uothesis — A LATEX package for the generation of theses and dissertations that meet the requirements established by the University of Oregon Graduate School*

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1 Introduction

The uothesis class file provides support for generating properly formatted documents that comply with the University of Oregon Graduate School style guidelines for the preparation of dissertations and theses. The use of this class does not replace the review process by the Thesis Editor or guarantee the document will pass that review perfectly. Its intention is to simplify the formatting of the document and limit the type of possible corrections to minor fine tuning. This document summarizes the features of the class and provides an example header for the generation of a basic document. This document is NOT intended as a substitute for the University of Oregon Graduate School manual and will not be repeating the specifics of document formatting, as the user is expected to have downloaded, read and understood that manual¹.

1.1 New To This Version (2.5)

There have been a number of changes to this version to deal with a couple of persistent bugs in the code and to make the CV a little easier to write. The changes to the CV are indicated below in the appropriate section Second, the package natbib is now required by the cls. Users should add the \usepackage command from their header files as shown in the example header later in this document. Customization of the citation formatting can be accomplished through the use of a list of options as described in the natbib documentation. The last change is the requiring of the command \formatbib to the header file above the bibliography section as demonstrated in the example header later in this document.

¹Thesis and Dissertation Style and Policy Manual (v. Fall 2010)

 $^{^2\}mathrm{Please}$ note that you will have to change your current CV structure to get a clean compile at this point

1.2 New To This Version (2.5.1)

The package natbib is still required by the cls, but now it is loaded directly, no user input is required to load \natbib by itself. Customization of the citation formatting can now be accomplished through the use of the native natbib options, as described in the natbib documentation, included in the options for the class itself. This change is reflected in the example header in this document. Last, the problem requiring the \formatbib command has been corrected and now is not needed. Calling the \formatbib command will now produce an error.

1.3 New To This Version (2.5.2)

This version corrects a page number position change that was recently put in place by the graduate school.

1.4 New To This Version (2.5.3)

Corrected a formatting issue with the block quotes environment.

1.5 New To This Version (2.5.4)

Added the nofigures and notables options. These options are used to exclude the LOF and LOT from the TOC's if no tables or figures are present in the document. Also an issue with the TOC column labels and long section titles not wrapping were corrected.

2 Installation

The package is supplied in dtx format, running tex uothesis.dtx will extract the package whereas latex uothesis.dtx will extract it and also typeset the documentation

Typesetting the documentation requires a number of packages in addition to those needed to use the package. This is mainly because of the number of demonstration items included in the text. To compile the documentation without error, you will need the packages:

- array hypdoc lmodern
- booktabs listings microtype

3 Requirements

The uothesis class itself minimally requires the following packages:

• float	• setspace	• todonotes	
• subfig	• natbib	• ragged2e	
• xcolor	• lineno		
• graphicx	• layouts	• draftwatermark	

Additional features and functionality may require the following packages:

• mhchem (for chemistry)

• amssymb (for amstex)

• amsmath (for amstex)

• amsthm (for amstex)

• lipsum (for lipsum)

These are normally present in the current major T_EX distributions, but are also available from The Comprehensive TeX Archive Network. Note that these packages themselves may have secondary dependencies not expressly listed here. When in doubt read their documentation.

4 The Class File

uothesis is an extended version of the report LATEX primitive class. It has been heavily extended to comply with the University of Oregon Graduate School requirements for the formatting of dissertations and theses. While every effort has been made to assure that the class generates a document that fully complies with the Graduate School's requirements, every document will be different and use different packages that may cause formatting issues. Therefore, the use of this package does not replace extensive proof reading or the meetings with the thesis editor.

5 Class Options

Class options for uothesis should be declared in the usual manner within square brackets during the class declaration in the header:

\documentclass[option1,option2,option3]{uothesis}

Note that class options should be come separated.

5.1 General class options

dissertation msthesis

Formats the document for a Ph.D. dissertation.

Formats the document for a Master's thesis (still experimental...Graduate School has not approved for theses.)

draftimages

Graphics included using \includegraphics are suppressed to just their bounding boxes and file names. This option is useful for quick compiles where only the layout of the pages and text are a concern. This option is suppressed by the option final.

draftcopy

Creates a draft copy of the document. Dates the document on each page, does not include the preliminary pages, TOC, TOF, or TOT. A page of notes and omissions is created after the cover page for use with the editorial macros below. This option also uses the bound option, which shifts the text block slightly to one side for three hole punching. Line numbering is also invoked for this draft mode and the text is shrunk down by one size to reduce paper if the draft is printed.

committeedraft

Like draftcopy except includes front matter and standard title page. Does not include the texts of the acknowledgement or dedication. For distribution to committee members.

latedraft

Useful for last-minute preparations, corrections, and editing before handing the document to the graduate school. For all purposes, latedraft is identical to final, with the exception that the dedication and the acknowledgements are suppressed and the inclusion of a disclaimer to clearly mark this as a draft copy.

final

The final draft for presentation to the graduate school.

