kuthesis.dtx*

Arthur Shipkowski

November 20, 2014

Abstract

Kuthesis.dtx is a style file for the Kettering University Thesis Format for LaTeX. It is designed to cover most needs that Kettering thesis students have.

Preface

Usage of other styles. You will find traces of other style files sucked in wholesale by this file. This is not to offend the original owners of those files; I figure that a student adventurous enough to try this file out ought to have all the help they can get. The most flagrant use of this is in the endnote section. Due to the multitude of available files for to do it, I have not added APA-style citing.

Special note. This style does not attempt to provide APA-style citing. There are a number of packages out there, of which the most comprehensive is apacite (which has both a LaTeX style and a BibTeX style). However, you'll have to `\renewcommand` the keyword `\bibname`, because they define it to have lowercase and use addcontentsline to get around any provisions I may make.

Thanks. There are three people I wish to thank for help on creating this file. First, Professor Mark Wicks of Kettering University, who answered a good number of my headscratchers. Second, Professor James McDonald of Kettering University, who encouraged me to use LaTeXto create my thesis. Finally, My fianceé, Stephanie Rybicki, who was kind enough to give me the kick I needed to get this file documented. It is still somewhat of a crawling horror, though.

1 Getting Started

1.1 Requirements

This style file requires the `setspace`, `times`, `helvet`, `ifthen`, and `calc` packages. With the possible exception of `setspace`, all of these should be in your TeX distribution.

---

*This file has version v0.4 last revised 2000/05/29

1.2 Installation

1. Make sure the files are in your current working directory and run `kuthesis.ins` through TeX.

2. Move the generated files to someplace you'd like them to be. I'm sure there's an official spot.

3. If your TeX implementation uses a filename database, update it.

1.3 Usage

The use of this file is actually fairly simple, as it acts almost exactly like the report style. Just add the following to your file:

```
\documentclass[12pt]{kuthesis}      % Specifies the document class
```

Of course, in order to completely make a file fit the Kettering Thesis manual, there is more to do than that. First off, in addition to `\title{}` and `\author{}`, you are to define other things. To start with, you must define your department with `\department{Computer Engineering}`. Then, define your sponsor with `\sponsor{MAXIMUM WIDGETS}`. Finally, define your graduation date with `\gdate{December 3, 1999}`. This way, when you use `\maketitle`, not only will your title page be generated but your disclaimer page will be generated as well.

Next, enclose your preface in the preface environment with `\begin{preface}` and `\end{preface}`.

In order to produce the table of contents, list of illustrations, and list of tables, you'll need to do the following.

```
\singlespacing
\tableofcontents\
\listofillustrations
```

Finally, when it is time to begin the body of your thesis, use `\begincontent`. Enter chapters as you would for a report. Note that footnotes are not permitted; use `\endnote` with a `\theendnotes` at the end of each chapter.

Creating a glossary will require you to `\setcounter{secnumdepth}{-1}` before the glossary and `\setcounter{secnumdepth}{0}` afterwards. Declare appendicies with `\appendix` before chapter names, but note that a single appendix will have to be done by hand.

1.4 Using `apacite` with `kuthesis.cls`

Just use the following code, and do citations as normal. Naturally, don't forget to use the apacite package in your preamble.

```
\begin{singlespace}
```

```
\bibliographystyle{apacite}
\bibliography{thesis}
\end{singlespace}
```

2 Source Code Examination and Discussion

This source code is based heavily on the report style source code. Therefore, I will focus more on commenting on changes and interesting properties.

```
1 \NeedsTeXFormat{LaTeX2e}[1995/12/01]
2 \ProvidesClass{kuthesis}[2000/05/29 Kettering University Thesis class definition]
```

We must double space almost everything and put it in 12 pt Times New Roman. In certain cases, Helvetica may be needed. Since we will still occasionally need to single space things, we simply use the `setspace` package.

```
3 \RequirePackage{setspace}
4 \RequirePackage{times}
5 \RequirePackage{helvet}
6 \RequirePackage{ifthen}
7 \RequirePackage{calc}
```

There are spots in this file where options remain that aren't useful. Paper sizes are one of these things. One of these days perhaps someone will rip it out, but I'm not too willing to risk yet another style change.

```
 8 \newcommand\@ptsize{}
 9 \newif\if@restonecol
10 \newif\if@titlepage
11 \@titlepagetrue
12 \newif\if@openright
13 \if@compatibility\else
14 \DeclareOption{a4paper}
15    {\setlength\paperheight {297mm}%
16     \setlength\paperwidth  {210mm}}
17 \DeclareOption{a5paper}
18    {\setlength\paperheight {210mm}%
19     \setlength\paperwidth  {148mm}}
20 \DeclareOption{b5paper}
21    {\setlength\paperheight {250mm}%
22     \setlength\paperwidth  {176mm}}
23 \DeclareOption{letterpaper}
24    {\setlength\paperheight {11in}%
25     \setlength\paperwidth  {8.5in}}
26 \DeclareOption{legalpaper}
27    {\setlength\paperheight {14in}%
28     \setlength\paperwidth  {8.5in}}
29 \DeclareOption{executivepaper}
30    {\setlength\paperheight {10.5in}%
31     \setlength\paperwidth  {7.25in}}
```

```
32 \DeclareOption{landscape}
33   {\setlength\@tempdima   {\paperheight}%
34     \setlength\paperheight {\paperwidth}%
35     \setlength\paperwidth  {\@tempdima}}
36 \fi
37 \if@compatibility
38   \renewcommand\@ptsize{0}
39 \else
40 \DeclareOption{10pt}{\renewcommand\@ptsize{0}}
41 \fi
42 \DeclareOption{11pt}{\renewcommand\@ptsize{1}}
43 \DeclareOption{12pt}{\renewcommand\@ptsize{2}}
44 \if@compatibility\else
45 \DeclareOption{oneside}{\@twosidefalse \@mparswitchfalse}
46 \fi
47 \DeclareOption{twoside}{\@twosidetrue  \@mparswitchtrue}
48 \DeclareOption{draft}{\setlength\overfullrule{5pt}}
49 \if@compatibility\else
50 \DeclareOption{final}{\setlength\overfullrule{0pt}}
51 \fi
52 \DeclareOption{titlepage}{\@titlepagetrue}
53 \if@compatibility\else
54 \DeclareOption{notitlepage}{\@titlepagefalse}
55 \fi
56 \if@compatibility
57 \else
58 \DeclareOption{openright}{\@openrighttrue}
59 \DeclareOption{openany}{\@openrightfalse}
60 \fi
61 \if@compatibility\else
62 \DeclareOption{onecolumn}{\@twocolumnfalse}
63 \fi
64 \DeclareOption{twocolumn}{\@twocolumntrue}
65 \DeclareOption{leqno}{\input{leqno.clo}}
66 \DeclareOption{fleqn}{\input{fleqn.clo}}
67 \DeclareOption{openbib}{%
68   \AtEndOfPackage{%
69     \renewcommand\@openbib@code{%
70       \advance\leftmargin\bibindent
71       \itemindent -\bibindent
72       \listparindent \itemindent
73       \parsep \z@
74       }%
75   \renewcommand\newblock{\par}}%
76 }
```

