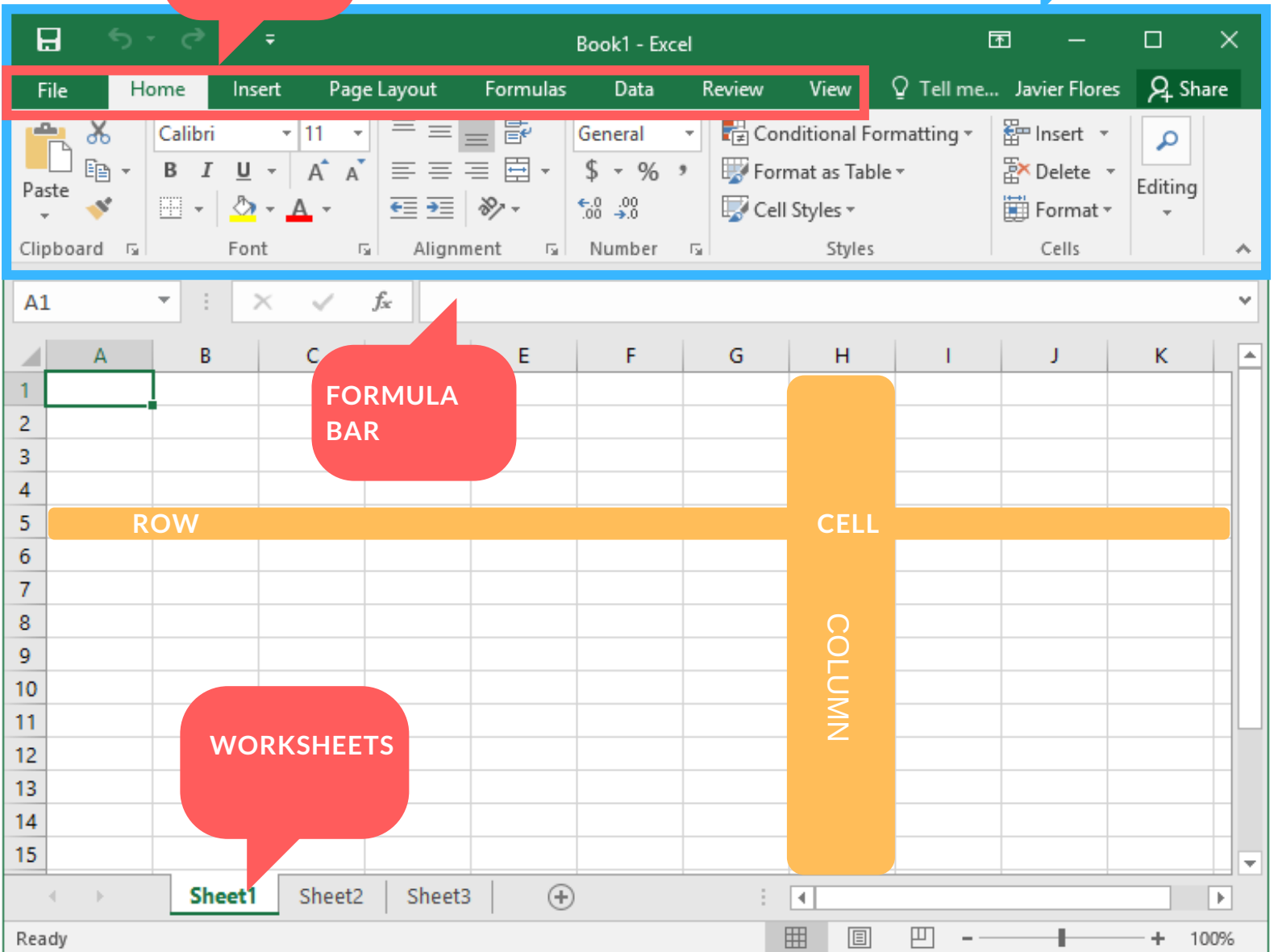
This tool contains features that will help you edit the document, such as spell check. Be careful—sometimes the spell check feature cannot tell the difference between write and right.