5.2 Formatting class options

justified

This option turns off the ragged right setting for the large text blocks of the document and returns the text block formatting to the LATEX default, which is full justification. The UOGS does not generally approve of full justification, but they will accept it in this case since LATEX does it properly.

copyright numsections

Includes the copyright page.

Provides the option of numbered sections.

gsmodern

An alternate formatting scheme to numsections that still provides the section numbering. This has been designed to be closer to technical manuscripts with the numbering hierarchy spanning from the Chapter to the subsubsection level.

 ${\tt contnumbering}$

This changes the figure and table numbering to be continuous throughout the document from start to finish.

amstex chemistry

Loads amsmath, amsthm, and amssymb packages in proper order.

Loads the amstex class option, mhchem, and chemstyle packages. Defines new environments for long and short reactions (chem and Chem) and a new cross reference type for reactions (rxn:) for use with \eqref{}. The rxn: prefix is paired with a new counter to keep track of the reaction environments. This counter is reset by chapter by default.

smallcaps

Allows small caps in titles and TOC. This option should only be used if there is a need to differentiate between capital and lower case letters in the title, such as with atomic symbols.

bound

The bound option is provided strictly for personal use. It reformats the margins and text block parameters to allow for printing and binding of finished documents. A disclaimer is placed at the bottom of the copyright page, and the copyright notation on this page is suppressed.

nofigures

Excludes the list of figures from the table of contents section of the frontmatter in cases were there are no figures in the document.

notables

Excludes the list of tables from the table of contents section of the frontmatter in cases were there are no tables in the document.

6 Manuscript macros

6.1 General macros

\cleanbreak

Forces a clean linebreak in the TOC, TOT, and TOF. This macro is provided to correct issues with over-run in the TOC, etc. It is used so:

\chapter[This is the use of the \linebreak...]{This is the use of the...}

The line would break at the point indicated. This macro does not always work depending on how badly other typesetting rules are violated and should only be used in the square bracketed "short title" area. Note that to conform to the University of Oregon Graduate School style manual the title in the square and

curly brackets should be identical. A second caveat to this command is that it is especially unstable with the use of ragged right text blocks. The method that is used for the fully justified text block (LATEX default) is incompatible with the Ragged2e package, and so a second method, \newline, is used. This method gives LATEX the option of allowing a page break in the middle of the TOC entry.

\ie \etc \etal \eg The following commands to provide macro's for common latin phrases. These commands assume that it is desired for these phrases to be italicized and provide proper punctuation after the latin phase. The code is taken from the Chemstyle package.

6.2 Editing macros (draftcopy, committeedraft)

\ednote

\ednote{} is a variation on standard margin notes. A numbered margin note will be placed in the margin with a place holder in the text body at the location in the text. A line will connect the place holder with the margin note and the text in the "{}" will appear on the notes page in the draft copy of the document. The macro is used so:

This is some text that needs a callout\ednote{this is a call out}.

\needref

\needref{} places a diamond in the text body at the command location, and a red margin note at the same line with an arrow and a "citation." The "{}" can be left blank, but must be included at the moment. Text in the braces will also appear on the notes page in the draft copy.

\rfmk

Extensive use of the \needref{} macro may result in float errors in the compile. The \rfmk command is provided in such cases. It does not provide margin note, only the text marker in the document body and the entry into the list of todo's that appears in the draft mode. \rfmk also functions in draft modes, inserting a dummy \cite command in the text which results in the default missing citation place holder for the bibtex style being used.

\here

\here places a square in the text body and a red "here" in the margin. It is intended to mark incomplete sections and will place an "incomplete section" note in the draft copy notes page.

6.3 Chemistry macros (chemistry)

These commands use a combination of mhchem and amsmath calls to create two new environments, chem and Chem. These reactions can be cross referenced using the rxn prefix in \eqref{}.