The following options are what you get if you do not specify any options in the class definition. It is designed to produce a thesis the way the department wants to see it.

```
77 \ExecuteOptions{letterpaper,12pt,oneside,onecolumn,final,openany}
```

```
78 \ProcessOptions
79 \input{size1\@ptsize.clo}
```

To produce output with the desired line spacing, the argument of `\spacing` should
be multiplied by $5/6 = 0.8333$, so that $1\frac{1}{2}$ spacing corresponds to `\spacing{1.5}`
and double spaced is `\spacing{1.66}`.

```
80 \def\normalspacing{1.25} % default line spacing
81 \setlength\lineskip{1\p@}
82 \setlength\normallineskip{1\p@}
83 \renewcommand\baselinestretch{}
84 \setlength\parskip{0\p@ \@plus \p@}
85 \@lowpenalty   51
86 \@medpenalty  151
87 \@highpenalty 301
88 \setcounter{topnumber}{2}
89 \renewcommand\topfraction{.7}
90 \setcounter{bottomnumber}{1}
91 \renewcommand\bottomfraction{.3}
92 \setcounter{totalnumber}{3}
93 \renewcommand\textfraction{.2}
94 \renewcommand\floatpagefraction{.5}
95 \setcounter{dbltopnumber}{2}
96 \renewcommand\dbltopfraction{.7}
97 \renewcommand\dblfloatpagefraction{.5}
98 \if@twoside
99   \def\ps@headings{%
100       \let\@oddfoot\@empty\let\@evenfoot\@empty
101       \def\@evenhead{\thepage\hfil\slshape\leftmark}%
102       \def\@oddhead{{\slshape\rightmark}\hfil\thepage}%
103       \let\@mkboth\markboth
104     \def\chaptermark##1{%
105       \markboth {\MakeUppercase{%
106         \ifnum \c@secnumdepth >\m@ne
107             \@chapapp\ \thechapter. \ %
108         \fi
109         ##1}}{}}%
110     \def\sectionmark##1{%
111       \markright {\MakeUppercase{%
112         \ifnum \c@secnumdepth >\z@
113           \thesection. \ %
114         \fi
115         ##1}}}}
116 \else
117   \def\ps@headings{%
118     \let\@oddfoot\@empty
119     \def\@oddhead{{\slshape\rightmark}\hfil\thepage}%
120     \let\@mkboth\markboth
121     \def\chaptermark##1{%
122       \markright {\MakeUppercase{%
123         \ifnum \c@secnumdepth >\m@ne
```

```
124            \@chapapp\ \thechapter. \ %
125        \fi
126        ##1}}}}
127 \fi
128 \def\ps@myheadings{%
129    \let\@oddfoot\@empty\let\@evenfoot\@empty
130    \def\@evenhead{\thepage\hfil\slshape\leftmark}%
131    \def\@oddhead{{\slshape\rightmark}\hfil\thepage}%
132    \let\@mkboth\@gobbletwo
133    \let\chaptermark\@gobble
134    \let\sectionmark\@gobble
135    }
```

Items required for the title page.

```
136 \newcommand{\sponsor}[1]{\ifx\empty#1\else\gdef\@sponsor{#1}\fi}
137 \newcommand{\department}[1]{\ifx\empty#1\else\gdef\@department{#1}\fi}
138 \renewcommand{\author}[1]{\ifx\empty#1\else\gdef\@author{#1}\fi}
139 \renewcommand{\title}[1]{\ifx\empty#1\else\gdef\@title{#1}\fi}
140 \newcommand{\gdate}[1]{\ifx\empty#1\else\gdef\@gdate{#1}\fi}
141
142 \global\def\@sponsor{\mbox{}}
143 \global\def\@degree{\mbox{}}
144 \global\def\@author{\mbox{}}
145 \global\def\@title{\mbox{}}
146 \global\def\@gdate{\number\date} % Default date is current date
```

Here \maketitle is changed to follow the KU guidelines. It includes its own disclaimer page.

```
147 \newcommand{\maketitle}
148 {
149 \begin{titlepage}
150    \setcounter{page}{1}
```

Set the line spacing to 1 for the title page.

```
151    \begin{spacing}{1}
152    \begin{center}
153       \mbox{}
154       \vfill
155       \textbf{{\@title}}\\
156       \vspace{2em}
157       A thesis written at \\
158       \vspace{1em}
159       \textbf{{\@sponsor}}\\
160       \vspace{1em}
161       and submitted to \\
162       \vspace{1em}
163       \textbf{KETTERING UNIVERSITY} \\
164       \vspace{3em}
165       in partial fulfillment \\
166       of the requirements for the \\
167       degree of \\
```

```
168        \vspace{1em}
169        \textbf{BACHELOR OF SCIENCE IN \MakeUppercase{\@department}} \\
170        \vspace{3em}
171        by \\
172        \vspace{1em}
173        \textbf{\MakeUppercase{{\@author}}}\\
174        \vspace{1em}
175        {\@gdate} \\
176        \vspace{1in}
177     \end{center}
178
179     \begin{flushright}
180
181
182     \begin{tabular}{@{}l}
183     \\ \hline
184     Author     \\
185     \\
186     \\ \hline
187     Employer Advisor~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  \\
188     \\
189     \\ \hline
190     Faculty Advisor \\
191     \end{tabular}
192
193
194     \end{flushright}
195     \end{spacing}
196     \end{titlepage}
197     \setcounter{page}{2}
198     \setcounter{secnumdepth}{-1}
199
200     \chapter{DISCLAIMER}
201     \begin{doublespace}
202     \par
203        This thesis is being submitted as partial and final fulfillment of the
204        cooperative work experience requirements of Kettering University needed
205     to obtain a Bachelor of Science in {\@department}.
206     \par
207     The conclusions and opinions expressed in this thesis are those of the
208     writer and do not necessarily represent the position of Kettering
209     University or my employer, or any of its directors, officers, agents, or
210     employees with respect to the matters discussed.
211     \end{doublespace}
212 }%\maketitle
213
214 \newcommand*\chaptermark[1]{}
```

