

Thesis and Dissertation Class Files

Kelly O. Homan

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1 Preface

1.1 File Description

Simply \LaTeX the `theses.ins` file to generate the class file `mstthesis.cls`. This documentation file (`theses.dtx`) can be typeset by running it through \LaTeX .

A companion template, in files `ths.dtx` and `ths.ins`, illustrates the use of the class file.

1.2 Limitations and Bugs

Added: 2011/11/03. The first page of each individual appendix in a thesis with multiple appendices is not correctly generated in \LaTeX . At the moment, this would require generating these pages outside of \LaTeX . The associated class file will need revision in order to make these pages generate with the correct formatting.

1.3 Acknowledgments

A special thanks to Phil Thiem for his very careful review of the class file in Fall 2011. His suggested improvements have produced a class file which very accurately follows the current Missouri S&T spec.

2 Missouri University of Science & Technology

2.1 Identification

```
<*mstthesis>
\NeedsTeXFormat{LaTeX2e}
\ProvidesClass{mstthesis}[2008/01/22 MO S&T Thesis Class]
```

2.2 Initial Code

The `ifthen` package is loaded and the following boolean variables defined:

timesfree used to select the Times Roman fonts which are publically available.

timescomm used to select the commercially-available fonts from MathTime Pro.

double used to specify double or single spacing (the default). Because of a quirk in the `setspace` package, the variable gets used in the actual `thesis.tex` file, not in the class file.

onehalf used to specify one-and-one-half spacing or single spacing (the default).

```

\RequirePackage{ifthen}
\newboolean{timesfree}
\newboolean{timescomm}
\newboolean{double}
\newboolean{onehalf}

```

2.3 Declaration of Options

The following options are defined:

10pt, **11pt**, **12pt** options passed to the document class.

times selects the publically-available Times Roman fonts for both the text and the mathematics.

timesmtp selects commercial Times Roman and MathTime fonts for the text and math fonts, respectively. Only use this option if the MathTime fonts have been purchased and installed in your local texmf tree.

doublespace selects doublespacing.

onehalfspace selects one and one-half spacing.

```

\DeclareOption{10pt}{%
\PassOptionsToClass{10pt}{report}%
}

\DeclareOption{11pt}{%
\PassOptionsToClass{11pt}{report}%
}

\DeclareOption{12pt}{%
\PassOptionsToClass{12pt}{report}%
}

\DeclareOption{times}{%
\setboolean{timesfree}{true}%
}

\DeclareOption{timesmtp}{%
\setboolean{timescomm}{true}%
}

\DeclareOption{doublespace}{%
\setboolean{double}{true}
}

\DeclareOption{onehalfspace}{%
\setboolean{onehalf}{true}%
}

```

```
% UMR option chap (from Fr
\newif\ifchap % true for chap option
\chapfalse % false by default
\DeclareOption{chap}{\chaptrue} % option to print "Chapter" at each new chapter
```

2.4 Execution of Options

```
\ProcessOptions
```

2.5 Package Loading

Prior to obtaining the MathTime fonts package, I had used `\RequirePackage{times,mathptm,pifont}` to get times font for both the text and math.