NAVIGATING EXCEL CONT.

TABS

RIBBON MENU SYSTEM





CURSORS IN EXCEL



Selection
Cursor



AutoFill
Cursor



Move Cells



Resize Rows
or Columns

The selection cursor highlights and selects information

This cursor automatically fills in information that you have selected

The four arrowed cursor can move cells in any direction.

The two arrowed cursor can move rows and columns left or right



CREATE A BUDGET IN EXCEL

Purpose: The purpose of this activity is to help you practice the basics of using excel to organize information. You will practice how to enter text, enter numbers, format cells, and use formulas.

Task: Imagine that your monthly salary is \$2000.00. Your job is to create a monthly budget in excel that allows you meet all your expenses and pay for your basic needs. (Note: For the sake of this exercise we are all going to use the same numbers and categories. At the end of the class, you are welcome to email this budget to yourself and modify it to meet your personal needs)

1. Data Entry

To create a budget we need spending categories. We are going to practice entering data into cells by setting up the spending categories below. Begin by typing this information into the listed cells.

PERSONAL BUDGET-A1

- Income - A4
- Wages - A5
- Interest - A6
- Misc - A7
- Income Total - A8

LIVING - A18

- Groceries - A19
- Child Care - A20
- Eating Out - A21
- Living Total - A22

EXPENSES - A10

- Home - A11
- Mortgage/Rent - A12
- Utilities - A13
- Phone - A14
- Home Repairs - A15
- Home Total - A16

TRANSPORTATION - A24

- Gas - A25
- Insurance - A26
- Parking - A27
- Public Transportation - A28
- Transportation Total - A29

EXPENSES TOTAL - A31
OVER/SHORT-A32



CREATE A BUDGET IN EXCEL

	A	B	C	D	E	F	G
1	PERSONAL BUDGET						
2							
3							
4	INCOME						
5	Wages						
6	Interest						
7	Misc						
8	Income Total						
9							
10							
11	HOME						
12	Rent						
13	Utilities						
14	Phone						
15	Home Repairs						
16	Home Total						
17							
18							
19							
20							

Example of text entry. Note: When a cell is outlined in black that means this is the cell you are typing in.

2. Make column A wide enough to accommodate text.

You'll notice in our spreadsheet, the text from personal budget looks like it is in column B. We can adjust the column size, so that all the text fits in column A. Put your cursor on the line separating columns A and B in the column headings. Double click on the line separating columns A and B. This should make the column wider.



AUTOFILL

1 Type Jan.

2 Find the small black dot in the bottom right

3 Using the auto fill cursor, drag the black dot to the right

	B	E	F	G	H	I	J
1							
2							
3	Jan						
4	INCOME						
5	Wages						
6	Interest						
7	Misc						
8	Income total						
9							
10	EXPENSES						
11	HOME						
12	Rent						
13	Utilities						
14	Phone						
15	Home Repair						
16	Home Total						
17							
18	LIVING						
19							
20							
21							
22							

3. Use Autofill to Create Months

Type "Jan" in cell B3. Confirm value by hitting Enter. Go back to cell B3. Click and drag the auto fill handle in the lower right corner of the selected cell until you see the prompt for December.

Auto Fill

Excel saves established patterns as part of its programming. For example, If we type in January. Excel knows the next month is February. We do not need to type in all twelve months because Excel can enter this data for us. We call this feature auto fill because Excel automatically fills in the rest of the information we need.