Chapters are the only numbered objects, and they use Roman numerals. Roman numerals are set below.

```
215 \setcounter{secnumdepth}{0}
216 \setcounter{secnumdepth}{0}
217 \newcounter {part}
218 \newcounter {chapter}
219 \newcounter {section}[chapter]
220 \newcounter {subsection}[section]
221 \newcounter {subsubsection}[subsection]
222 \newcounter {paragraph}[subsubsection]
223 \newcounter {subparagraph}[paragraph]
224 \renewcommand \thepart {\@Roman\c@part}
225 \renewcommand \thechapter {\@Roman\c@chapter}
226 \renewcommand \thesection {\thechapter.\@arabic\c@section}
227 \renewcommand\thesubsection   {\thesection.\@arabic\c@subsection}
228 \renewcommand\thesubsubsection{\thesubsection .\@arabic\c@subsubsection}
229 \renewcommand\theparagraph    {\thesubsubsection.\@arabic\c@paragraph}
230 \renewcommand\thesubparagraph {\theparagraph.\@arabic\c@subparagraph}
231 \newcommand\@chapapp{\chaptername}
232 \newcommand\part{%
233   \if@openright
234     \cleardoublepage
235   \else
236     \clearpage
237   \fi
238   \thispagestyle{plain}%
239   \if@twocolumn
240     \onecolumn
241     \@tempswatrue
242   \else
243     \@tempswafalse
244   \fi
245   \null\vfil
246   \secdef\@part\@spart}
247
248 \def\@part[#1]#2{%
249     \ifnum \c@secnumdepth >-2\relax
250       \refstepcounter{part}%
251       \addcontentsline{toc}{part}{\thepart\hspace{1em}#1}%
252     \else
253       \addcontentsline{toc}{part}{#1}%
254     \fi
255     \markboth{}{}%
256     {\centering
257     \interlinepenalty \@M
258     \normalfont
259     \ifnum \c@secnumdepth >-2\relax
260       \huge\bfseries \partname~\thepart
261       \par
262       \vskip 20\p@
263     \fi
264     \Huge \bfseries #2\par}%
```

```
265     \@endpart}
266 \def\@spart#1{%
267     {\centering
268      \interlinepenalty \@M
269      \normalfont
270      \Huge \bfseries #1\par}%
271     \@endpart}
272 \def\@endpart{\vfil\newpage
273              \if@twoside
274                 \null
275                 \thispagestyle{empty}%
276                 \newpage
277              \fi
278              \if@tempswa
279                 \twocolumn
280              \fi}
281 \newcommand\chapter{\if@openright\cleardoublepage\else\clearpage\fi
282                 \thispagestyle{plain}%
283                 \global\@topnum\z@
284                 \@afterindentfalse
285                 \secdef\@chapter\@schapter}
```

We put a period after the chapter number in the table of contents. (e.g. I. INTRODUCTION)

```
286 \def\@chapter[#1]#2{\ifnum \c@secnumdepth >\m@ne
287                     \refstepcounter{chapter}%
288                     \typeout{\@chapapp\space\thechapter.}%
289                     \addcontentsline{toc}{chapter}%
290                             {\protect\numberline{\thechapter\@.}\MakeUppercase{#1}}%
291                 \else
292                   \addcontentsline{toc}{chapter}{\MakeUppercase{#1}}%
293                 \fi
294                 \chaptermark{#1}%
295                 \if@twocolumn
296                   \@topnewpage[\@makechapterhead{#2}]%
297                 \else
298                   \@makechapterhead{#2}%
299                   \@afterheading
300                 \fi}
```

We do simplistic Chapter Headers. Note that these fix the table of contents as well.

```
301 \def\@makechapterhead#1{%
302   \vspace*{1in}%
303   {\parindent \z@ \centering \normalfont
304     \ifnum \c@secnumdepth >\m@ne
305         \bfseries \thechapter\@.
306     \fi
307     \bfseries \MakeUppercase#1\par\nobreak
308     \vskip 40\p@
```

```
309   }}
310 \def\@makeschapterhead#1{%
311   \vspace*{1in}%
312   {\parindent \z@ \centering
313     \normalfont
314     \interlinepenalty\@M
315     \bfseries  \MakeUppercase#1\par\nobreak
316     \vskip 40\p@
317   }}
318 \def\@schapter#1{\if@twocolumn
319                 \@topnewpage[\@makeschapterhead{#1}]%
320               \else
321                 \@makeschapterhead{#1}%
322                 \@afterheading
323               \fi}
```

The format requires underlined section headers.