Update (2011/10/26): the first three commands used with the MathTime Pro fonts have nothing to do with the purchased fonts. These simply use the publically-available Times fonts from Adobe. The difference then, is in the companion math fonts.

```
\LoadClass{report}

\ifthenelse{\boolean{timescomm}}{%
  \RequirePackage[T1]{fontenc}%
  \RequirePackage{textcomp}%
  \renewcommand{\rmdefault}{ptm}%
  \RequirePackage{mtpro2}%
}{%

\ifthenelse{\boolean{timesfree}}{%
  \RequirePackage[T1]{fontenc}%
  \RequirePackage{textcomp}%
  \renewcommand{\rmdefault}{ptm}%
  \RequirePackage{mathptmx}%
  \RequirePackage{pifont}%
}{%

\RequirePackage{geometry}
\geometry{letterpaper,total={6in,9.25in},includehead}
\geometry{top=0.515in,headheight=0.125in,headsep=0.3125in,left=1.515in}

\RequirePackage{setspace}
\RequirePackage{amsmath} % ,amssymb
\RequirePackage[american]{babel}
\RequirePackage[notoday,nofancy]{rcsinfo}
\RequirePackage[indentfirst}
\RequirePackage[noprefix]{nomencl}

\RequirePackage{titlesec}
\titleformat{\chapter}{\singlespacing\center\normalsize\bfseries\uppercase}%
  {\thechapter.}{.5em}{}[\doublespacing]
```

```

\titlespacing{\chapter}{0pt}{-0.5in}{0.6875in}
\titleformat{\section}{\singlespacing\normalsize\bfseries\uppercase}%
    {\thesection.}{.5em}{\doublespacing}
\titleformat{\subsection}[runin]{\normalsize\bfseries}%
    {\thesubsection.}{0.5em}{. \hspace{0.5em}~}
\titlespacing{\subsection}{\parindent}{\parskip}{0pt}
\titleformat{\subsubsection}[runin]{\normalsize\bfseries}%
    {\thesubsubsection.}{0.5em}{. \hspace{0.5em}~}
\titlespacing{\subsubsection}{\parindent}{\parskip}{0pt}

\RequirePackage{fancyhdr}
\pagestyle{fancy}
\lhead{\chead{}}\rhead{\thepage}
\lfoot{\cfoot{}}\rfoot{}
\renewcommand{\headrulewidth}{0pt}
\renewcommand{\footrulewidth}{0pt}

\RequirePackage[authoryear,sort]{natbib}

```

2.6 Main Code

The following was my attempt at being able to select the line spacing as a class option. However, for unknown reasons, it does not work. The same mechanism works fine in the ppr template.

```

\ifthenelse{\boolean{double}}{%
{\newcommand{\paperbodysettings}{\doublespacing}}%
{\newcommand{\paperbodysettings}{}}

\ifthenelse{\boolean{onehalf}}{%
{\renewcommand{\paperbodysettings}{\onehalfspacing}}%
{\renewcommand{\paperbodysettings}{}}

\def\nopagenumber{%
\thispagestyle{empty}%
}

\setlength{\parindent}{0.5in}

```

2.6.1 Title Page

Begin by defining an environment for the thesis title page. Two commands are introduced for specification of the thesis adviser(s). As of 2011/10/22, the co-adviser specification does not work correctly. If one uncomments the original command, cotheadviserCarnot and specify a name in the brackets, the titlepage is typeset with the name of memberone as the coadviser. This will need some

work down the road.

```

\newcommand{\ThesisAdviser}[1]{\thadviser{#1}}
\newcommand{\CoThesisAdviser}[1][false]{%
\ifthenelse{\equal{#1}{true}}{\cothadviser{#1}}{}}

\newenvironment{ThesisTitlePage}[1]{%
\ifthenelse{\equal{#1}{ms}}{\thesistype{1}}{\thesistype{2}}}%
{\titlepage}

This content is a shameless hack of a file obtained at UMR in 2003.
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% FOR RPI TITLEPAGE, ABSTR. TITLEPAGE & COPYRIGHT PAGE
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

\def\thesistitle#1{\gdef\@thesistitle{#1}}
\def\author#1{\gdef\@author{#1}}
\def\degree#1{\gdef\@degree{#1}}
\def\department#1{\gdef\@department{#1}}
\newcount\numcomm \numcomm=1
\def\thesistype#1{\numcomm=#1}
\def\thadviser#1{\gdef\@thadviser{#1}}
\def\projadviser#1{\gdef\@projadviser{#1}} \projadviser{*}
\def\cothadviser#1{\gdef\@cothadviser{#1}} \cothadviser{*}
\def\coprojadviser#1{\gdef\@coprojadviser{#1}} \coprojadviser{*}
\def\doctype{\if \@projadviser *Thesis \else Project \fi}
\def\adviser{\if \@projadviser *\@thadviser \else \@projadviser\fi}
\def\coadviser{\if \@coprojadviser *\@cothadviser \else \@coprojadviser\fi}
\def\memberone#1{\gdef\@memberone{#1}}
\def\membertwo#1{\gdef\@membertwo{#1}}
\def\memberthree#1{\gdef\@memberthree{#1}}
\def\memberfour#1{\gdef\@memberfour{#1}}
\def\memberfive#1{\gdef\@memberfive{#1}}
\def\membersix#1{\gdef\@membersix{#1}}
\def\copyrightyear#1{\gdef\@copyrightyear{#1}} \copyrightyear{\the\year}
\def\graddate#1{\gdef\@graddate{#1}}

\newcount\numcount

\def\titlepage{%

\ifnum\numcomm<2 \typeout{-----Masters Thesis-----}

\thispagestyle{empty}
\mbox{} \vspace*{\fill}
\begin{singlinspace}
\begin{center}
\parindent=0pt
\vspace*{-0.25in} % ... koh (2011/09/06) ...

