

# kuthesis.dtx<sup>\*</sup>

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April 15, 2015

## Abstract

Kuthesis.dtx is a style file for the Kettering University Thesis Format for L<sup>A</sup>T<sub>E</sub>X. 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 L<sup>A</sup>T<sub>E</sub>X style and a B<sup>I</sup>B<sub>T</sub>E<sub>X</sub> 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.

**Arthur's 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 headscratches. Second, Professor James McDonald of Kettering University, who encouraged me to use L<sup>A</sup>T<sub>E</sub>X to create my thesis. Finally, my fiancé, 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.

**Alison's thanks.** I'd like to thank Mark Wicks for digging up Arthur's work over a decade after the fact, and Arthur for not thinking it creepy that I contacted him out of the blue regarding this project, and for permitting me to host it on Github and update it for the current thesis specifications.

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<sup>\*</sup>This file has version v0.5 last revised 2015/04/15

# 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  $\text{\TeX}$  distribution.

## 1.2 Installation

1. Make sure the files are in your current working directory and run `kuthesis.ins` through  $\text{\TeX}$ .
2. Move the generated files to someplace you'd like them to be. I'm sure there's an official spot.
3. If your  $\text{\TeX}$  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 employer with `\employer{MAXIMUM WIDGETS}`. Finally, define your graduation year with `\gdate{2015}`. 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 appendices 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 university 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   }
```

```

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{\employer}[1]{\ifx\empty#1\else\gdef\@employer{#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\@employer{\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. There is a separate `\maketitle` command for each type of thesis (co-op, research, professional practice, and e-ship). Yes, I know this is bloody awful. I'm going to fix it later.

```

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{\MakeUppercase{\@title}}\\
156 \vspace{2em}
157 A Thesis written for \\
158 \vspace{1em}
159 \textbf{\@employer}\\
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 Student      \\
185 \\
186 \\ \hline
187 Employer Thesis Advisor ~~~~~~ \\
188 \\
189 \\ \hline
190 Faculty Thesis 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 fulfillment of the
204 graduation requirements of Kettering University needed
205 to obtain a Bachelor of Science in {\@department} Degree.
206 \par
207 The conclusions and opinions expressed in this thesis are those
208 of the student author and do not necessarily represent the position
209 of Kettering University or anyone else affiliated with this
210 culminating undergraduate experience.
211 \end{doublespace}

```

```

212 }%\maketitle
    Coop thesis.
213 \newcommand{\maketitlecoop}
214 {
215 \begin{titlepage}
216 \setcounter{page}{1}
217 \begin{spacing}{1}
218 \begin{center}
219 \mbox{}
220 \vfill
221 \textbf{\MakeUppercase{\@title}}\\
222 \vspace{2em}
223 A Co-op Thesis written for \\
224 \vspace{1em}
225 \textbf{\@employer}\\
226 \vspace{1em}
227 and submitted to \\
228 \vspace{1em}
229 \textbf{KETTERING UNIVERSITY} \\
230 \vspace{3em}
231 in partial fulfillment \\
232 of the requirements for the \\
233 degree of \\
234 \vspace{1em}
235 \textbf{BACHELOR OF SCIENCE IN \MakeUppercase{\@department}} \\
236 \vspace{3em}
237 by \\
238 \vspace{1em}
239 \textbf{\MakeUppercase{\@author}}\\
240 \vspace{1em}
241 {\@gdate} \\
242 \vspace{1in}
243 \end{center}
244
245 \begin{flushright}
246
247
248 \begin{tabular}{@{}l}
249 \hline
250 Student \\\
251 \\\
252 \hline
253 Employer Thesis Advisor~~~~~ \\\
254 \\\
255 \hline
256 Faculty Thesis Advisor \\\
257 \end{tabular}
258
259

```



```

260 \end{flushright}
261 \end{spacing}
262 \end{titlepage}
263 \setcounter{page}{2}
264 \setcounter{secnumdepth}{-1}
265
266 \chapter{DISCLAIMER}
267 \begin{doublespace}
268 \par
269 This thesis is being submitted as partial fulfillment of the
270 graduation requirements of Kettering University needed
271 to obtain a Bachelor of Science in {\@department} Degree.
272 \par
273 The conclusions and opinions expressed in this thesis are those
274 of the student author and do not necessarily represent the position
275 of Kettering University or anyone else affiliated with this
276 culminating undergraduate experience.
277 \end{doublespace}
278 }%\maketitlecoop

```

Research thesis.

```

279 \newcommand{\maketitleresearch}
280 {
281 \begin{titlepage}
282 \setcounter{page}{1}
283 \begin{spacing}{1}
284 \begin{center}
285 \mbox{}
286 \vfill
287 \textbf{\MakeUppercase{\@title}}\\
288 \vspace{2em}
289 A Research Thesis written for \\
290 \vspace{1em}
291 \textbf{KETTERING UNIVERSITY}\\
292 \vspace{1em}
293 and submitted to \\
294 \vspace{1em}
295 \textbf{KETTERING UNIVERSITY} \\
296 \vspace{3em}
297 in partial fulfillment \\
298 of the requirements for the \\
299 degree of \\
300 \vspace{1em}
301 \textbf{BACHELOR OF SCIENCE IN \MakeUppercase{\@department}} \\
302 \vspace{3em}
303 by \\
304 \vspace{1em}
305 \textbf{\MakeUppercase{\@author}} \\
306 \vspace{1em}
307 {\@gdate} \\