Note: Even though the thesis formatting permits you to use italics instead of underlining most places, this is one place it does not.

```
324 \newcommand\section{\@startsection{section}{1}{0mm}%
325                                   {3.5ex \@plus 1ex \@minus .2ex}%
326                                   {2.3ex \@plus.2ex}%
327                                   {\raggedright\normalsize\bfseries\underline}}%
328 \newcommand\subsection{\@startsection{subsection}{2}{0mm}%
329                                   {3.25ex\@plus 1ex \@minus .2ex}%
330                                   {1.5ex \@plus .2ex}%
331                                   {\normalfont\normalsize\bfseries\underline}}%
332 \newcommand\subsubsection{\@startsection{subsubsection}{3}{0mm}%
333                                   {3.25ex\@plus 1ex \@minus .2ex}%
334                                   {1.5ex \@plus .2ex}%
335                                   {\normalfont\normalsize\bfseries\underline}}%
336 \newcommand\paragraph{\@startsection{paragraph}{4}{\z@}%
337                                   {3.25ex \@plus1ex \@minus.2ex}%
338                                   {-1em}%
339                                   {\normalfont\normalsize\bfseries}}
340 \newcommand\subparagraph{\@startsection{subparagraph}{5}{\parindent}%
341                                    {3.25ex \@plus1ex \@minus .2ex}%
342                                    {-1em}%
343                                  {\normalfont\normalsize\bfseries}}
344 \if@twocolumn
345   \setlength\leftmargini  {2em}
346 \else
347   \setlength\leftmargini  {2.5em}
348 \fi
349 \leftmargin  \leftmargini
350 \setlength\leftmarginii  {2.2em}
351 \setlength\leftmarginiii {1.87em}
352 \setlength\leftmarginiv  {1.7em}
353 \if@twocolumn
354   \setlength\leftmarginv  {.5em}
```

```
355   \setlength\leftmarginvi {.5em}
356 \else
357   \setlength\leftmarginv  {1em}
358   \setlength\leftmarginvi {1em}
359 \fi
360 \setlength  \labelsep  {.5em}
361 \setlength  \labelwidth{\leftmargini}
362 \addtolength\labelwidth{-\labelsep}
363 \@beginparpenalty -\@lowpenalty
364 \@endparpenalty   -\@lowpenalty
365 \@itempenalty     -\@lowpenalty
366 \renewcommand\theenumi{\@arabic\c@enumi}
367 \renewcommand\theenumii{\@alph\c@enumii}
368 \renewcommand\theenumiii{\@roman\c@enumiii}
369 \renewcommand\theenumiv{\@Alph\c@enumiv}
370 \newcommand\labelenumi{\theenumi.}
371 \newcommand\labelenumii{(\theenumii)}
372 \newcommand\labelenumiii{\theenumiii.}
373 \newcommand\labelenumiv{\theenumiv.}
374 \renewcommand\p@enumii{\theenumi}
375 \renewcommand\p@enumiii{\theenumi(\theenumii)}
376 \renewcommand\p@enumiv{\p@enumiii\theenumiii}
377 \newcommand\labelitemi{\textbullet}
378 \newcommand\labelitemii{\normalfont\bfseries \textendash}
379 \newcommand\labelitemiii{\textasteriskcentered}
380 \newcommand\labelitemiv{\textperiodcentered}
381 \newenvironment{description}
382               {\singlespacing\begin{list}{}{%
383                \renewcommand{\makelabel}[1]{\normalfont ##1:\hfil}%
384                \setlength{\labelwidth}{1.5 in}%
385                \setlength{\leftmargin}{\labelwidth+\labelsep}}}
386               {\end{list}\doublespacing}
387 \newcommand*\descriptionlabel[1]{\hspace\labelsep
388                        \normalfont #1:\hfil}
389 \newenvironment{preface}
390 {
391 \setcounter{secnumdepth}{-1}
392 \chapter{\prefacename}\begin{doublespacing}
393 }
394 {\end{doublespacing}\setcounter{secnumdepth}{0}}
395 \newenvironment{verse}
396               {\let\\\@centercr
397                \list{}{\itemsep      \z@
398                        \itemindent   -1.5em%
399                        \listparindent\itemindent
400                        \rightmargin  \leftmargin
401                        \advance\leftmargin 1.5em}%
402                \item\relax}
403               {\endlist}
404 \newenvironment{quotation}
```

```
405                     {\list{}{\listparindent 1.5em%
406                             \itemindent    \listparindent
407                             \rightmargin   \leftmargin
408                             \parsep        \z@ \@plus\p@}%
409                      \item\relax}
410                     {\endlist}
411 \newenvironment{quote}
412                     {\list{}{\rightmargin\leftmargin}%
413                      \item\relax}
414                     {\endlist}
415 \if@compatibility
416 \newenvironment{titlepage}
417     {%
418        \if@twocolumn
419          \@restonecoltrue\onecolumn
420        \else
421          \@restonecolfalse\newpage
422        \fi
423        \thispagestyle{empty}%
424        \setcounter{page}\z@
425     }%
426     {\if@restonecol\twocolumn \else \newpage \fi
427     }
428 \else
429 \newenvironment{titlepage}
430     {%
431        \if@twocolumn
432          \@restonecoltrue\onecolumn
433        \else
434          \@restonecolfalse\newpage
435        \fi
436        \thispagestyle{empty}%
437        \setcounter{page}\@ne
438     }%
439     {\if@restonecol\twocolumn \else \newpage \fi
440      \if@twoside\else
441         \setcounter{page}\@ne
442      \fi
443     }
444 \fi
```

The appendix command has many tasks. Note that right now, if you have only one appendix, you're on your own. A lot of this was ripped from Peter Wilson's appendix class. The only reason I ripped it was because his system provides no facility for telling it whether chapter or section starts an appendix for a non-standard class. Since this needs to be fairly easy for fellow students (E.g. no editing other packages if I can help it), I rewrote and inserted it here.

```
445 \newcommand\appendix{\par
446   \thispagestyle{plain}%
447   \if@twocolumn\onecolumn\@tempswatrue\else\@tempswafalse\fi
```

```
448    \markboth{}{}%
449    {\setcounter{secnumdepth}{-1}
450    \chapter{\appendixtocname}
451    \setcounter{secnumdepth}{0}}%
452    \vfil\newpage
453    \if@twoside
454      \if@openright
455        \null
456        \thispagestyle{empty}%
457        \newpage
458      \fi
459    \fi
460    \if@tempswa
461      \twocolumn
462    \fi
463
464    \setcounter{section}{0}
465    \setcounter{chapter}{0}
466    \renewcommand\@chapapp{\appendixname}
467    \renewcommand\thechapter{\@Alph\c@chapter}
468    \let\oldacl@pp=\addcontentsline
469    \def\addcontentsline##1##2##3{%
470      \ifthenelse{\equal{##1}{toc}}{%
471        \ifthenelse{\equal{##2}{chapter}}{%
472          \addtocontents{##1}{\protect\contentsline{##2}%
473                        {\appendixname\space ##3}{\thepage}}}%
474      {\oldacl@pp{##1}{##2}{##3}}}%
475      {\oldacl@pp{##1}{##2}{##3}}}
```

Note: Still in \appendix.