```

```

\begin{doublespace}
{\uppercase\expandafter{\@thesistitle}}\ \ [24pt]
by \ \ [24pt]
{\uppercase\expandafter{\@author}}\ \ [24pt]
\end{doublespace}
A \uppercase\expandafter{\doctype} \ \ [12pt]
Presented to the Faculty of the Graduate School of the\ \ [18pt]
MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY\ \ [18pt]
In Partial Fulfillment of the Requirements for the Degree\ \ [24pt]
\uppercase\expandafter{\@degree}~IN~%
\uppercase\expandafter{\@department} \ \ [24pt]
\@graddate\ \ [18pt]
Approved by\ \
\vspace*{0.375in}
\end{center}
\if \coadviser * % no coadviser
\begin{center}
\begin{minipage}{5in}
\begin{center}\begin{onehalfspacing}
\adviser, Advisor\ \
\@memberone \ \
\@membertwo\ \
\end{onehalfspacing}\end{center}
\end{minipage}
\end{center}
\else
\begin{center}
\begin{minipage}{5in}
\begin{center}\begin{onehalfspacing}
\adviser, Co-advisor\ \
\@memberone, Co-advisor \ \
\@membertwo\ \
\@memberthree \ \
\end{onehalfspacing}\end{center}
\end{minipage}
\end{center}
\fi
\end{singlespace}
\vspace*{\fill}
\newpage
\pagestyle{myheadings}
\pagenumbering{roman}
\setcounter{page}{2}

\else \typeout{-----Doctoral Thesis-----}

\thispagestyle{empty}
\mbox{}\vspace*{\fill}
\begin{singlespace}
\begin{center}

```

```

\parindent=0pt
\vspace*{-0.25in}
\begin{doublespace}
{\uppercase\expandafter{\@thesistitle}}\ \ [20pt]
by \ \ [20pt]
{\uppercase\expandafter{\@author}}\ \ [20pt]
\end{doublespace}
A DISSERTATION \ \ [18pt]
Presented to the Faculty of the Graduate School of the\ \ [18pt]
MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY\ \ [18pt]
In Partial Fulfillment of the Requirements for the Degree\ \ [24pt]
\uppercase\expandafter{\@degree}\ \ [18pt]
~in~\ \ [18pt]%
\uppercase\expandafter{\@department} \ \ [18pt]
\@graddate\ \ [18pt]
Approved by\ \
\vspace*{0.3in}
\end{center}
\if \coadviser * % no coadviser
\begin{center}
\begin{minipage}{5in}
\begin{center}\begin{onehalfspacing}
\adviser, Advisor\ \
\@memberone \ \
\@membertwo\ \
\@memberthree \ \
\@memberfour \ \
\end{onehalfspacing}\end{center}
\end{minipage}
\end{center}
\else
\begin{center}
\begin{minipage}{5in}
\begin{center}\begin{onehalfspacing}
\adviser, Co-advisor\ \
\@memberone, Co-advisor \ \
\@membertwo\ \
\@memberthree \ \
\@memberfour \ \
\end{onehalfspacing}\end{center}
\end{minipage}
\end{center}
\fi
\end{singlespace}
\vspace*{\fill}
\newpage
\pagestyle{myheadings}
\pagenumbering{roman}
\setcounter{page}{2}