```

```

308     \vspace{1in}
309 \end{center}
310
311 \begin{flushright}
312
313
314 \begin{tabular}{@{}l}
315 \\\hline
316 Student    \\\
317 \\\
318 \\\hline
319 Faculty Thesis Advisor~~~~~ \\\
320 \\\
321 \\\hline
322 Committee Member \\\
323 \end{tabular}
324
325
326 \end{flushright}
327 \end{spacing}
328 \end{titlepage}
329 \setcounter{page}{2}
330 \setcounter{secnumdepth}{-1}
331
332 \chapter{DISCLAIMER}
333 \begin{doublespace}
334 \par
335 This thesis is being submitted as partial fulfillment of the
336 graduation requirements of Kettering University needed
337 to obtain a Bachelor of Science in {\@department} Degree.
338 \par
339 The conclusions and opinions expressed in this thesis are those
340 of the student author and do not necessarily represent the position
341 of Kettering University or anyone else affiliated with this
342 culminating undergraduate experience.
343 \end{doublespace}
344 }%\maketitleresearch
345
346 Professional Practice thesis.
347 \newcommand{\maketitlepp}
348 {
349 \begin{titlepage}
350 \setcounter{page}{1}
351 \begin{spacing}{1}
352 \begin{center}
353 \mbox{}
354 \vfill
355 \textbf{\MakeUppercase{\@title}}\\
356 \vspace{2em}
357 A Professional Practice Thesis written for \\\

```

```

356     \vspace{1em}
357     \textbf{{\@employer}}\\
358     \vspace{1em}
359     and submitted to \\
360     \vspace{1em}
361     \textbf{KETTERING UNIVERSITY} \\
362     \vspace{3em}
363     in partial fulfillment \\
364     of the requirements for the \\
365     degree of \\
366     \vspace{1em}
367     \textbf{BACHELOR OF SCIENCE IN \MakeUppercase{\@department}} \\
368     \vspace{3em}
369     by \\
370     \vspace{1em}
371     \textbf{\MakeUppercase{\@author}}\\
372     \vspace{1em}
373     {\@gdate} \\
374     \vspace{1in}
375 \end{center}
376
377 \begin{flushright}
378
379
380 \begin{tabular}{@{}l}
381 \\\hline
382 Student    \\
383 \\
384 \\\hline
385 Company Liaison~~~~~ \\
386 \\
387 \\\hline
388 Faculty Thesis Advisor \\
389 \end{tabular}
390
391
392 \end{flushright}
393 \end{spacing}
394 \end{titlepage}
395 \setcounter{page}{2}
396 \setcounter{secnumdepth}{-1}
397
398 \chapter{DISCLAIMER}
399 \begin{doublespace}
400 \par
401 This thesis is being submitted as partial fulfillment of the
402 graduation requirements of Kettering University needed
403 to obtain a Bachelor of Science in {\@department} Degree.
404 \par
405 The conclusions and opinions expressed in this thesis are those

```

```

406     of the student author and do not necessarily represent the position
407     of Kettering University or anyone else affiliated with this
408     culminating undergraduate experience.
409     \end{doublespace}
410 }%\maketitlepp
    E-ship thesis.
411 \newcommand{\maketitleeship}
412 {
413 \begin{titlepage}
414     \setcounter{page}{1}
415     \begin{spacing}{1}
416     \begin{center}
417         \mbox{}
418         \vfill
419         \textbf{\MakeUppercase{\@title}}\\
420         \vspace{2em}
421         An E-Ship Thesis written by \\
422         \vspace{1em}
423         \textbf{\MakeUppercase{\@author}}\\
424         \vspace{1em}
425         and submitted to \\
426         \vspace{1em}
427         \textbf{KETTERING UNIVERSITY} \\
428         \vspace{3em}
429         in partial fulfillment \\
430         of the requirements for the \\
431         degree of \\
432         \vspace{1em}
433         \textbf{BACHELOR OF SCIENCE IN \MakeUppercase{\@department}} \\
434         \vspace{4em}
435         {\@gdate} \\
436         \vspace{1in}
437     \end{center}
438
439     \begin{flushright}
440
441
442     \begin{tabular}{@{}l}
443     \\ \hline
444     Student    \\
445     \\
446     \\ \hline
447     Faculty Thesis Advisor~~~~~ \\
448     \\
449     \\ \hline
450     Committee Member \\
451     \end{tabular}
452
453

```

```

454 \end{flushright}
455 \end{spacing}
456 \end{titlepage}
457 \setcounter{page}{2}
458 \setcounter{secnumdepth}{-1}
459
460 \chapter{DISCLAIMER}
461 \begin{doublespace}
462 \par
463 This thesis is being submitted as partial fulfillment of the
464 graduation requirements of Kettering University needed
465 to obtain a Bachelor of Science in {\@department} Degree.
466 \par
467 The conclusions and opinions expressed in this thesis are those
468 of the student author and do not necessarily represent the position
469 of Kettering University or anyone else affiliated with this
470 culminating undergraduate experience.
471 \end{doublespace}
472 }%\maketitleeship
473
474 \newcommand*\chaptermark[1]{%
    Chapters are the only numbered objects, and they use Roman numerals. Roman
    numerals are set below.
475 \setcounter{secnumdepth}{0}
476 \setcounter{secnumdepth}{0}
477 \newcounter {part}
478 \newcounter {chapter}
479 \newcounter {section}[chapter]
480 \newcounter {subsection}[section]
481 \newcounter {subsubsection}[subsection]
482 \newcounter {paragraph}[subsubsection]
483 \newcounter {subparagraph}[paragraph]
484 \renewcommand \thepart {\@Roman\c@part}
485 \renewcommand \thechapter {\@Roman\c@chapter}
486 \renewcommand \thesection {\thechapter.\@arabic\c@section}
487 \renewcommand\thesubsection {\thesection.\@arabic\c@subsection}
488 \renewcommand\thesubsubsection{\thesubsection .\@arabic\c@subsubsection}
489 \renewcommand\theparagraph {\thesubsubsection.\@arabic\c@paragraph}
490 \renewcommand\thesubparagraph {\theparagraph.\@arabic\c@subparagraph}
491 \newcommand\@chapapp{\chaptername}
492 \newcommand\part{%
493 \if@openright
494 \cleardoublepage
495 \else
496 \clearpage
497 \fi
498 \thispagestyle{plain}%
499 \if@twocolumn
500 \onecolumn

