APPLIED COMPUTING 1P01
Fluency with Technology
Word Processing

APCO/IASC 1P01

Brock University
Word Processors

Word processors, at their core, are simply *document editors*.

- Note that there’s a *slight* difference between a document and text
- Most word processors are *WYSIWYG* editors
- They include tools for both formatting and layout
  - For most common factors, you can either eyeball it and drag with the mouse, or express things numerically
The best day ever would be when they got done promoted.

Word's grammar check is worse than better.

It can actually easily try to corrects when not necessary and can misses so many other things that it's best to ignored it.
Elements

- Note that we still have the same basic *tool ribbon*
  - Of course, we have different choices now
- Rulers aren’t enabled by default, but can be turned on
- Much like Excel, we have different preview (display) modes
- Note that Word brings up additional hints for contextual shortcuts
  - Try pasting some text, and you’ll see that you can hit CTRL for additional options
  - Move the cursor to an empty place in the page, and you can easily set alignment
- We can manually invoke the spelling and grammar checkers, but Word will also mark up text in the document to highlight (what it believes to be) obvious mistakes
  - AutoCorrect will automagically take care of common mistakes (e.g. *teh* → *the*)
A page’s layout is defined by basic properties:

- **Page/paper size**
  - Normally, this should correspond to the paper you intend to use

- **Margins**
  - How much of a gap should be left between each page edge and the contained text
  - Can be set separately for top/bottom/left/right
  - Gutter margins give you extra space for binding
  - Mirror margins flip the margins for every other page
    - Of course, this really only makes sense when the opposing margins are different from each other

- **The orientation may be** *portrait* (tall) or *landscape* (wide)
Breaks

On the *Home* tab, turn on the display for formatting symbols. It shows you:

- Whitespace (e.g. spaces)
- Paragraph breaks
- Line breaks (*note: not* the same thing!)
- Page breaks

This can be a handy view for when you’re trying to get things *juuust* right!
Tables

Tables are used for the presentation of tabular data (this is sounding familiar...)

There are a few ways to draw a table:

- Insert Table...
- Draw Table
- A grid for quickly choosing up to a $10 \times 8$ table

Note: You can also embed an Excel spreadsheet into a Word document, but the need to do so should be rare.
Tables
Formatting

Many of the same features in Excel are also present here.
- Borders & Shading, etc.
- Merging

By default, tables automatically fit the entire margin width, and uses heights of one line per row
- However, the *Table Properties* dialog gives you extensive control over many such properties
- There are also shorthand buttons (e.g. *Distribute Rows* and *Distribute Columns*)
Adding Images

The three basic embeddables are:

- **Pictures**
  - e.g. Photographs

- **Clip Art**
  - Premade illustrations, often included for free
  - Oftentimes vector-based, so they can be easily resized

- **Other embeddables**
  - e.g. Excel spreadsheets, charts, vector images, etc.

**Important:** When including raster graphics, ensure that the image has an appropriate resolution (dot pitch) if you intend to eventually print the document!
Additional Image Notes

Note that you’ll normally have additional options for making your pictures look like they belong in the document:

- The *Format Picture*… dialog for basic filters and decorations
- The *Size and Position*… dialog for indicating how the embedded object should be positioned and sized, and how it should interact with the text (if at all)
  - This includes *text wrapping*

We also have some more interesting tools, including *background removal* (which works great with a *chroma key!*).
Other Handy Embeddables

- **Shapes**
  - Vector-based
  - Good for very basic illustrations

- **Charts**
  - Integration with other Office modules allows it to easily create an Excel worksheet and create a corresponding chart

- **SmartArt**
  - A *very* handy tool for quickly creating commonly-used layouts, illustrations, flowcharts, etc.
  - Adapts to differing data
    - e.g. Lets you change the number of points
    - Automatically adjusts font sizes (scales to fit)
Writing basic math can be needlessly complicated when done manually.

- I don’t have a $\frac{dx^2}{dy}$ button on my keyboard; I don’t know about you...
- The *Equation Editor* is a handy way to create formulae either for *inline* or *display mode*
- For simpler use of esoteric glyphs, there’s also a *Symbol* option on the *Insert* tab
Enumerated Lists

- Numbered Lists
- Bulleted Lists
- Multilevel Lists

Note that all of these have several predefined styles from which to choose, but also let you define your own.
Formatting Text

Let’s just take a quick look at this
(I’m guessing we all knows the difference between *italics* and **bold**, yes?)

(We also remember what a *monospaced font* is, right?)
The *Home* tab has several commonly-used options for formatting paragraphs, but there’s also a link to a full dialog

- Alignment
- Indentation
- Spacing
  - Spacing before
  - Spacing after
  - Line spacing
- Widows and Orphans
- Page break before

We’ll come back to *Outline level* in a moment
We’re already familiar with the basic concept of styles

- A style simply represents a collection of multiple formatting options bundled into a single name

Proper use of them becomes more important for editing documents, because inconsistent style is incredibly distracting

- Headings
  - Navigation Pane
  - This’ll be useful for making a Table of Contents later!

- It’s a good idea to create your own styles if you plan on reusing the same formatting more than once
  - You can add new styles to just the document, or to Microsoft Word
Themes

Themes are basically an extension of Styles.

- A single theme can set multiple styles
  - Each style can set multiple formatting options

In the same way that you can create new styles, you can save themes (and even distribute them!)
The *Word Count* is a count of the words.
You’ll know it when you see it

- Found on the *Insert* tab (under *Text*)
Comments

Comments can be a handy way to annotate a document

- You have the option of turning them on and off
- You can separately control whether or not they print
Remembering that consistent formatting is important, pasting in a document editor (especially from other sources) can be a bit of a nuisance. Remember that *Paste Special* is an option

- Keep Source Formatting
- Merge Formatting
- Keep Text Only
Tab Stops

Turn on the ruler and look at the top of the page

- *Indentation* is an additional fixed-width space added to the margin
- A *first-line indent* is an additional fixed-width space that only applies to the first line of a paragraph
- A *tab stop* represents a special point to which you can *tab*
  - Proper tabbing is the best way to reliably line up words on multiple lines of the page
  - If you *really* don’t like dealing with these, tables (with the borders turned off) can usually be an adequate substitute
  - Still, take a look at all of the options
    - Either double-click the ruler, or click the *Tabs...* button in the paragraph dialog box
Columns

Columns simply let you split a single page up into multiple columns of text.

You can find it on the *Page Layout* tab.
Page Numbering

Page numbering numbers the page.

If you’re using a multi-leveled list with chapters, you can have it automatically include chapter numbers as well.

These become part of the header or footer.
Footnotes/Endnotes

- Footnotes allow you to add a referenced note to the bottom of the same page
- Endnotes push the referenced note to the end of the document
- Both are customizable
Citations/References

Citations are used to reference cited works.

- Word can keep track of your references for you
- Don’t forget to include the corresponding bibliography!
Templates

Templates are still a thing.

As with Excel, they represent a basic blank document, ready to have “real” information added.
Mail Merge

If you need to send (essentially) the same letter to multiple people, it would be far too tedious to manually edit in each person’s name.

A Mail Merge lets you identify replaceable fields, which can be automagically filled with corresponding fields from contacts.

- Contacts may be imported (e.g. from Excel) or stored in a simple database
Table of Contents

If you were using headings correctly, generating a Table of Contents is trivial.

- Find the option under the *References* tab
Additional Topics

- Watermarks
- Track Changes
- Page Colour
  - Issues with printing, though
- Cover Page