AutoFill
Cursor

***To use the autofill feature, you must see the autofill cursor.



CREATING FORMULAS

The screenshot shows an Excel spreadsheet titled 'Book1' with a formula bar containing `=B4+B5+B6+B7`. The spreadsheet has columns A through G and rows 1 through 9. Row 1 is labeled 'PERSONAL BUDGET'. Row 3 has months: Jan, Apr, May, Jun, Jul. Row 4 has values: 2000, 2000, 2000, 2000. Row 5 has values: 0, 0, 0, 0. Row 6 has values: 0, 0, 0, 0. Row 7 has values: 0, 0, 0, 0. Row 8 has the formula `=B4+B5+B6+B7`. Three callouts are present: 1. A box pointing to cell B8 containing the text 'Click in the box where the total should appear. Type ='. 2. A box pointing to cell B4 containing the text 'Click in the cell with the first value you want to add. Hit the + key'. 3. A box pointing to cell B5 containing the text 'Click in the cell with the second value you want to add. Hit the + key'.

4. Entering our Salary and Using Basic Math in Excel

Type 2000 into cell B5. AutoFill the 2000 across to December (row M). Type 0 in cell B6. AutoFill the 0 across to M6. Type 0 into cell B7. AutoFill the 0 across to M7. Now our goal is to add our wages, interest, misc, to get our total income. Follow the directions above or follow along in class.

When we enter in formulas in Excel, we always begin with =. This = appears in our box where we want our total to appear. In our example, our formula is `=B4+B5+B6+B7`.



FORMATTING NUMBERS

1 Select the cells that we would like to show as currency.

2 Click on the **Number Formatting** drop down menu on the **Home Tab** in the **Number Grouping**.

3 Select **Currency** from the list.

	B	C	D	E	F	G	H	I	J	K	L
1											
2											
3		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
4											De
5		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
6	Interest	0	0	0	0	0	0	0	0	0	0
7	Misc	0	0	0	0	0	0	0	0	0	0
8	INCOME TOTAL	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
9											

5. Change Numbers to Signify Currency:

Even though we are looking at a budget, it isn't obvious we are talking about money. We want to change the number formatting to currency. Follow these instructions:

- Select the cells that we would like to show as currency.
- Click on the **Number Formatting** drop down menu on the **Home Tab** in the **Number Grouping**.
- Select **Currency** from the list.



AUTO SUM

3 Click the autosum button.

2 Verify that the black box surround the cells you want to add. Press Enter.

1 Click in the cell where you want the total

	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
EXPENSES									
HOME									
Rent	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00
Utilities	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
Phone	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00
Home Repairs	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
Home total									
LIVING EXPENSE									
	\$0.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00
	\$0.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

6. Use Auto Sum:

The math we've looked at already is great if you only have a few numbers, but what if you were asked to add up a range of 500 numbers? This is where auto sum is helpful. With auto sum we can add up hundreds of numbers at once. Here's an example of how to use auto sum in this budget to find your total expenses for each category in your budget

- Fill in the values for the rest of your categories. Use the values from the example budget
- Once you have all your values entered, be sure to format what you have entered as currency.
- Then follow the instructions on the image above to use auto sum to find your totals.



ADDING NONCONTINUOUS CELLS

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	PERSONAL BUDGET												
2													
3		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4	INCOME												
5	Wages	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
6	Interest	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7	Misc	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
8	INCOME TOTAL	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
9													
10	EXPENSES												
11	HOME												
12	Rent	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00
13	Utilities	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
14	Phone	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00
15	Home Repairs	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
16	Home total	\$980.00	\$980.00	\$980.00	\$980.00	\$980.00	\$980.00	\$980.00	\$980.00	\$980.00	\$980.00	\$980.00	\$980.00
17													
18	LIVING EXPENSES												
19	Groceries	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00
20	Child Care	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
21	Eating out	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00
22	Living total	\$490.00	\$490.00	\$490.00	\$490.00	\$490.00	\$490.00	\$490.00	\$490.00	\$490.00	\$490.00	\$490.00	\$490.00
23													
24	Transportation												
25	Gas	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00
26	Insurance	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00
27	Parking	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00
28	Public Transport	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
29	Transportation Total	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00	\$80.00
30													
31	Expenses Total	=B16+B22+B29											

Sometimes we need to add numbers that are not continuous. In this budget , we need to add our living expenses total, our housing total, and our transportation total in order to discover our total expenses. We can create a formula in excel to do this. Follow the directions below to practice.