```

```

501 \@tempswatrue
502 \else
503 \@tempswafalse
504 \fi
505 \null\vfil
506 \secdef\@part\@spart}
507
508 \def\@part[#1]#2{%
509 \ifnum \c@secnumdepth >-2\relax
510 \refstepcounter{part}%
511 \addcontentsline{toc}{part}{\thepart\hspace{1em}#1}%
512 \else
513 \addcontentsline{toc}{part}{#1}%
514 \fi
515 \markboth{}{}%
516 {\centering
517 \interlinepenalty \@M
518 \normalfont
519 \ifnum \c@secnumdepth >-2\relax
520 \huge\bfseries \partname~\thepart
521 \par
522 \vskip 20\p@
523 \fi
524 \Huge \bfseries #2\par}%
525 \@endpart}
526 \def\@spart#1{%
527 {\centering
528 \interlinepenalty \@M
529 \normalfont
530 \Huge \bfseries #1\par}%
531 \@endpart}
532 \def\@endpart{\vfil\newpage
533 \if@twoside
534 \null
535 \thispagestyle{empty}%
536 \newpage
537 \fi
538 \if@tempswa
539 \twocolumn
540 \fi}
541 \newcommand\chapter{\if@openright\cleardoublepage\else\clearpage\fi
542 \thispagestyle{plain}%
543 \global\@topnum\z@
544 \@afterindentfalse
545 \secdef\@chapter\@schapter}

```

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

```

546 \def\@chapter[#1]#2{\ifnum \c@secnumdepth >\m@ne
547 \refstepcounter{chapter}%

```

```

548             \typeout{\@chapapp\space\thechapter.}%
549             \addcontentsline{toc}{chapter}%
550                 {\protect\numberline{\thechapter\@.}\MakeUppercase{#1}}%
551         \else
552             \addcontentsline{toc}{chapter}{\MakeUppercase{#1}}%
553         \fi
554         \chaptermark{#1}%
555         \if@twocolumn
556             \@topnewpage[\@makechapterhead{#2}]%
557         \else
558             \@makechapterhead{#2}%
559             \@afterheading
560         \fi}

```

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

```

561 \def\@makechapterhead#1{%
562     \vspace*{1in}%
563     {\parindent \z@ \centering \normalfont
564         \ifnum \c@secnumdepth >\m@ne
565             \bfseries \thechapter.\enspace
566         \fi
567         \bfseries\MakeUppercase{#1}\par\nobreak
568         \vskip 40\p@
569     }}
570 \def\@makeschapterhead#1{%
571     \vspace*{1in}%
572     {\parindent \z@ \centering
573         \normalfont
574         \interlinepenalty\@M
575         \bfseries\MakeUppercase{#1}\par\nobreak
576         \vskip 40\p@
577     }}
578 \def\@schapter#1{\if@twocolumn
579     \@topnewpage[\@makeschapterhead{#1}]%
580 \else
581     \@makeschapterhead{#1}%
582     \@afterheading
583 \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.

```

584 \newcommand\section{\@startsection{section}{1}{0mm}%
585                                     {3.5ex \@plus 1ex \@minus .2ex}%
586                                     {2.3ex \@plus .2ex}%
587                                     {\raggedright\normalsize\bfseries\underline}}%
588 \newcommand\subsection{\@startsection{subsection}{2}{0mm}%
589                                     {3.25ex \@plus 1ex \@minus .2ex}%
590                                     {1.5ex \@plus .2ex}%

```

```

591                                     {\normalfont\normalsize\bfseries\underline}}%
592 \newcommand\subsubsection{\@startsection{subsubsection}{3}{0mm}%
593                                     {3.25ex \@plus 1ex \@minus .2ex}%
594                                     {1.5ex \@plus .2ex}%
595                                     {\normalfont\normalsize\bfseries\underline}}%
596 \newcommand\paragraph{\@startsection{paragraph}{4}{\z@}%
597                                     {3.25ex \@plus 1ex \@minus .2ex}%
598                                     {-1em}%
599                                     {\normalfont\normalsize\bfseries}}
600 \newcommand\subparagraph{\@startsection{subparagraph}{5}{\parindent}%
601                                     {3.25ex \@plus 1ex \@minus .2ex}%
602                                     {-1em}%
603                                     {\normalfont\normalsize\bfseries}}
604 \if@twocolumn
605   \setlength\leftmargini {2em}
606 \else
607   \setlength\leftmargini {2.5em}
608 \fi
609 \leftmargin \leftmargini
610 \setlength\leftmarginii {2.2em}
611 \setlength\leftmarginiii {1.87em}
612 \setlength\leftmarginiv {1.7em}
613 \if@twocolumn
614   \setlength\leftmarginv {.5em}
615   \setlength\leftmarginvi {.5em}
616 \else
617   \setlength\leftmarginv {1em}
618   \setlength\leftmarginvi {1em}
619 \fi
620 \setlength \labelsep {.5em}
621 \setlength \labelwidth{\leftmargini}
622 \addtolength\labelwidth{-\labelsep}
623 \@beginparpenalty -\@lowpenalty
624 \@endparpenalty -\@lowpenalty
625 \@itempenalty -\@lowpenalty
626 \renewcommand\theenumi{\@arabic\c@enumi}
627 \renewcommand\theenumii{\@alph\c@enumii}
628 \renewcommand\theenumiii{\@roman\c@enumiii}
629 \renewcommand\theenumiv{\@Alph\c@enumiv}
630 \newcommand\labelenumi{\theenumi.}
631 \newcommand\labelenumii{(\theenumii)}
632 \newcommand\labelenumiii{\theenumiii.}
633 \newcommand\labelenumiv{\theenumiv.}
634 \renewcommand\p@enumii{\theenumi}
635 \renewcommand\p@enumiii{\theenumi(\theenumii)}
636 \renewcommand\p@enumiv{\p@enumiii\theenumiii}
637 \newcommand\labelitemi{\textbullet}
638 \newcommand\labelitemii{\normalfont\bfseries \textendash}
639 \newcommand\labelitemiii{\textasteriskcentered}
640 \newcommand\labelitemiv{\textperiodcentered}

```