Note we have that darned colon in for appendicies in the TOC. Also note the ugly
kludge being used to remove vertical spacing between appendix names.

```
476 \def\@chapter[##1]##2{\ifnum \c@secnumdepth >\m@ne
477                        \refstepcounter{chapter}%
478                        \typeout{\@chapapp\space\thechapter}%
479                        \addcontentsline{toc}{section}%
480                              {\@chapapp\space\thechapter: ##1}%
481                      \else
482                        \addcontentsline{toc}{chapter}{##1}%
483                      \fi
484                      \chaptermark{##1}%
485                        \if@twocolumn
486                        \@topnewpage[\@makechapterhead{##2}]%
487                      \else
488                        \@makechapterhead{##2}%
489                        \@afterheading
490                      \fi}
```

Now things are redefined a special page just for the chapter heading.

```
491 \def\@makechapterhead##1{%
```

```
492   \vspace*{1in}%
493   {\parindent \z@ \centering \normalfont
494     \ifnum \c@secnumdepth >\m@ne
495         \bfseries \@chapapp\  \thechapter\@\par
496     \fi
497     \vskip 40\p@
498     \bfseries \MakeUppercase##1\par\nobreak
499     \clearpage
500   }}
501 }
502 \setlength\arraycolsep{5\p@}
503 \setlength\tabcolsep{6\p@}
504 \setlength\arrayrulewidth{.4\p@}
505 \setlength\doublerulesep{2\p@}
506 \setlength\tabbingsep{\labelsep}
507 \skip\@mpfootins = \skip\footins
508 \setlength\fboxsep{3\p@}
509 \setlength\fboxrule{.4\p@}
510 \@addtoreset {equation}{chapter}
511 \renewcommand\theequation
512   {\ifnum \c@chapter>\z@ \thechapter.\fi \@arabic\c@equation}
```

Here we reconfigure lists of figures and tables to appear in table of contents. Also, parts of report.cls were removed to reconfigure figure counter to number for the entire document rather than per chapter.

```
513 \newcounter{figure}
514 \def\fps@figure{tbp}
515 \def\ftype@figure{1}
516 \def\ext@figure{lof}
517 \def\fnum@figure{\underline{\figurename~\thefigure.}}
518 \newenvironment{figure}
519                 {\@float{figure}}
520                 {\end@float}
521 \newenvironment{figure*}
522                 {\@dblfloat{figure}}
523                 {\end@dblfloat}
```

Reconfigured table counter to number for the entire document, not per chapter. (Bits of report.cls removed)

```
524 \newcounter{table}
525 \def\fps@table{tbp}
526 \def\ftype@table{2}
527 \def\ext@table{lot}
528 \def\fnum@table{\underline{\tablename~\thetable.}}
529 \newenvironment{table}
530                 {\@float{table}}
531                 {\end@float}
532 \newenvironment{table*}
533                 {\@dblfloat{table}}
534                 {\end@dblfloat}
```

```latex
535 \newlength\abovecaptionskip
536 \newlength\belowcaptionskip
537 \setlength\abovecaptionskip{10\p@}
538 \setlength\belowcaptionskip{0\p@}
539 \long\def\@makecaption#1#2{%
540   \vskip\abovecaptionskip
541   \sbox\@tempboxa{#1 #2}%
542   \ifdim \wd\@tempboxa >\hsize
543     #1 #2\par
544   \else
545     \global \@minipagefalse
546     \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
547   \fi
548   \vskip\belowcaptionskip}
549 \DeclareOldFontCommand{\rm}{\normalfont\rmfamily}{\mathrm}
550 \DeclareOldFontCommand{\sf}{\normalfont\sffamily}{\mathsf}
551 \DeclareOldFontCommand{\tt}{\normalfont\ttfamily}{\mathtt}
552 \DeclareOldFontCommand{\bf}{\normalfont\bfseries}{\mathbf}
553 \DeclareOldFontCommand{\it}{\normalfont\itshape}{\mathit}
554 \DeclareOldFontCommand{\sl}{\normalfont\slshape}{\@nomath\sl}
555 \DeclareOldFontCommand{\sc}{\normalfont\scshape}{\@nomath\sc}
556 \DeclareRobustCommand*\cal{\@fontswitch\relax\mathcal}
557 \DeclareRobustCommand*\mit{\@fontswitch\relax\mathnormal}
558 \newcommand\@pnumwidth{1.55em}
559 \newcommand\@tocrmarg{2.55em}
560 \newcommand\@dotsep{4.5}
561 \setcounter{tocdepth}{2}
562 \newcommand\tableofcontents{%
563     \if@twocolumn
564       \@restonecoltrue\onecolumn
565     \else
566       \@restonecolfalse
567     \fi
568     \chapter*{\contentsname
569        \@mkboth{%
570           \MakeUppercase\contentsname}{\MakeUppercase\contentsname}}%
571     \@starttoc{toc}%
572     \if@restonecol\twocolumn\fi
573     }
574 \newcommand*\l@part[2]{%
575   \ifnum \c@tocdepth >-2\relax
576     \addpenalty{-\@highpenalty}%
577     \addvspace{2.25em \@plus\p@}%
578     \begingroup
579       \parindent \z@ \rightskip \@pnumwidth
580       \parfillskip -\@pnumwidth
581       {\leavevmode
582       \large \bfseries #1\hfil \hb@xt@\@pnumwidth{\hss #2}}\par
583       \nobreak
584         \global\@nobreaktrue
```

```
585            \everypar{\global\@nobreakfalse\everypar{}}%
586       \endgroup
587    \fi}
```

Here we setup table of contents.

```
588 \newcommand*\l@chapter{\vspace{1em}\@dottedtocline{0}{0em}{4em}}
589 \newcommand*\l@section{\@dottedtocline{1}{5.5em}{2.3em}}
590 \newcommand*\l@subsection{\@dottedtocline{2}{7.8em}{3.2em}}
591 \newcommand*\l@subsubsection{\@dottedtocline{3}{11.0em}{4.1em}}
592 \newcommand*\l@paragraph{\@dottedtocline{4}{14em}{5em}}
593 \newcommand*\l@subparagraph{\@dottedtocline{5}{16em}{6em}}
```