```



```

\fi
}

```

2.6.2 RPI Abstract

This content came with the above file obtained from UMR. This doesn't get used, at present.

```

%%%
\def\abstitlepage{%
  \if@twoside\thispagestyle{empty}\cleardoublepage\fi
  \thispagestyle{empty}
  \begin{singlespace}
  \begin{center}
    \parindent=0pt
    \vglue 24pt plus 24pt minus 12pt
    {\uppercase\expandafter{\@thesistitle}}\ \ [11pt]
    By \ \ [11pt]
    \@author\ \ [11pt]
    An Abstract of a Thesis Submitted to the Graduate\ \ [7pt]
    Faculty of Rensselaer Polytechnic Institute\ \ [7pt]
    in Partial Fulfillment of the\ \ [7pt]
    Requirements for the Degree of\ \ [7pt]
    \uppercase\expandafter{\@degree}\ \ [7pt]
    Major Subject:~\@department\ \ [7pt]
    The original of the complete thesis is on file\ \
    in the Rensselaer Polytechnic Institute Library\ \
%    \vskip 36pt plus 2pt minus 12pt
    \vfill
    \sigblockabs
    \vskip 36pt plus 2pt minus 12pt
    Rensselaer Polytechnic Institute\ \
    Troy, New York\ \ [12pt]
    \@graddate
  \end{center}
  \end{singlespace}
  \newpage
  \pagestyle{myheadings}
  \pagenumbering{roman}
  \setcounter{page}{2}}

```

2.6.3 Front Matter Environments

Originally, when the toc was set in double space, the vspace added prior to the SECTION toc entry was 2ex. With the change to having the toc set in single space, so that two-line entries appear as single spaced, this vertical space needed to be increased.

```

\newcommand{\ThesisCopyrightPage}[1]{%

```

```

\ifthenelse{\equal{#1}{true}}%
{\copyrightpage}%
{\thispagestyle{empty}\vspace*{1in}\vfill\eject}%
}

\newenvironment{ThesisPublicationOption}[1]{%
\ifthenelse{\equal{#1}{ms}}%
{\chapter*{Publication Thesis Option}%
\addcontentsline{toc}{chapter}{PUBLICATION THESIS OPTION}}%
{\chapter*{Publication Dissertation Option}%
\addcontentsline{toc}{chapter}{PUBLICATION DISSERTATION OPTION}}%
}{}

\newenvironment{ThesisAbstract}{%
\chapter*{ABSTRACT}%
\addcontentsline{toc}{chapter}{ABSTRACT}%
}{}

\newenvironment{ThesisAcknowledgment}{%
\chapter*{ACKNOWLEDGMENT}%
\addcontentsline{toc}{chapter}{ACKNOWLEDGMENT}%
}{}

\newenvironment{ThesisFrontMatter}{}{%
\addtocontents{toc}{\protect\vspace{4ex}}%
\addtocontents{toc}{\hbox to \textwidth{\hspace*{-2mm}{\bf SECTION\ \hfill}}}%
}

```

2.6.4 Copyright Page

```

\def\copyrightpage{
\hbox{ }
\thispagestyle{empty}
\vfill
\begin{center}
% \copyright\
Copyright \@copyrightyear \\\
% by \\\
\@author \\\
All Rights Reserved \\\ [12pt]
\end{center}
\clearpage}

```

2.6.5 Table of Contents

This is content from myuiuc.sty, generated for my own PhD thesis. The code adds column headings to table of contents and lists of tables and figures.

```

\renewcommand{\tableofcontents}{%
\renewcommand{\contentsname}{TABLE OF CONTENTS}

```

```

\if@twocolumn
  \@restonecoltrue\onecolumn
\else
  \@restonecolfalse
\fi
\chapter*{\contentsname
  \@mkboth{\uppercase{\contentsname}}{\uppercase{\contentsname}}}{%
  \vspace*{-0.375in}
  \hbox to \textwidth{\hspace*{-2mm}{\hfill Page}}
  \singlespacing\setlength{\parskip}{10\p@}
  \@starttoc{toc}%
  \if@restonecol\twocolumn\fi
}

