Document Design: Typography

It’s helpful to know a little about typefaces and page design. That way, you can make choices that best meet your readers’ needs.

Fonts:

“Fonts” and “typefaces” are not really the same thing, but we’ll use the terms interchangeably in this course. Most fonts are either serifed (example: CTA. Note the “doodads” or serifs on the ends of the strokes) or sans serif (example: CTA. Note the clean ends.)

**Serifed:**
- Easier to read in large blocks, most often used for body text.
- Should be 11pt to 13pt for readability.
- Examples: Times New Roman, Cambria, Century Schoolbook, Courier

**Sans serif:**
- High impact, great for headings. Also used for technical drawings
- Should be 14pt to 20pt (depending on level) in headings
- Examples: Arial, Calibri, Helvetica, Comic Sans

The height of a font is given in “points”. (One point is 1/72"). These days, even in the same point size, one font may be a different height than another. That drives purist font designers crazy; the rest of us just make small adjustments so things look right.

Choose a font based on the following:
- Legibility
- Aesthetics
- Impact
- Coordination with the other fonts and general style of the document
- Portability – will the reader’s computer have the same fonts? Automatic substitutions can undo your careful design work. Either choose common fonts (best) or use Embed Fonts in Document option of the Save As… dialog.

Justification:

This text is “left justified” (CTRL-L in Word). It is pushed up against the left margin, and the line breaks wherever a word ends. Because the lines have different lengths, this is often called “ragged right”. It’s easy to read.

This text is “right justified” (CTRL-R in Word): pushed up against the right margin. This is rarely used in technical writing.
This text is centered (CTRL-E in Word). Centered text most often appears in headings and titles.

This text is “fully justified” or sometimes just “justified” (CTRL-J in Word). It is pushed up against both the left and right margins. It’s actually harder to read than ragged right, but most books are set this way anyway. Large spaces can occur with some word processors or low-resolution printers.

This text is indented with a tab or a margin change: it starts to the right of the normal left margin.

This text has a “hanging indent” (CTRL-T in Word). Hanging indents are most often used to put headings in the left margin, or for bullets.

This text has a block indent, usually used for long quotations and for Notes/ Cautions/Warnings. Create the indents by dragging on the ruler or in the Paragraph format dialog.

Margins:

Margins apply to the entire page. If you want paragraphs to look different, indent them using the techniques described earlier.

In bound books, the margins where the pages are glued together (the “gutter margins”) are often wider so the text isn’t lost in the seam.

Tabs

Most typefaces you are used are “proportional” – different letters are different widths (compare: iwiwi); “monospaced” fonts’ letters are all the same width (iwiwi). The problem with using proportional fonts is that it is very difficult to get things to line things up vertically. Trying to
use blank spaces gets close, but it’s ugly (the examples below also shows all the non-printing characters revealed by the ¶ button):

```
Item one  Item two tabbed over Item three spaced over
Item number four  Item five tabbed Item six spaced over
```

Tabs can help. Set tabs by clicking on the Ruler where you want the tab to be. If you press Enter at the end of a line with tabs, the new line you create will have the same tabs. You can highlight several lines and set all their tabs at once. Tabs can also be “fine tuned” and given enhancements like leading dots ( . . . . . . ) from within the Paragraph format dialog box.

```
→ Item one tabbed  → Item two tabbed  → Item three tabbed
→ Item four tabbed  → Item five tabbed  → Item six tabbed
```

**Paragraph and Page Behavior**

Paragraphs can have “padding” or extra spacing above or below it. This can make one-line paragraphs look double-spaced even when they are not (this often shows up in your Cover Letter’s address areas). You can work around this by using Shift-Enter instead of Enter; this forces a line break but does not create a new paragraph. You also can right-click on the paragraph and choose Paragraph from the menu; change the Spacing Above and Spacing Below to 0, and set the Line Spacing to Single.

Sometimes a heading and its paragraph will be split across a page boundary. You can force the heading down with blank lines, but you may also choose to open the Paragraph format dialog, choose the Line and Page Breaks tab, and click the Keep with Next and/or Keep Together boxes.

If you absolutely want something to start at the top of a new page, no matter what happens on previous pages, use CTRL-Enter or Insert Page Break. You should do this for your Table of Contents and bibliography pages.

**Handy Word Processor Keystrokes**

These keystrokes can save you a lot of trouble:

- CTRL-Z (Undo) reverses your last action. Depending on the application, you may be able to Undo several previous actions, or just one.
- CTRL-Y (Redo) redoes your last action. It can “undo undo,” or more commonly, will allow you to repeat a formatting or other operation in another location.
- F1 (Help) brings up the application’s Help facility. You can also get help on YouTube and on the web.
- The ¶ button at the top of the page shows hidden characters and functions like spaces (·), tabs (→), paragraph breaks (¶), line breaks (←), and page breaks (—— Page Break ——)

**Illustration Placeholders**

In the draft version of your technical research report, you’ll probably want to have placeholders for the illustrations. You’ll insert the actual illustrations in the final version.

Use the following format for your placeholder:
Illustrations

Illustrations are used to explain a document’s text, present it in a more-understandable form, help people with alternate learning styles, and so on. Illustrations should be relevant to the text, not “filler” or decoration. Illustrations come in a variety of types.

Photographs.

Photos are realistic and detailed (or start that way, before being Photoshopped). But they may be too detailed or contain too much information. To make them more specific, they can be cropped, enlarged sections can be inset, parts can be traced with lines to emphasize shapes, labels or “callouts” can be used to annotate them, or they can be “masked” to blur or darken irrelevant areas while still providing context.

Line Art.

Line art is a realistic or non-realistic “cartoon”. It can show just what the author wishes to show and omit nonessential details. Parts can be exaggerated (caricature) to over-emphasize parts. Callouts can be used to label parts of the drawing.
Charts, and Graphs

“Chart” and “graph” often refer to the same thing: shapes or lines that represent numbers. Pie charts primarily show ratios, bar charts primarily show absolute and relative magnitude, line charts primarily show trends, and scatter charts primarily show grouping.

Tables

Tables are arrangements of text and/or numbers. They are useful for lookup (e.g., decoding), cross referencing, and presentation of data for comparison.

Audio and Video

While sound and motion are impossible to embed in traditional printed materials, it’s increasingly common to find a CD, CD-ROM, or DVD included with a textbook or manual. Online materials can easily accommodate multiple media; the primary concern is the readers’ ability to access and play the content.

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