```

641 \newenvironment{description}
642     {\singlespacing\begin{list}{\}%
643      \renewcommand{\makelabel}[1]{\normalfont ##1:\hfil}%
644      \setlength{\labelwidth}{1.5 in}%
645      \setlength{\leftmargin}{\labelwidth+\labelsep}}
646     {\end{list}\doublespacing}
647 \newcommand*{descriptionlabel}[1]{\hspace\labelsep
648                                \normalfont #1:\hfil}
649 \newenvironment{preface}
650 {
651 \setcounter{secnumdepth}{-1}
652 \chapter{\prefacename}\begin{doublespacing}
653 }
654 {\end{doublespacing}\setcounter{secnumdepth}{0}}
655 \newenvironment{verse}
656     {\let\\ \@centercr
657      \list{}{\itemsep      \z@
658              \itemindent   -1.5em%
659              \listparindent\itemindent
660              \rightmargin  \leftmargin
661              \advance\leftmargin 1.5em}%
662      \item\relax}
663     {\endlist}
664 \newenvironment{quotation}
665     {\list{}{\listparindent 1.5em%
666              \itemindent     \listparindent
667              \rightmargin     \leftmargin
668              \parsep          \z@ \@plus\p@}%
669      \item\relax}
670     {\endlist}
671 \newenvironment{quote}
672     {\list{}{\rightmargin\leftmargin}%
673      \item\relax}
674     {\endlist}
675 \if@compatibility
676 \newenvironment{titlepage}
677     {%
678     \if@twocolumn
679     \@restonecoltrue\onecolumn
680     \else
681     \@restonecolfalse\newpage
682     \fi
683     \thispagestyle{empty}%
684     \setcounter{page}\z@
685     }%
686     {\if@restonecol\twocolumn \else \newpage \fi
687     }
688 \else
689 \newenvironment{titlepage}
690     {%

```

```

691     \if@twocolumn
692         \@restonecoltrue\onecolumn
693     \else
694         \@restonecolfalse\newpage
695     \fi
696     \thispagestyle{empty}%
697     \setcounter{page}\@ne
698 }%
699 {\if@restonecol\twocolumn \else \newpage \fi
700 \if@twoside\else
701     \setcounter{page}\@ne
702 \fi
703 }
704 \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.

```

705 \newcommand\appendix{\par
706 \thispagestyle{plain}%
707 \if@twocolumn\onecolumn\@tempswattrue\else\@tempswafalse\fi
708 \markboth{}{}%
709 {\setcounter{secnumdepth}{-1}
710 \chapter{\appendixtocname}
711 \setcounter{secnumdepth}{0}}%
712 \vfil\newpage
713 \if@twoside
714     \if@openright
715         \null
716         \thispagestyle{empty}%
717     \newpage
718 \fi
719 \fi
720 \if@tempswa
721     \twocolumn
722 \fi
723
724 \setcounter{section}{0}
725 \setcounter{chapter}{0}
726 \renewcommand\@chapapp{\appendixname}
727 \renewcommand\thechapter{\@Alph{c}chapter}
728 \let\oldac1@pp=\addcontentsline
729 \def\addcontentsline##1##2##3{%
730     \ifthenelse{\equal{##1}{toc}}{%
731         \ifthenelse{\equal{##2}{chapter}}{%
732             \addtocontents{##1}{\protect\contentsline{##2}%
733                 {\appendixname\space ##3}{\thepage}}}%

```

```

734     {\oldac1@pp{##1}{##2}{##3}}}%
735     {\oldac1@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.

```

736 \def\@chapter[##1]##2{\ifnum \c@secnumdepth >\m@ne
737     \refstepcounter{chapter}%
738     \typeout{\@chapapp\space\thechapter}%
739     \addcontentsline{toc}{section}%
740         {\@chapapp\space\thechapter: ##1}%
741     \else
742     \addcontentsline{toc}{chapter}{##1}%
743     \fi
744     \chaptermark{##1}%
745     \if@twocolumn
746     \@topnewpage[\@makechapterhead{##2}]%
747     \else
748     \@makechapterhead{##2}%
749     \afterheading
750     \fi}

```

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

```

751 \def\@makechapterhead##1{%
752     \vspace*{1in}%
753     {\parindent \z@ \centering \normalfont
754     \ifnum \c@secnumdepth >\m@ne
755         \bfseries \@chapapp\ \thechapter\@par
756     \fi
757     \vskip 40\p@
758     \bfseries \MakeUppercase##1\par\nobreak
759     \clearpage
760     }}
761 }
762 \setlength\arraycolsep{5\p@}
763 \setlength\tabcolsep{6\p@}
764 \setlength\arrayrulewidth{.4\p@}
765 \setlength\doublerulesep{2\p@}
766 \setlength\tabbingsep{\labelsep}
767 \skip\@mpfootins = \skip\footins
768 \setlength\fbboxsep{3\p@}
769 \setlength\fbboxrule{.4\p@}
770 \@addtoreset {equation}{chapter}
771 \renewcommand\theequation
772     {\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.

```

773 \newcounter{figure}
774 \def\fps@figure{tbp}