```

2.6.6 List of Figures, Tables and Symbols

```

\renewcommand{\listoffigures}{%
  \newpage%
  \if@twocolumn
    \@restonecoltrue\onecolumn
  \else
    \@restonecolfalse
  \fi
  \addcontentsline{toc}{chapter}{LIST OF ILLUSTRATIONS}
  \renewcommand{\listfigurename}{LIST OF ILLUSTRATIONS}
  \chapter*{\listfigurename
    \@mkboth{\uppercase{\listfigurename}}{\uppercase{\listfigurename}}}{%
    \vspace*{-0.375in}
    \hbox to \textwidth{\hspace*{-2mm}{Figure \hfill Page}}
    \singlespacing\setlength{\parskip}{10\p@}
    \@starttoc{lof}%
    \if@restonecol\twocolumn\fi
    \setlength{\parskip}{0pt}\doublespacing% ... added by koh ...
  }

\renewcommand{\listoftables}{%
  \newpage%
  \if@twocolumn
    \@restonecoltrue\onecolumn
  \else
    \@restonecolfalse
  \fi
  \addcontentsline{toc}{chapter}{LIST OF TABLES}
  \renewcommand{\listtablename}{LIST OF TABLES}
  \chapter*{\listtablename
    \@mkboth{\uppercase{\listtablename}}{\uppercase{\listtablename}}}{%
    \vspace*{-0.375in}
    \hbox to \textwidth{\hspace*{-2mm}{Table \hfill Page}}
  }

```

```

\single spacing\setlength{\parskip}{10\p@}
\@starttoc{lot}%
\if@restonecol\twocolumn\fi
\setlength{\parskip}{0pt}\doublespacing% ... added by koh ...
}

\newcommand{\listofsymbols}{%
\newpage%
\addcontentsline{toc}{chapter}{LIST OF SYMBOLS}%
\renewcommand{\nomname}{LIST OF SYMBOLS}%
\printnomenclature%
}

```

2.6.7 TOC entries

Define a command which adds a Chapter entry to the table of contents without a dotted leader or page number. This entry follows the table of contents entries for list of tables, figures and symbols.

Add dotted leader to table of contents chapter entries.

The vspace prior to the toc entry had previously been 2ex but when the change was made to have the individual contentsline entries be single space, this leading space needed to be increased.

```

\newcommand{\Thesistocentry}[1]{%
\addtocontents{toc}{\protect\vspace{4ex}}
\addtocontents{toc}%
{\hbox to \textwidth{{} \hspace*{-2mm}{#1} \ \hfill}}}
}

```

2.6.8 Thesis Body and Publications

The begdef commands start the thesis body on a new page, reset the page number to arabic and force a 4-line separation between the bottom of a float and the subsequent text (added fall 2011).

The template I put together for the first time in Spring 2004 used the setcounter command in the base tex file to specify the pagination of the individual starting pages of the publications. This appears not to work. Apparently, these must be edited after adding the nofiles command.

```

\newenvironment{ThesisBody}{%
\newpage%
\pagenumbering{arabic}%
\setcounter{page}{1}
\addtolength{\textfloatsep}{+0.28125in}%
}{%

\newenvironment{ThesisPublications}{\Thesistocentry{\bf PAPER}}{}

```

```

\newcommand{\ThesisListofEntry}[2]{%
\addtocontents{#1}{\protect\vspace{2ex}}
\addtocontents{#1}%
{\hbox to \textwidth{{} \hspace*{-2mm}{{#2} \ \hfill}}}}
}

\newcommand{\PaperManuscript}[2]{%
\chapter*{#1. #2}%
\addcontentsline{toc}{chapter}{#1. #2}%
\ThesisListofEntry{lof}{PAPER #1}%
\ThesisListofEntry{lot}{PAPER #1}%
}

```

2.6.9 Redefined Chapter commands

The first command definition is pulled directly from the report class. The only changes are to comment out the addvspace commands for the lof and lot. This was flagged by Missouri S&T thesis checkers as not acceptable in Fall 2011. Commenting out these two commands took care of the issue. This command with the specification of parskip in the listoffigures and listoftables commands gives S&T desired spacing.