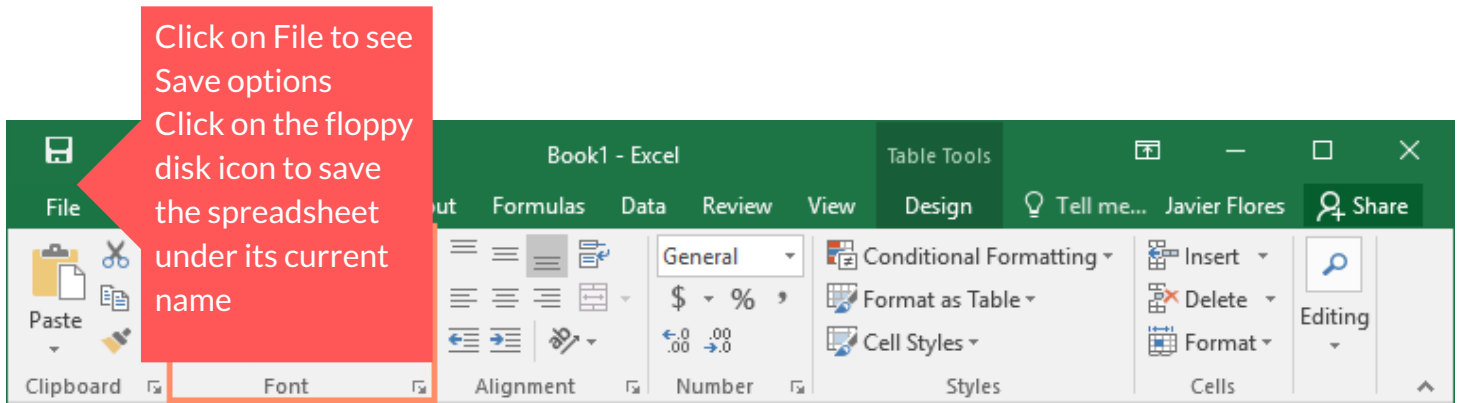
7. Create the Expenses Total formula.

To find our total expenses within this budget, we need to add together our Home Total, Living Total, and Transportation total.

- Click in cell B31, Type in =.
- Click on cell B16,
- Type in +.
- Click on cell B22,
- Type in +.
- Click on cell B29.
- Press Enter.
- AutoFill across row 31.



SAVING & MORE EXCEL RESOURCES



8. Save your work!

Click on the tab called **file** in the top left hand corner, and select **save as**. I suggest that you save your work under a name you will remember. For example, I might save my document as 2018budget

More Excel Resources:

GCF Learning: <https://edu.gcfglobal.org/en/excel2016/>

This site provides a free excel tutorial.

Apache OpenOffice Calc: <https://www.openoffice.org/product/calc.html>

Apache OpenOffice Software is a trusted company that creates free open source software. You can download and use their free spreadsheet software from this site.

More Resources for Computer Instruction

Community Workshop Series Classes



Chapel Hill Public Library

Wednesdays at 6-7:30pm

To register for class, contact the CHPL at (919) 968-2777.

Durham SW Public Library

Thursdays at 6-7:30pm

To register for class, contact the Durham Branch at (919)560-8590.

Cybrary at Carrboro

Saturday at 10-11:30pm

To register for class, contact the Cybrary at (919) 969-3006.

More Local Resources

Kramden Institute

<https://kramden.org/classes/>

Phone: 919-293-1133

Email: info@kramden.org

Hours: Mon - Fri 9am – 5pm

Wed 9am – 9pm

Orange County Literacy Council

<http://orangeliteracy.org/>

Phone: (919) 914-6153

oclc@orangeliteracy.org