```

```

775 \def\ftype@figure{1}
776 \def\ext@figure{lof}
777 \def\fnun@figure{\underline{\figurename~\thefigure.}}
778 \newenvironment{figure}
779         {\@float{figure}}
780         {\end@float}
781 \newenvironment{figure*}
782         {\@dblfloat{figure}}
783         {\end@dblfloat}

```

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

```

784 \newcounter{table}
785 \def\fps@table{tbp}
786 \def\ftype@table{2}
787 \def\ext@table{lot}
788 \def\fnun@table{\underline{\tablename~\thetable.}}
789 \newenvironment{table}
790         {\@float{table}}
791         {\end@float}
792 \newenvironment{table*}
793         {\@dblfloat{table}}
794         {\end@dblfloat}
795 \newlength\abovecaptionskip
796 \newlength\belowcaptionskip
797 \setlength\abovecaptionskip{10\p@}
798 \setlength\belowcaptionskip{0\p@}
799 \long\def\@makecaption#1#2{%
800     \vskip\abovecaptionskip
801     \sbox\@tempboxa{#1 #2}%
802     \ifdim \wd\@tempboxa >\hsize
803         #1 #2\par
804     \else
805         \global \@minipagefalse
806         \hb@xt@\hsize{\hfil\box\@tempboxa\hfil}%
807     \fi
808     \vskip\belowcaptionskip}
809 \DeclareOldFontCommand{\rm}{\normalfont\rmfamily}{\mathrm}
810 \DeclareOldFontCommand{\sf}{\normalfont\sffamily}{\mathsf}
811 \DeclareOldFontCommand{\tt}{\normalfont\ttfamily}{\mathtt}
812 \DeclareOldFontCommand{\bf}{\normalfont\bfseries}{\mathbf}
813 \DeclareOldFontCommand{\it}{\normalfont\itshape}{\mathit}
814 \DeclareOldFontCommand{\sl}{\normalfont\slshape}{\@nomath\sl}
815 \DeclareOldFontCommand{\sc}{\normalfont\scshape}{\@nomath\sc}
816 \DeclareRobustCommand*\cal{\@fontswitch\relax\mathcal}
817 \DeclareRobustCommand*\mit{\@fontswitch\relax\mathnormal}
818 \newcommand\@pnumwidth{1.55em}
819 \newcommand\@tocrmarg{2.55em}
820 \newcommand\@dotsep{4.5}
821 \setcounter{tocdepth}{2}

```

```

822 \newcommand\tableofcontents{%
823     \if@twocolumn
824         \@restonecoltrue\onecolumn
825     \else
826         \@restonecolfalse
827     \fi
828     \chapter*{\contentsname
829         \@mkboth{%
830             \MakeUppercase\contentsname}{\MakeUppercase\contentsname}}%
831     \@starttoc{toc}%
832     \if@restonecol\twocolumn\fi
833 }
834 \newcommand*\l@part[2]{%
835     \ifnum \c@tocdepth >-2\relax
836         \addpenalty{-\@highpenalty}%
837         \addvspace{2.25em \@plus\p@}%
838         \begingroup
839             \parindent \z@ \rightskip \@pnumwidth
840             \parfillskip -\@pnumwidth
841             {\leavevmode
842                 \large \bfseries #1\hfil \hb@xt@\@pnumwidth{\hss #2}}\par
843             \nobreak
844             \global\@nobreaktrue
845             \everypar{\global\@nobreakfalse\everypar{}}%
846         \endgroup
847     \fi}

```

Here we setup table of contents.

```

848 \newcommand*\l@chapter{\vspace{1em}\@dottedtocline{0}{0em}{4em}}
849 \newcommand*\l@section{\@dottedtocline{1}{5.5em}{2.3em}}
850 \newcommand*\l@subsection{\@dottedtocline{2}{7.8em}{3.2em}}
851 \newcommand*\l@subsubsection{\@dottedtocline{3}{11.0em}{4.1em}}
852 \newcommand*\l@paragraph{\@dottedtocline{4}{14em}{5em}}
853 \newcommand*\l@subparagraph{\@dottedtocline{5}{16em}{6em}}

```

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

```

854 \newcommand\listofillustrations{%
855     \setcounter{secnumdepth}{-1}
856     \chapter{\listillusname%
857         \@mkboth{\MakeUppercase\listillusname}%
858             {\MakeUppercase\listillusname}}%
859 \begin{doublespace}%
860 \begin{raggedright}%
861 \textbf{\underline{Figures}\hfill\underline{Page}}}%
862 \end{raggedright}%
863 \@starttoc{lof}%
864 \vspace{2em}
865 \begin{raggedright}%
866 \textbf{\underline{Tables}\hfill\underline{Page}}}%
867 \end{raggedright}%
868 \@starttoc{lot}%

```

```

869 \end{doublespace}
870 \setcounter{secnumdepth}{0}
871 }
872 \newcommand*{\l@figure{\@dottedtocline{1}{0em}{2.3em}}
873 \let\l@table\l@figure
874 \newdimen\bibindent
875 \setlength\bibindent{1.5em}
876 \newenvironment{thebibliography}[1]
877     {\chapter*{\bibname
878         \@mkboth{\MakeUppercase\bibname}{\MakeUppercase\bibname}}%
879     \list{\@biblabel{\@arabic{cenumiv}}}%
880         {\settowidth\labelwidth{\@biblabel{#1}}%
881         \leftmargin\labelwidth
882         \advance\leftmargin\labelsep
883         \@openbib@code
884         \usecounter{enumiv}%
885         \let\p@enumiv\@empty
886         \renewcommand\theenumiv{\@arabic{cenumiv}}}%
887     \sloppy
888     \clubpenalty4000
889     \@clubpenalty \clubpenalty
890     \widowpenalty4000%
891     \sfcode'\. \@m}
892 {\def\@noitemerr
893     {\@latex@warning{Empty 'thebibliography' environment}}}%
894     \endlist}
895 \newcommand\newblock{\hskip .11em\@plus.33em\@minus.07em}
896 \let\@openbib@code\@empty
897 \newenvironment{theindex}
898     {\if@twocolumn
899         \@restonecolfalse
900         \else
901         \@restonecoltrue
902         \fi
903         \columnseprule \z@
904         \columnsep 35\p@
905         \twocolumn[\@makeschapterhead{\indexname}]}%
906     \@mkboth{\MakeUppercase\indexname}%
907         {\MakeUppercase\indexname}%
908     \thispagestyle{plain}\parindent\z@
909     \parskip\z@ \@plus .3\p@\relax
910     \let\item\@idxitem}
911     {\if@restonecol\onecolumn\else\clearpage\fi}
912 \newcommand\@idxitem{\par\hangindent 40\p@}
913 \newcommand\subitem{\@idxitem \hspace*{20\p@}}
914 \newcommand\subsubitem{\@idxitem \hspace*{30\p@}}
915 \newcommand\indexspace{\par \vskip 10\p@ \@plus5\p@ \@minus3\p@\relax}
916 \renewcommand\footnoterule{%
917     \kern-3\p@
918     \hrule\@width.4\columnwidth