Added an `ifthenelse` statement to the command so that that pagestyle is changed to empty if the page counter has the value of one. This has the effect of removing the page number on the first page of the thesis body.

```

\def\@chapter[#1]#2{\ifnum \c@secnumdepth >\m@ne
\refstepcounter{chapter}%
\typeout{\@chapapp\space\thechapter.}%
\addcontentsline{toc}{chapter}%
{\protect\numberline{\thechapter}#1}%
\else
\addcontentsline{toc}{chapter}{#1}%
\fi
\chaptermark{#1}%
\ifthenelse{\value{page}=1}{\thispagestyle{empty}}{}
%\addtocontents{lof}{\protect\addvspace{10\p@}}%
%\addtocontents{lot}{\protect\addvspace{10\p@}}%
\if@twocolumn
\@topnewpage[\@makechapterhead{#2}]%
\else
\@makechapterhead{#2}%
\@afterheading
\fi}

\renewcommand*{\l@chapter}[2]{%
\ifnum \c@tocdepth >\m@ne
\addpenalty{-\@highpenalty}%
\vskip 1.0em \@plus\p@
\setlength\@tempdima{1.5em}%

```

```

\beginngroup
\parindent \z@ \rightskip \@pnumwidth
\parfillskip -\@pnumwidth
\leavevmode %\bfseries
\advance\leftskip\@tempdima
\hskip -\leftskip
\uppercase{#1}\nobreak \dotfill \nobreak\hbox to\@pnumwidth{\hss #2}\par
\penalty\@highpenalty
\endngroup
\fi}

```

2.6.10 Appendix environment

The appendix environment took some effort to create as it has a number of unique aspects for Missori S&T. The key difference is that if there is one appendix, it should appear without a letter in the toc and on the top of the page as a typical chapter heading. However, if there are more than one appendices, it should appear on its own page but only the “chapter” level appendix headings should appear in the toc. *Very important:* the closing tocdepth setting is very important because if it is set to zero when leaving the environment, the list of tables and list of illustrations will have no entries. Apparently, a tocdepth of more than zero is necessary for any list of illustrations or list of tables entries to be included.

The titleformat command for the multiple appendix case has now been modified to center the text on the page both vertically and horizontally. A hearty thanks to Phil Thiem for figuring this one out.

```

\newenvironment{ThesisAppendix}[1]{%
\newpage%
\ifthenelse{\equal{#1}{one}}{%
{\addcontentsline{toc}{chapter}{\MakeUppercase{Appendix}}}%
\addtocontents{toc}{\protect\setcounter{tocdepth}{-1}}%
\titleformat{chapter}{\center\normalsize\bfseries\uppercase}{}{.5em}{}%
\titlespacing{chapter}{0pt}{-0.5in}{0.6875in}%
\titleformat{section}{\normalsize\bfseries\uppercase}{}{.5em}{}%
\titleformat{subsection}[runin]{
{\normalsize\bfseries}{\arabic{subsection}.}{0.5em}%
}{. \hspace{0.5em}~}%
\titleformat{subsubsection}[runin]{
{\normalsize\bfseries}%
{\arabic{subsection}.\arabic{subsubsection}.}%
{0.5em}{. \hspace{0.5em}~}}%
{\addtocontents{toc}{\protect\setcounter{tocdepth}{0}}}%
\titleformat{chapter}%[block]{
{\vspace*{\stretch{1}}\center\normalsize\bfseries\uppercase}%
{APPENDIX \thechapter}{0em}%
{\~\hspace{-1in}\nopagenumber}[\vspace*{\stretch{1}}\newpage]
%\titlespacing{chapter}{0pt}{-0.5in}{0.6875in}

```

```

\titledformat{\section}{\normalsize\bfseries\uppercase}{.5em}{.5em}%
\titledformat{\subsection}{runin}%
{\normalsize\bfseries}{\arabic{subsection}.}{0.5em}%
{.}{.}{\hspace{0.5em}}~}%
\titledformat{\subsubsection}{runin}%
{\normalsize\bfseries}%
{\arabic{subsection}.\arabic{subsubsection}.}{0.5em}%
{.}{.}{\hspace{0.5em}}~}%
\Thesistocentry{\bf APPENDICES}
\appendix}%
}{\addtocontents{toc}{\protect\setcounter{tocdepth}{4}}}

```

2.6.11 Bibliography environment and style

The default bibliography environment was pulled from the base report.cls file and edited to specific the chapter name and the spacing appropriate to the thesis class.