List of illustrations modified to appear in the table of contents.

```
594 \newcommand\listofillustrations{%
595     \setcounter{secnumdepth}{-1}
596     \chapter{\listillusname%
597       \@mkboth{\MakeUppercase\listillusname}%
598               {\MakeUppercase\listillusname}}%
599 \begin{doublespace}%
600 \begin{raggedright}%
601 \textbf{\underline{Figures}\hfill\underline{Page}}%
602 \end{raggedright}%
603 \@starttoc{lof}%
604 \vspace{2em}
605 \begin{raggedright}%
606 \textbf{\underline{Tables}\hfill\underline{Page}}%
607 \end{raggedright}%
608 \@starttoc{lot}%
609 \end{doublespace}
610 \setcounter{secnumdepth}{0}
611 }
612 \newcommand*\l@figure{\@dottedtocline{1}{0em}{2.3em}}
613 \let\l@table\l@figure
614 \newdimen\bibindent
615 \setlength\bibindent{1.5em}
616 \newenvironment{thebibliography}[1]
617     {\chapter*{\bibname
618        \@mkboth{\MakeUppercase\bibname}{\MakeUppercase\bibname}}%
619      \list{\@biblabel{\@arabic\c@enumiv}}%
620          {\settowidth\labelwidth{\@biblabel{#1}}%
621           \leftmargin\labelwidth
622           \advance\leftmargin\labelsep
623           \@openbib@code
624           \usecounter{enumiv}%
625           \let\p@enumiv\@empty
626           \renewcommand\theenumiv{\@arabic\c@enumiv}}%
627      \sloppy
628      \clubpenalty4000
629      \@clubpenalty \clubpenalty
630      \widowpenalty4000%
631      \sfcode`\.\@m}
```

```
632        {\def\@noitemerr
633          {\@latex@warning{Empty 'thebibliography' environment}}%
634         \endlist}
635 \newcommand\newblock{\hskip .11em\@plus.33em\@minus.07em}
636 \let\@openbib@code\@empty
637 \newenvironment{theindex}
638                {\if@twocolumn
639                   \@restonecolfalse
640                \else
641                   \@restonecoltrue
642                \fi
643                \columnseprule \z@
644                \columnsep 35\p@
645                \twocolumn[\@makeschapterhead{\indexname}]%
646                \@mkboth{\MakeUppercase\indexname}%
647                        {\MakeUppercase\indexname}%
648                \thispagestyle{plain}\parindent\z@
649                \parskip\z@ \@plus .3\p@\relax
650                \let\item\@idxitem}
651                {\if@restonecol\onecolumn\else\clearpage\fi}
652 \newcommand\@idxitem{\par\hangindent 40\p@}
653 \newcommand\subitem{\@idxitem \hspace*{20\p@}}
654 \newcommand\subsubitem{\@idxitem \hspace*{30\p@}}
655 \newcommand\indexspace{\par \vskip 10\p@ \@plus5\p@ \@minus3\p@\relax}
656 \renewcommand\footnoterule{%
657   \kern-3\p@
658   \hrule\@width.4\columnwidth
659   \kern2.6\p@}
660 \@addtoreset{footnote}{chapter}
661 \newcommand\@makefntext[1]{%
662     \parindent 1em%
663     \noindent
664     \hb@xt@1.8em{\hss\@makefnmark}#1}
```

Kettering requires that these be all caps. While we do have automatic uppercasing in spots, it's best to cover all the bases.

```
665 \newcommand\contentsname{TABLE OF CONTENTS}
666 \newcommand\listillusname{LIST OF ILLUSTRATIONS}
667 \newcommand\bibname{REFERENCES}                 % APA format!
668 \newcommand\indexname{INDEX}
669 \newcommand\figurename{Figure}
670 \newcommand\tablename{Table}
671 \newcommand\partname{PART}
672 \newcommand\chaptername{Chapter}
673 \newcommand\appendixname{APPENDIX}
674 \newcommand\appendixtocname{APPENDICES}
675 \newcommand\prefacename{PREFACE}
676 \def\today{\ifcase\month\or
677   January\or February\or March\or April\or May\or June\or
678   July\or August\or September\or October\or November\or December\fi
```

```
679   \space\number\day, \number\year}
680 \setlength\columnsep{10\p@}
681 \setlength\columnseprule{0\p@}
682 \pagestyle{plain}
```

The thesis begins with Roman page numerals, and continues with Arabic. Some sections in the front are double-spaced.

```
683 \pagenumbering{roman}
684 \newcommand\begincontent{
685 \clearpage
686 \pagenumbering{arabic}
687 \doublespacing
688 }
```

Margin Setup

```
689 \setlength{\oddsidemargin}{.5 in}
690 \setlength{\footskip}{.5 in}
691 \setlength{\textheight}{9 in}
692 \setlength{\textwidth}{6 in}
693 \setlength{\topmargin}{0pt}
694 \setlength{\headheight}{0pt}
695 \setlength{\headsep}{0pt}
696 \setlength{\voffset}{0pt}
697 \setlength{\hoffset}{0pt}
698 \setlength{\textheight}{9in}
699
700
701 \if@twoside
702 \else
703   \raggedbottom
704 \fi
705 \if@twocolumn
706   \twocolumn
707   \sloppy
708   \flushbottom
709 \else
710   \onecolumn
711 \fi
```

Rather than stomp on the documentation, I'll simply indicate that it's right below. Note that I have altered the file somewhat. If I was less lazy, I'd pull out the unneccesary bits.

```
712 %
713 % Save file as: ENDNOTES.STY
714 % modified by --bg (B.Gaulle) 09/14/94 for:
715 %            1) replace  (why a 8bit char here?) by ^ as a default.
716 %            2) force \catcode of > to be 12 (implied by \@doanenot).
717 %        by --bg again 03/22/95 for:
718 %            3) reseting appropriate catcode of > in case it were
719 %               used as an active char before \@endanenote (was
720 %               pointed by Ch. Pallier).
```

```
721 %%%% free to distribute by John_Lavagnino@Brown.edu on Thu, 23 Mar 1995
722 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
723 %
724 %          ****************************************
725 %          *              ENDNOTES                *
726 %          ****************************************
727 %
728 %  Date of this version: 24 September 1991.
729 %
730 %  Based on the FOOTNOTES section of
731 %  LATEX.TEX (VERSION 2.09 - RELEASE OF 19 April 1986), with
732 %  "footnote" changed to "endnote" and "fn" changed to "en" (where
733 %  appropriate), with all the minipage stuff pulled out, and with
734 %  some small changes for the different operation of endnotes.
735 %
736 %  Uses an extra external file, with .ENT extension, to hold the
737 %  text of the endnotes.  This may be deleted after the run; a new
738 %  version is generated each time.
739 %
740 %  This code does not obey \nofiles.  Perhaps it should.
741 %
742 %   John Lavagnino (lav@brandeis.bitnet), 9/23/88
743 %   Department of English and American Literature,
744 %      Brandeis University
745 %
746 %  To turn all the footnotes in your documents into endnotes, say
747 %
748 %      \let\footnote=\endnote
749 %
750 %  in your preamble, and then add something like
751 %
752 %      \newpage
753 %      \begingroup
754 %      \parindent 0pt
755 %      \parskip 2ex
756 %      \def\enotesize{\normalsize}
757 %      \theendnotes
758 %      \endgroup
759 %
760 % as the last thing in your document.
761 %
762 %          ****************************************
763 %          *              CHANGE LOG              *
764 %          ****************************************
765 %
766 % JL  Modified to include \addtoendnotes.  JL, 10/22/89.
767 %
768 % JK  Modification by J"org Knappen 25. 2. 1991:
769 % JK
770 % JK  Introduced \notesname in the spirit of international \LaTeX.
```