```

```

919 \kern2.6\p@}
920 \@addtoreset{footnote}{chapter}
921 \newcommand\@makefnintext[1]{%
922     \parindent 1em%
923     \noindent
924     \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.

```

925 \newcommand\contentsname{TABLE OF CONTENTS}
926 \newcommand\listillusname{LIST OF ILLUSTRATIONS}
927 \newcommand\bibname{REFERENCES} % APA format!
928 \newcommand\indexname{INDEX}
929 \newcommand\figurename{Figure}
930 \newcommand\tablename{Table}
931 \newcommand\partname{PART}
932 \newcommand\chaptername{Chapter}
933 \newcommand\appendixname{APPENDIX}
934 \newcommand\appendixtocname{APPENDICES}
935 \newcommand\prefacename{PREFACE}
936 \def\today{\ifcase\month\or
937     January\or February\or March\or April\or May\or June\or
938     July\or August\or September\or October\or November\or December\fi
939     \space\number\day, \number\year}
940 \setlength\columnsep{10\p@}
941 \setlength\columnseprule{0\p@}
942 \pagestyle{plain}

```

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

```

943 \pagenumbering{roman}
944 \newcommand\begincontent{
945     \clearpage
946     \pagenumbering{arabic}
947     \doublespacing
948 }

```

Margin Setup

```

949 \setlength{\oddsidemargin}{.5 in}
950 \setlength{\footskip}{.5 in}
951 \setlength{\textheight}{9 in}
952 \setlength{\textwidth}{6 in}
953 \setlength{\topmargin}{0pt}
954 \setlength{\headheight}{0pt}
955 \setlength{\headsep}{0pt}
956 \setlength{\voffset}{0pt}
957 \setlength{\hoffset}{0pt}
958 \setlength{\textheight}{9in}
959
960
961 \if@twoside

```

```

962 \else
963   \raggedbottom
964 \fi
965 \if@twocolumn
966   \twocolumn
967   \sloppy
968   \flushbottom
969 \else
970   \onecolumn
971 \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 unnecessary bits.

```

972 %
973 % Save file as: ENDNOTES.STY
974 % modified by --bg (B.Gaulle) 09/14/94 for:
975 %           1) replace (why a 8bit char here?) by ^ as a default.
976 %           2) force \catcode of > to be 12 (implied by \@doanenot).
977 %           by --bg again 03/22/95 for:
978 %           3) resetting appropriate catcode of > in case it were
979 %               used as an active char before \@endanenote (was
980 %               pointed by Ch. Pallier).
981 %%% free to distribute by John_Lavagnino@Brown.edu on Thu, 23 Mar 1995
982 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
983 %
984 % *****
985 % *                ENDNOTES                *
986 % *****
987 %
988 % Date of this version: 24 September 1991.
989 %
990 % Based on the FOOTNOTES section of
991 % LATEX.TEX (VERSION 2.09 - RELEASE OF 19 April 1986), with
992 % "footnote" changed to "endnote" and "fn" changed to "en" (where
993 % appropriate), with all the minipage stuff pulled out, and with
994 % some small changes for the different operation of endnotes.
995 %
996 % Uses an extra external file, with .ENT extension, to hold the
997 % text of the endnotes. This may be deleted after the run; a new
998 % version is generated each time.
999 %
1000 % This code does not obey \nofiles. Perhaps it should.
1001 %
1002 % John Lavagnino (lav@brandeis.bitnet), 9/23/88
1003 % Department of English and American Literature,
1004 % Brandeis University
1005 %
1006 % To turn all the footnotes in your documents into endnotes, say
1007 %

```



```

1008 %      \let\footnote=\endnote
1009 %
1010 % in your preamble, and then add something like
1011 %
1012 %      \newpage
1013 %      \begingroup
1014 %      \parindent Opt
1015 %      \parskip 2ex
1016 %      \def\enotesize{\normalsize}
1017 %      \theendnotes
1018 %      \endgroup
1019 %
1020 % as the last thing in your document.
1021 %
1022 %      *****
1023 %      *              CHANGE LOG              *
1024 %      *****
1025 %
1026 % JL Modified to include \addtoendnotes.  JL, 10/22/89.
1027 %
1028 % JK Modification by J"org Knappen 25. 2. 1991:
1029 % JK
1030 % JK Introduced \notesname in the spirit of international \LaTeX.
1031 % JK \notesname is set per default to be {Notes}, but can easily
1032 % JK be redefined, e.g. for german language
1033 % JK \renewcommand{\notesname}{Anmerkungen}
1034 %
1035 % DW Modification by Dominik Wujastyk, London, 19 September 1991:
1036 % DW
1037 % DW Moved the line
1038 % DW      \edef\@currentlabel{\csname p@endnote\endcsname\@theenmark}
1039 % DW out of the definition of \@endnotetext and into the definition
1040 % DW of \@doanenote so that \label and \ref commands work correctly in
1041 % DW endnotes. Otherwise, the \label just pointed to the last section
1042 % DW heading (or whatever) preceding the \theendnotes command.
1043 %
1044 % JL Revised documentation and macros. 24 Sept 1991.
1045 %
1046 %      *****
1047 %      *              ENDNOTE COMMANDS              *
1048 %      *****
1049 %
1050 %
1051 % \endnote{NOTE}      : User command to insert a endnote.
1052 %
1053 % \endnote[NUM]{NOTE} : User command to insert a endnote numbered
1054 % NUM, where NUM is a number -- 1, 2,
1055 % etc. For example, if endnotes are numbered
1056 % *, **, etc. within pages, then \endnote[2]{...}
1057 % produces endnote '**'. This command does not

