AN EXAMPLE OF THE USAGE OF THE TUFTE-HANDOUT STYLE

TUFTÉ-LATEX DEVELOPERS & THE LYX TEAM

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This document describes the Tufte-handout \LaTeX document style. It also provides examples and comments on the style’s use. It is based on the example file shipped with tufte-handout.cls, but adapted for the use with LyX.

The tufte-handout document class\(^1\) defines a style similar to the style Edward Tufte uses in his books and handouts. Tufte’s style is known for its extensive use of sidenotes, tight integration of graphics with text, and well-set typography. This document aims to be at once a demonstration of the features of the tufte-handout document class and a style guide to its use.

1 Page Layout

1.1 Headings and paragraph design

This style provides A- and b-heads (that is, section and subsection) demonstrated above.

If you need more than two levels of section headings, you’ll have to define them yourself at the moment;\(^2\) there are no pre-defined styles for anything below a subsection. As Bringhurst points out in *The Elements of Typographic Style*,\(^3\) you should “use as many levels of headings as you need: no more, and no fewer.”

The Tufte-handout class will emit an error if you try to use \subsubsection and smaller headings.

In his later books,\(^4\) Tufte starts each section with a bit of vertical space, a non-indented paragraph, and sets the first few words of the sentence in small caps. To accomplish this, use the NewThought character style (Edit > TextStyle > NewThought).

1.2 Sidenotes

One of the most prominent and distinctive features of this style is the extensive use of sidenotes. There is a wide margin to provide ample room for sidenotes and small figures. Any footnotes will automatically be converted to sidenotes.\(^5\) If you’d like to place ancillary information in the margin without the sidenote mark (the superscript number), you can use the \marginnote{some text} \LaTeX command. The normal margin note will work as well, but it will look rather odd.


\(^2\) See see “Defining new sections” on page 4 for help with defining more heading levels.


\(^5\) This is a sidenote that was entered using the \footnote command.

This is Tufte’s margin note. Notice that there isn’t a number preceding the note, and there is no number in the main text where this note was written.

This is a normal margin note.\(^1\)

Don’t use it.
1.3 References

References are placed alongside their citations as sidenotes, as well. This can be accomplished using the normal citation command.6

The complete list of references may also be printed automatically by using Insert> Lists&Toc> BibTeX References... (see the end of this document for an example.) If you do not want to print a bibliography at the end of your document, use the \nobibliography \LaTeX command in its place.

2 Figures and Tables

Images and graphics play an integral role in Tufte’s work. In addition to the standard figure and tabular floats, this class provides special figure and table environments for full-width floats.

Full page width figures and tables can be produced by using figure or table floats and clicking Span Columns in the float dialog. To place figures or tables in the margin, use the MarginFigure or MarginTable floats (see figure 1).

Figure 2 is an example of the wide figure float and figure 3 is an example of the normal figure float.

Table 1 shows a table created with the booktabs package (this is border style “formal” in the tabular dialog). Notice the lack of vertical rules—they serve only to clutter the table’s data.

<table>
<thead>
<tr>
<th>Margin</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper width</td>
<td>8 1/2 inches</td>
</tr>
<tr>
<td>Paper height</td>
<td>11 inches</td>
</tr>
<tr>
<td>Textblock width</td>
<td>6 1/2 inches</td>
</tr>
<tr>
<td>Textblock/sidenote gutter</td>
<td>3/8 inches</td>
</tr>
<tr>
<td>Sidenote width</td>
<td>2 inches</td>
</tr>
</tbody>
</table>

Table 1: Here are the dimensions of the various margins used in the Tufte-handout class.

6 The first paragraph of this document includes a citation.
3 Full-width text blocks

In addition to the new float types, there is a Full Width environment that stretches across the main text block and the sidenotes area and ragged left:


Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

4 Typography

4.1 Typefaces

If the Palatino and Bera Mono typefaces are installed, this style will use them automatically. Otherwise, we’ll fall back on the Computer Modern typefaces.

4.2 Letterspacing

This document class includes two new commands and some improvements on existing commands for letterspacing.

When setting strings of ALL CAPS or SMALL CAPS, the letterspacing—that is, the spacing between the letters—should be increased slightly.7 The AllCaps character style (Edit>TextStyle>AllCaps) has proper letterspacing for strings of FULL CAPITAL LETTERS, and the SmallCaps character style (Edit>TextStyle>SmallCaps) has letterspacing for SMALL CAPITAL LETTERS. These commands will also automatically convert the case of the text to upper- or lowercase, respectively.

The normal Small Caps shape has also been redefined to include letterspacing. Its case is left as is, however. This allows one to use both uppercase and lowercase letters: THE INITIAL LETTERS OF THE WORDS IN THIS SENTENCE ARE CAPITALIZED.

5 Customization

5.1 Document class options

The tufte-handout class is based on the article document class. Therefore, you can pass any of the typical article options. There

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are a few options that are specific to the tufte-handout document class, however.

- The \texttt{apaper} option will set the paper size to A4 instead of the default US letter size.
- The \texttt{sfsidenotes} option will set the sidenotes in a \texttt{sans serif} typeface instead of the default roman.
- The \texttt{twoside} option will modify the running heads so that the page number is printed on the outside edge (as opposed to always printing the page number on the right-side edge in \texttt{oneside} mode).
- The \texttt{symmetric} option typesets the sidenotes on the outside edge of the page. This is how books are traditionally printed, but is contrary to Tufte’s book design which sets the sidenotes on the right side of the page. This option implicitly sets the \texttt{twoside} option.
- The \texttt{justified} option sets all the text fully justified (flush left and right). The default is to set the text ragged right. The body text of Tufte’s books are set ragged right. This prevents needless hyphenation and makes it easier to read the text in the slightly narrower column.

5.2 Defining new sections

As mentioned on page 1, the \texttt{tufte-handout} document class only defines \texttt{section} and \texttt{subsection} headings. If you wanted to define, say, a \texttt{paragraph} heading, you could do it as follows:

\begin{verbatim}
\makeatletter
\renewcommand\paragraph{\@startsection{paragraph}{4}{0em}{\baselineskip}{-1.5em}{\normalfont\itshape}}
\makeatother
\end{verbatim}

Place that code in \texttt{Document\textbackslash Settings\textbackslash Preamble} and you’ll now be able to use \texttt{paragraph} in \texttt{\LaTeX} mode.

For more details on defining section levels, see \textit{The \LaTeX Companion} \cite{ MittelbachGoossens04}, or use the \texttt{titlesec} package.

6 Installation

To install the tufte-handout class, simply drop the `tufte-handout.cls` file into the same directory as your `.tex` file. Better, however, install it in your T E X M F tree (see the help manuals for details).

7 Support

7.1 Package Dependencies

The following is a list of packages that the tufte-handout document class relies upon. Packages marked with an asterisk are optional.

- geometry
- ragged2e
- chngpage
- paralist
- textcase
- footmisc
- natbib and bibentry
- placeins
- caption
- fancyhdr
- microtype*
- soul*
- palatino*
- beramono*

7.2 Tufte-\LaTeX\ Website

The website for the Tufte-\LaTeX\ packages is located at http://code.google.com/p/tufte-latex/. On our website, you’ll find links to our svn repository, mailing lists, bug tracker, and documentation.
References