19

```
771 % JK  \notesname is set per default to be {Notes}, but can easily
772 % JK  be redifined, e.g. for german language
773 % JK  \renewcommand{\notesname}{Anmerkungen}
774 %
775 % DW Modification by Dominik Wujastyk, London, 19 September 1991:
776 % DW
777 % DW Moved the line
778 % DW           \edef\@currentlabel{\csname p@endnote\endcsname\@theenmark}
779 % DW out of the definition of \@endnotetext and into the definition
780 % DW of \@doanenote so that \label and \ref commands work correctly in
781 % DW endnotes.  Otherwise, the \label just pointed to the last section
782 % DW heading (or whatever) preceding the \theendnotes command.
783 %
784 % JL Revised documentation and macros.  24 Sept 1991.
785 %
786 %        ****************************************
787 %        *          ENDNOTE COMMANDS            *
788 %        ****************************************
789 %
790 %
791 %   \endnote{NOTE}        : User command to insert a endnote.
792 %
793 %   \endnote[NUM]{NOTE}   : User command to insert a endnote numbered
794 %                          NUM, where NUM is a number -- 1, 2,
795 %                          etc.  For example, if endnotes are numbered
796 %                          *, **, etc. within pages, then  \endnote[2]{...}
797 %                          produces endnote '**'.  This command does  not
798 %                          step the endnote counter.
799 %
800 %   \endnotemark[NUM]     : Command to produce just the endnote mark in
801 %                           the text, but no endnote.  With no argument,
802 %                           it steps the endnote counter before  generating
803 %                           the mark.
804 %
805 %   \endnotetext[NUM]{TEXT} : Command to produce the endnote but no
806 %                             mark.  \endnote is equivalent to
807 %                             \endnotemark \endnotetext .
808 %
809 %   \addtoendnotes{TEXT} : Command to add text or commands to current
810 %                             endnotes file: for inserting headings,
811 %                             pagebreaks, and the like into endnotes
812 %                             sections.  TEXT a moving argument:
813 %                             \protect required for fragile commands.
814 %
815 %        ****************************************
816 %        *          ENDNOTE USER COMMANDS       *
817 %        ****************************************
818 %
819 %   Endnotes use the following parameters, similar to those relating
820 %   to footnotes:
```

```
821 %
822 %    \enotesize   : Size-changing command for endnotes.
823 %
824 %    \theendnote : In usual LaTeX style, produces the endnote number.
825 %
826 %    \@theenmark : Holds the current endnote's mark--e.g., \dag or '1' or 'a'.
827 %
828 %    \@makeenmark : A macro to generate the endnote marker from  \@theenmark
829 %                    The default definition is \hbox{$^\@theenmark$}.
830 %
831 %    \@makeentext{NOTE} :
832 %        Must produce the actual endnote, using \@theenmark as the mark
833 %        of the endnote and NOTE as the text.  It is called when effectively
834 %        inside a \parbox, with \hsize = \columnwidth.  For example, it might
835 %        be as simple as
836 %                $^{\@theenmark}$ NOTE
837 %
838 %
839 %        ****************************************
840 %        *          ENDNOTE PSEUDOCODE          *
841 %        ****************************************
842 %
843 % \endnote{NOTE}  ==
844 %  BEGIN
845 %     \stepcounter{endnote}
846 %     \@theenmark :=G eval (\theendnote)
847 %     \@endnotemark
848 %     \@endnotetext{NOTE}
849 %  END
850 %
851 % \endnote[NUM]{NOTE} ==
852 %  BEGIN
853 %     begingroup
854 %        counter endnote :=L NUM
855 %        \@theenmark :=G eval (\theendnote)
856 %     endgroup
857 %     \@endnotemark
858 %     \@endnotetext{NOTE}
859 %  END
860 %
861 % \@endnotetext{NOTE} ==
862 %  BEGIN
863 %     write to \@enotes file: "\@doanenote{ENDNOTE MARK}"
864 %     begingroup
865 %        \next := NOTE
866 %        set \newlinechar for \write to \space
867 %        write to \@enotes file: \meaning\next
868 %                (that is, "macro:->NOTE)
869 %     endgroup
870 %  END
```

21

```
871 %
872 % \addtoendnotes{TEXT} ==
873 %   BEGIN
874 %     open endnotes file if not already open
875 %     begingroup
876 %         let \protect to \string
877 %         set \newlinechar for \write to \space
878 %         write TEXT to \@enotes file
879 %     endgroup
880 %   END
881 %
882 % \endnotemark        ==
883 %   BEGIN \stepcounter{endnote}
884 %         \@theenmark :=G eval(\theendnote)
885 %         \@endnotemark
886 %   END
887 %
888 % \endnotemark[NUM] ==
889 %    BEGIN
890 %        begingroup
891 %          endnote counter :=L NUM
892 %         \@theenmark :=G eval(\theendnote)
893 %        endgroup
894 %        \@endnotemark
895 %    END
896 %
897 % \@endnotemark ==
898 %    BEGIN
899 %     \leavevmode
900 %     IF hmode THEN \@x@sf := \the\spacefactor FI
901 %     \@makeenmark           % put number in main text
902 %     IF hmode THEN \spacefactor := \@x@sf FI
903 %    END
904 %
905 % \endnotetext        ==
906 %    BEGIN \@theenmark :=G eval (\theendnote)
907 %          \@endnotetext
908 %    END
909 %
910 % \endnotetext[NUM] ==
911 %    BEGIN begingroup  counter endnote :=L NUM
912 %                      \@theenmark :=G eval (\theendnote)
913 %          endgroup
914 %          \@endnotetext
915 %    END
916 %
917 %       ****************************************
918 %       *            ENDNOTE MACROS            *
919 %       ****************************************
920 %
```