Specify the appropriate bst package. Not presently used (2008/01/22).

```

\renewenvironment{thebibliography}[1]
{
\chapter*{\MakeUppercase{References}}% ... added by koh ...
\addcontentsline{toc}{chapter}{REFERENCES}
\mkboth{\MakeUppercase\bibname}{\MakeUppercase\bibname}%
\singlespacing\setlength{\parskip}{2pt} % ... added by koh ...
\list{\@biblabel{\@arabic{c@enumiv}}}%
{\settowidth\labelwidth{\@biblabel{#1}}%
\leftmargin\labelwidth
\advance\leftmargin\labelsep
\@openbib@code
\usecounter{enumiv}%
\let\p@enumiv\@empty
\renewcommand\theenumiv{\@arabic{c@enumiv}}%
\sloppy
\clubpenalty4000
\@clubpenalty \clubpenalty
\widowpenalty4000%
\sfcode'\.\@m}
{\def\@noitemerr
{\@latex@warning{Empty 'thebibliography' environment}}%
\endlist
\doublespacing % ... added by koh, 2011/10/20 ...
}

%\bibliographystyle{ijhvacr}

```

2.6.12 Back Matter: Vita

```

\newenvironment{Vita}{%

```

```

\chapter*{Vita}%
\addcontentsline{toc}{chapter}{VITA}}{}

```

2.6.13 Page style for the Thesis Body

The page numbers are placed in the upper right hand corner.

```

\renewcommand{\ps@plain}{%
  \renewcommand{\@oddhead}{\hfill\textrm{\thepage}}%
  \renewcommand{\@evenhead}{\@oddhead}%
  \renewcommand{\@evenfoot}{}%
  \renewcommand{\@oddfoot}{}}

\newcommand{\psplainreset}{\renewcommand{\ps@plain}{%
  \renewcommand{\@oddhead}{\hfill\textrm{\thepage}}%
  \renewcommand{\@evenhead}{\@oddhead}%
  \renewcommand{\@evenfoot}{}%
  \renewcommand{\@oddfoot}{}}}
}

```

2.6.14 Dotted leader formatting

```

% ... dot separation for leaders ...
\renewcommand\@dotsep{4.5}

</mstthesis>

```

3 UIUC Thesis Style File

Ideally, this would be put into a class file like that for the Missouri S& T thesis/dissertation. However, in the interest of time, I am going to include it wholesale so that it can be revised or hacked as need be.

```

<*uiucthesis>
\NeedsTeXFormat{LaTeX2e}[1994/12/01]

% Specify name of contents and reference list

\renewcommand{\contentsname}{Table of Contents}

\renewcommand{\bibname}{REFERENCES}

% Set numbering of preliminary pages and thesis body.

\newenvironment{preliminary}%
  {\newpage\pagenumbering{roman}\setcounter{page}{3}}%
  {\clearpage\pagenumbering{arabic}\setcounter{page}{1}}

```



```

% Add column headings to table of contents and lists
% of tables and figures

\renewcommand{\tableofcontents}{%
  \if@twocolumn
    \@restonecoltrue\onecolumn
  \else
    \@restonecolfalse
  \fi
  \chapter*{\contentsname
    \@mkboth{\uppercase{\contentsname}}{\uppercase{\contentsname}}}%
  \hbox to \textwidth{\hspace*{-2mm}{\bf \ \ \hfill Page}}
  \@starttoc{toc}%
  \if@restonecol\twocolumn\fi
}

\renewcommand{\listoffigures}{%
  \if@twocolumn
    \@restonecoltrue\onecolumn
  \else
    \@restonecolfalse
  \fi
  \chapter*{\listfigurename
    \@mkboth{\uppercase{\listfigurename}}{\uppercase{\listfigurename}}}%
    {\uppercase{\listfigurename}}}%
  \hbox to \textwidth{\hspace*{-2mm}{\bf Figure \ \hfill Page}}
  \@starttoc{lof}%
  \if@restonecol\twocolumn\fi
}

\renewcommand{\listoftables}{%
  \if@twocolumn
    \@restonecoltrue\onecolumn
  \else
    \@restonecolfalse
  \fi
  \chapter*{\listtablename
    \@mkboth{\uppercase{\listtablename}}{\uppercase{\listtablename}}}%
    {\uppercase{\listtablename}}}%
  \hbox to \textwidth{\hspace*{-2mm}{\bf Table \ \hfill Page}}
  \@starttoc{lot}%
  \if@restonecol\twocolumn\fi
}

% Define a command which adds a Chapter entry to the table of contents
% without a dotted leader or page number. This entry follows the table
% of contents entries for list of tables, figures and symbols.

\newcommand{\chaptertocentry}{%
\addtocontents{toc}{\protect\vspace{2ex}}