```

```

1058 %                                step the endnote counter.
1059 %
1060 % \endnotemark[NUM]      : Command to produce just the endnote mark in
1061 %                        the text, but no endnote. With no argument,
1062 %                        it steps the endnote counter before generating
1063 %                        the mark.
1064 %
1065 % \endnotetext[NUM]{TEXT} : Command to produce the endnote but no
1066 %                        mark. \endnote is equivalent to
1067 %                        \endnotemark \endnotetext .
1068 %
1069 % \addtoendnotes{TEXT} : Command to add text or commands to current
1070 %                        endnotes file: for inserting headings,
1071 %                        pagebreaks, and the like into endnotes
1072 %                        sections. TEXT a moving argument:
1073 %                        \protect required for fragile commands.
1074 %
1075 % *****
1076 % *          ENDNOTE USER COMMANDS          *
1077 % *****
1078 %
1079 % Endnotes use the following parameters, similar to those relating
1080 % to footnotes:
1081 %
1082 % \enotesize      : Size-changing command for endnotes.
1083 %
1084 % \theendnote     : In usual LaTeX style, produces the endnote number.
1085 %
1086 % \@theenmark     : Holds the current endnote's mark--e.g., \dag or '1' or 'a'.
1087 %
1088 % \@makeenmark    : A macro to generate the endnote marker from \@theenmark
1089 %                  The default definition is \hbox{$^\@theenmark$}.
1090 %
1091 % \@makeentext{NOTE} :
1092 %                  Must produce the actual endnote, using \@theenmark as the mark
1093 %                  of the endnote and NOTE as the text. It is called when effectively
1094 %                  inside a \parbox, with \hsize = \columnwidth. For example, it might
1095 %                  be as simple as
1096 %                  $^\@theenmark$ NOTE
1097 %
1098 %
1099 % *****
1100 % *          ENDNOTE PSEUDOCODE          *
1101 % *****
1102 %
1103 % \endnote{NOTE} ==
1104 % BEGIN
1105 %   \stepcounter{endnote}
1106 %   \@theenmark :=G eval (\theendnote)
1107 %   \@endnotemark

```

```

1108 % \endnotetext{NOTE}
1109 % END
1110 %
1111 % \endnote[NUM]{NOTE} ==
1112 % BEGIN
1113 %   begingroup
1114 %     counter endnote :=L NUM
1115 %     \@theenmark :=G eval (\theendnote)
1116 %   endgroup
1117 %   \@endnotemark
1118 %   \@endnotetext{NOTE}
1119 % END
1120 %
1121 % \@endnotetext{NOTE} ==
1122 % BEGIN
1123 %   write to \@enotes file: "\@doanenote{ENDNOTE MARK}"
1124 %   begingroup
1125 %     \next := NOTE
1126 %     set \newlinechar for \write to \space
1127 %     write to \@enotes file: \meaning\next
1128 %       (that is, "macro:->NOTE)
1129 %   endgroup
1130 % END
1131 %
1132 % \addtoendnotes{TEXT} ==
1133 % BEGIN
1134 %   open endnotes file if not already open
1135 %   begingroup
1136 %     let \protect to \string
1137 %     set \newlinechar for \write to \space
1138 %     write TEXT to \@enotes file
1139 %   endgroup
1140 % END
1141 %
1142 % \endnotemark ==
1143 % BEGIN \stepcounter{endnote}
1144 %   \@theenmark :=G eval(\theendnote)
1145 %   \@endnotemark
1146 % END
1147 %
1148 % \endnotemark[NUM] ==
1149 % BEGIN
1150 %   begingroup
1151 %     endnote counter :=L NUM
1152 %     \@theenmark :=G eval(\theendnote)
1153 %   endgroup
1154 %   \@endnotemark
1155 % END
1156 %
1157 % \@endnotemark ==

```

```

1158 % BEGIN
1159 % \leavevmode
1160 % IF hmode THEN \x@sf := \the\spacefactor FI
1161 % \@makeenmark % put number in main text
1162 % IF hmode THEN \spacefactor := \x@sf FI
1163 % END
1164 %
1165 % \endnotetext ==
1166 % BEGIN \@theenmark :=G eval (\theendnote)
1167 % \endnotetext
1168 % END
1169 %
1170 % \endnotetext[NUM] ==
1171 % BEGIN begingroup counter endnote :=L NUM
1172 % \@theenmark :=G eval (\theendnote)
1173 % endgroup
1174 % \endnotetext
1175 % END
1176 %
1177 % *****
1178 % * ENDNOTE MACROS *
1179 % *****
1180 %
1181
1182 \@definecounter{endnote}
1183 \def\theendnote{\arabic{endnote}}
1184
1185 % Default definition
1186 \def\@makeenmark{\hbox{$^{\@theenmark}$}}
1187
1188 \newdimen\endnotesep
1189
1190 \def\endnote{\@ifnextchar[{\@xendnote}{\stepcounter
1191 {endnote}\xdef\@theenmark{\theendnote}\@endnotemark\@endnotetext}}
1192
1193 \def\@xendnote[#1]{\begingroup \c@endnote=#1\relax
1194 \xdef\@theenmark{\theendnote}\endgroup
1195 \@endnotemark\@endnotetext}
1196
1197 % Here begins endnote code that's really different from the footnote
1198 % code of LaTeX.
1199
1200 \let\@doanote=0
1201 \let\@endanote=0
1202
1203 \newwrite\@enotes
1204 \newif\if@enotesopen \global\@enotesopenfalse
1205
1206 \def\@openenotes{\immediate\openout\@enotes=\jobname.ent\relax
1207 \global\@enotesopentru}