22

```
921
922 \@definecounter{endnote}
923 \def\theendnote{\arabic{endnote}}
924
925 % Default definition
926 \def\@makeenmark{\hbox{$^{\@theenmark}$}}
927
928 \newdimen\endnotesep
929
930 \def\endnote{\@ifnextchar[{\@xendnote}{\stepcounter
931     {endnote}\xdef\@theenmark{\theendnote}\@endnotemark\@endnotetext}}
932
933 \def\@xendnote[#1]{\begingroup \c@endnote=#1\relax
934     \xdef\@theenmark{\theendnote}\endgroup
935     \@endnotemark\@endnotetext}
936
937 %  Here begins endnote code that's really different from the footnote
938 % code of LaTeX.
939
940 \let\@doanenote=0
941 \let\@endanenote=0
942
943 \newwrite\@enotes
944 \newif\if@enotesopen \global\@enotesopenfalse
945
946 \def\@openenotes{\immediate\openout\@enotes=\jobname.ent\relax
947        \global\@enotesopentrue}
948
949 %  The stuff with \next and \meaning is a trick from the TeXbook, 382,
950 % there intended for setting verbatim text, but here used to avoid
951 % macro expansion when the footnote text is written.  \next will have
952 % the entire text of the footnote as one long line, which might well
953 % overflow limits on output line length; the business with \newlinechar
954 % makes every space become a newline in the \@enotes file, so that all
955 % of the lines wind up being quite short.
956
957 \long\def\@endnotetext#1{%
958     \if@enotesopen \else \@openenotes \fi
959     \immediate\write\@enotes{\@doanenote{\@theenmark}}%
960     \begingroup
961        \def\next{#1}%
962        \newlinechar='40
963        \immediate\write\@enotes{\meaning\next}%
964     \endgroup
965     \immediate\write\@enotes{\@endanenote}}
966
967 % \addtoendnotes works the way the other endnote macros probably should
968 % have, requiring the use of \protect for fragile commands.
969
970 \long\def\addtoendnotes#1{%
```

```
 971       \if@enotesopen \else \@openenotes \fi
 972       \begingroup
 973          \newlinechar='40
 974          \let\protect\string
 975          \immediate\write\@enotes{#1}%
 976       \endgroup}
 977
 978 %  End of unique endnote code
 979
 980 \def\endnotemark{\@ifnextchar[{\@xendnotemark
 981      }{\stepcounter{endnote}\xdef\@theenmark{\theendnote}\@endnotemark}}
 982
 983 \def\@xendnotemark[#1]{\begingroup \c@endnote #1\relax
 984    \xdef\@theenmark{\theendnote}\endgroup \@endnotemark}
 985
 986 \def\@endnotemark{\leavevmode\ifhmode
 987   \edef\@x@sf{\the\spacefactor}\fi \@makeenmark
 988    \ifhmode\spacefactor\@x@sf\fi\relax}
 989
 990 \def\endnotetext{\@ifnextchar
 991      [{\@xendnotenext}{\xdef\@theenmark{\theendnote}\@endnotetext}}
 992
 993 \def\@xendnotenext[#1]{\begingroup \c@endnote=#1\relax
 994    \xdef\@theenmark{\theendnote}\endgroup \@endnotetext}
 995
 996
 997 %  \theendnotes actually prints out the endnotes.
 998
 999 % Endnotes auto-renumber at the end of each chapter (or actually, when
1000 % they're printed...)
1001 %  \enoteformat is provided so user can specify some special formatting
1002 % for the endnotes.  It needs to set up the paragraph parameters, start
1003 % the paragraph, and print the label.  The \leavemode stuff is to make
1004 % and undo a dummy paragraph, to get around the games \section*
1005 % plays with paragraph indenting.
1006
1007 \def\notesname{NOTES}% <------ AE
1008 \def\enoteheading{\chapter*{\notesname
1009   \@mkboth{\uppercase{\notesname}}{\uppercase{\notesname}}}%
1010      \leavevmode\par\vskip-\baselineskip}
1011
1012 \def\enoteformat{\vspace{\baselineskip}\rightskip\z@ \leftskip\z@ \parindent=1.8em
1013      \leavevmode\llap{\hbox{$^{\@theenmark}$}}}
1014
1015 \def\enotesize{\normalsize}
1016
1017 % The definition of \ETC. is needed only for versions of TeX prior
1018 % to 2.992.  Those versions limited \meaning expansions to 1000
1019 % characters; in 2.992 and beyond there is no limit.  At Brandeis the
1020 % BIGLATEX program changed the code in the token_show procedure of
```

```
1021 % TeX to eliminate this problem, but most ''big'' versions of TeX
1022 % will not solve this problem.
1023
1024 \def\theendnotes{\immediate\closeout\@enotes \global\@enotesopenfalse
1025   \begingroup
1026     \makeatletter
1027 % the following is to save catcode of ''>'' and restore it in \@endanenote
1028 \edef\@tempa{'\string >}%
1029 \ifnum\catcode\@tempa=11\let\@ResetGT\relax% accepts also that > were active
1030   \else\edef\@ResetGT{\noexpand\catcode\@tempa=\the\catcode\@tempa}%
1031 \fi%
1032     \catcode'>=12% char > will be read as char so force it to \catcode 12 --bg\edef\GOfrench{'\
1033     \def\@doanenote##1##2>{\def\@theenmark{##1}\par\begingroup
1034       \@ResetGT%\catcode'>=13
1035       \edef\@currentlabel{\csname p@endnote\endcsname\@theenmark} %DW
1036       \enoteformat}
1037     \def\@endanenote{\par\endgroup}%
1038     \def\ETC.{\errmessage{Some long endnotes will be truncated; %
1039                            use BIGLATEX to avoid this}%
1040         \def\ETC.{\relax}}
1041     \clearpage
1042     \enoteheading
1043     \enotesize
1044     \begin{singlespacing}
1045     \input{\jobname.ent}%
1046     \end{singlespacing}
1047   \endgroup
1048   \setcounter{endnote}{0}}
1049 \endinput
```