```

```

\addtocontents{toc}%
{\hbox to \textwidth{\hspace*{-2mm}{\bf Chapter \ \hfill}}}
}

% Add dotted leader to table of contents chapter entries.

\renewcommand*{\l@chapter}[2]{%
  \ifnum \c@tocdepth >\m@ne
    \addpenalty{-\@highpenalty}%
    \vskip 1.0em \plus\p@
    \setlength\@tempdima{1.5em}%
    \begingroup
      \parindent \z@ \rightskip \@pnumwidth
      \parfillskip -\@pnumwidth
      \leavevmode \bfseries
      \advance\leftskip\@tempdima
      \hskip -\leftskip
      #1\nobreak \dotfill \nobreak\hbox to\@pnumwidth{\hss #2}\par
      \penalty\@highpenalty
    \endgroup
  \fi}

% Thesis title page from file given to me by T.E. Morthland.

% *****
% *                TITLE PAGE                *
% *****
%
% Macros to set the degree type
%
%
\def\phdthesis{\def\@degree{Doctor of Philosophy}}
\def\msthesis{\def\@degree{Master of Science}}
\def\department#1{\def\@dept{#1}}
\def\college#1{\def\@college{#1}}
\def\schools#1{\def\@schools{#1}}
\def\degreeyear#1{\def\@degreeyear{#1}}
%
% set initial values for title page
%
\msthesis
\department{Mechanical and Industrial Engineering}
\college{Graduate College}
\def\@schools{}
\def\@degreeyear{\number\year}
%
% The following \maketitle should make a valid UIUC title page,
% assuming you've set all the fields, e.g.

```

```

%      \title{MY THESIS}
%      \author{JOE X. SCHMOO}
%      \schools{B.S., Cow Flop U, 1984 \ M.S. Illiness Tech, 1988}
%
\def\maketitle{
\begin{group}
\singlepage
%
%   setting lineskip to 0pt insures no extra space between following
%   vboxes.
%
\lineskip=0pt
\lineskiplimit=\maxdimen
\thispagestyle{empty}
\setcounter{page}{0}
%
%   this bit of garbage allows us to paste a larger-than-allowed vbox
%   on the first page without getting an over-full vbox. If we don't
%   do this, we get a blank sheet of paper for the first page, followed
%   by our over-full vbox. the \vss at the bottom of this vbox causes
%   us to un-glue 9in of vertical space, making TeX think that this
%   fits on a single page. See pages 82,83 of the TeXbook for why.
%
\vspace*{0.5in}%
\top to 0in{%
%\top to 0in{\centerline{\uppercase\expandafter{\@title}}\vss}%
\top to 0in{\centerline{\begin{tabular}{c}\uppercase\expandafter{\@title}\end{tabular}}\vss}%
%
%   skip to "by" and author line; measurements w.r.t top line (2.25in)
%
\kern 1.75in%
\top to 0in{\centerline{BY}%
\vskip \baselineskip
\centerline{\uppercase\expandafter{\@author}}%
\vskip \baselineskip
\begin{center}\begin{tabular}{c}\@schools\end{tabular}\end{center}%
\vss}\kern -1.75in%
%
%   Skip down from last item (which has baseline at the top) to
%   thesis line.
%
\kern 4.25in%
\top to 0in{%
\centerline{THESIS}%
\vskip \baselineskip
\centerline{\strut Submitted in partial fulfillment of the requirements}%
\centerline{\strut for the degree of \@degree\ in \@dept}%
\centerline{\strut in the \@college\ of the}%
\centerline{\strut University of Illinois at Urbana-Champaign, \@degreeyear}%
\vss}\kern -4.25in%

```

```

%
\kern 6.75in%
\top to 0in{\centerline{Urbana, Illinois}\vss}%
\kern -6.75in\vss}
\endgroup}
%

</uiucthesis>

```