```

```

1208
1209 % The stuff with \next and \meaning is a trick from the TeXbook, 382,
1210 % there intended for setting verbatim text, but here used to avoid
1211 % macro expansion when the footnote text is written. \next will have
1212 % the entire text of the footnote as one long line, which might well
1213 % overflow limits on output line length; the business with \newlinechar
1214 % makes every space become a newline in the \@enotes file, so that all
1215 % of the lines wind up being quite short.
1216
1217 \long\def\@endnotetext#1{%
1218     \if@enotesopen \else \@openenotes \fi
1219     \immediate\write\@enotes{\@doanenote{\@theenmark}}}%
1220     \begingroup
1221         \def\next{#1}%
1222         \newlinechar='40
1223         \immediate\write\@enotes{\meaning\next}%
1224     \endgroup
1225     \immediate\write\@enotes{\@endanenote}}
1226
1227 % \addtoendnotes works the way the other endnote macros probably should
1228 % have, requiring the use of \protect for fragile commands.
1229
1230 \long\def\addtoendnotes#1{%
1231     \if@enotesopen \else \@openenotes \fi
1232     \begingroup
1233         \newlinechar='40
1234         \let\protect\string
1235         \immediate\write\@enotes{#1}%
1236     \endgroup}
1237
1238 % End of unique endnote code
1239
1240 \def\endnotemark{\@ifnextchar[{\@xendnotemark
1241     }{\stepcounter{endnote}\xdef\@theenmark{\theendnote}\@endnotemark}}
1242
1243 \def\@xendnotemark[#1]{\begingroup \c@endnote #1\relax
1244     \xdef\@theenmark{\theendnote}\endgroup \@endnotemark}
1245
1246 \def\@endnotemark{\leavevmode\ifhmode
1247     \edef\@x@sf{\the\spacefactor}\fi \@makeenmark
1248     \ifhmode\spacefactor\@x@sf\fi\relax}
1249
1250 \def\endnotetext{\@ifnextchar
1251     [{\@xendnotenext}{\xdef\@theenmark{\theendnote}\@endnotetext}}
1252
1253 \def\@xendnotenext[#1]{\begingroup \c@endnote=#1\relax
1254     \xdef\@theenmark{\theendnote}\endgroup \@endnotetext}
1255
1256
1257 % \theendnotes actually prints out the endnotes.

```

```

1258
1259 % Endnotes auto-renumber at the end of each chapter (or actually, when
1260 % they're printed...)
1261 % \enoteformat is provided so user can specify some special formatting
1262 % for the endnotes. It needs to set up the paragraph parameters, start
1263 % the paragraph, and print the label. The \leavemode stuff is to make
1264 % and undo a dummy paragraph, to get around the games \section*
1265 % plays with paragraph indenting.
1266
1267 \def\notesname{NOTES}% <----- AE
1268 \def\noteheading{\chapter*{\notesname
1269   \@mkboth{\uppercase{\notesname}}{\uppercase{\notesname}}}%
1270   \leavemode\par\vskip-\baselineskip}
1271
1272 \def\noteformat{\vspace{\baselineskip}\rightskip\z@ \leftskip\z@ \parindent=1.8em
1273   \leavemode\llap{\hbox{$^{\@thenmark}$}}}
1274
1275 \def\notesize{\normalsize}
1276
1277 % The definition of \ETC. is needed only for versions of TeX prior
1278 % to 2.992. Those versions limited \meaning expansions to 1000
1279 % characters; in 2.992 and beyond there is no limit. At Brandeis the
1280 % BIGLATEX program changed the code in the token_show procedure of
1281 % TeX to eliminate this problem, but most 'big' versions of TeX
1282 % will not solve this problem.
1283
1284 \def\theendnotes{\immediate\closeout\@enotes \global\@enotesopenfalse
1285   \begingroup
1286     \makeatletter
1287 % the following is to save catcode of '>' and restore it in \endanenote
1288 \edef\@tempa{\string >}%
1289 \ifnum\catcode\@tempa=11\let\@ResetGT\relax% accepts also that > were active
1290 \else\edef\@ResetGT{\noexpand\catcode\@tempa=\the\catcode\@tempa}%
1291 \fi%
1292   \catcode'\>=12% char > will be read as char so force it to \catcode 12 --bg\edef\GOfrench{'\
1293   \def\@doanenote##1##2>{\def\@thenmark{##1}\par\begingroup
1294     \@ResetGT%\catcode'\>=13
1295     \edef\@currentlabel{\csname p@endnote\endcsname\@thenmark} %DW
1296     \noteformat}
1297   \def\@endanenote{\par\endgroup}%
1298   \def\ETC.{\errmessage{Some long endnotes will be truncated; %
1299     use BIGLATEX to avoid this}%
1300     \def\ETC.{\relax}}
1301   \clearpage
1302   \noteheading
1303   \notesize
1304   \begin{singlespacing}
1305   \input{\jobname.ent}%
1306   \end{singlespacing}
1307 \endgroup

```

```
1308 \setcounter{endnote}{0}}
1309 \endinput
```