\eqref{rxn:somerxn}

\chem

\chem is for short equations (no more than 1 column width) and uses mhchem and standard AMS equation environments. It is used so:

\chem[rxn:firstrxn]{MT2X4}

\Chem

The second environment is **\Chem**, which is for long reactions. This environment uses amsmath multiline environments which allow the use of **** to indicate where the equation should be broken. In this reaction, the line will be broken following the reaction arrow (-> in the code).

```
\Chem[rxn:secondrxn]{[(\cmath{(2+\delta)}Se \cdot \ce{Cr} \cdot \cert{Cor2Se4} \cmath{(\text{Fd3m, } \langle 111\rangle_{SL} )} + Se ^ }
```

\chemarray

The \chemarray environment is for multiple equations that are desired to have a single reference number as in multistep reactions. Like \Chem, the \\ argument is used to separate lines but the & command can also be used to define alignment points within each equation. The {rl} argument indicates the alignment of each column created by the & commands. In this case right justification for the left hand column and left justification for the right column.

```
\label{lem:condition} $$ \operatorname{Tang}\{rn: \frac{r1}{CuCl} + 2CrCl3 + 0LA \operatorname{(excess)} \&->[\operatorname{Ar}][SI\{150\}{\operatorname{CuCr}(0LA)_x\setminus Se + 0LA \operatorname{(excess)} \&->[\operatorname{Ar}][SI\{330\}{\operatorname{celsius}}] Se(0LA)_x\operatorname{cotiontag}\ CuCr(0LA)_x + Se(0LA)_x \&->[\operatorname{Ar}, \SI\{200\}{\operatorname{celsius}, \SI\{2\}{\operatorname{(our)}}[\operatorname{Ar}, \SI\{200\}{\operatorname{celsius}, \SI\{2\}{\operatorname{(olA)}_x}} } $$
```

7 Manuscript organization

It is suggested that you use some scheme for breaking up your document both for ease of editing and for debugging purposes. The method that has been suggested in the past is to break up the manuscript into a header or root file and a series of dependent tex files that contain one chapter each contained in a directory folder. These dependent tex files can then be included or excluded by using \include{} commands. uothesis is set up to support this method of working. The inclusion of the "\% !TEX root = \(path to root file \)" command will aid in this. The manuscript header example provided demonstrates one possible scheme for splitting of documents. The different components of the header and will be provided in the next section.

7.1 Manuscript header example

```
\documentclass[dissertation, justified, copyright, draftimages, final, numbers, sort&compress
gsmodern] {uothesis}
```

```
\usepackage[english,UKenglish]{babel}
\input{custom_cmds.tex}

THESIS FRONT MATTER

TITLES.
\covertitle{Document Title As it will appear on\\ the cover page}
\abstracttitle{Document Title: As it will appear on the abstract page}

AUTHOR
\author{Your Name Here}

DEPARTMENT
\narrowdepartment{Short Dept. Name}
```

```
\department{Full name of department}
DEGREE INFORMATION
\degreetype{Doctor of Philosophy}
\degreemonth{Month}
\degreeyear{XXXX}
COMMITTEE INFORMATION
\advisor{Advisor's name}
\chair{Chair's name}
\committee{Member 1 & Inside\\
   Member 2 & Inside\\
   Member 3 & Outside\\
   Member 4 & Honorary\\}
\graddean{Richard Linton}
CURRICULUM VITAE
\include{thesis_cv}
ACKNOWLEDGEMENTS
\include{thesis_acknowledgements}
DEDICATION (optional)
\include{thesis_dedication}
ABSTRACT
\include{thesis_abstract}
Main Document
\begin{document}
\maketitle
CHAPTERS
\include{introduction}
\include{chapter_2}
APPENDICES
\appendix
\include{tappendix_1}
REFERENCES
\bibliographystyle{unsrtnat}
\bibliography{bib}
\end{document}
```

Note that the various components of the document are kept separate with \include commands. The exception is the \input command used for the custom_cmds.tex. The difference comes from the fact that \input is treated as part of the header file itself and is processed in line with the rest of the code. The \import command takes the output of the target file and adds that, resulting in pages breaks after each \include. This is handy, as the style manual requires that each chapter starts on a new page.

8 Manuscript meta-data

Pleas note that in all cases the below macro's are macro's and not environments. As an example, most LaTeX classes have a **\begin{abstract}**...**\end{abstract}** environment that is used to handle the abstract text. This is not the case with this class, the method used for handling the front-matter requires that these elements be passed to LaTeXas strings in the macro's: **\abstract{...}**.

8.1 Main information

\covertitle

\covertitle{} is the title that will appear on the title page of the document. It requires hard coding of the line breaks, using "\\", to comply with the inverted pyramid style of the graduate school³.

\abstracttitle

\abstracttitle{} is the title form for anywhere the title appears as in line text. Do NOT use line breaks in the abstract title.

\author \narrowdepartment The full name of the author as it appears on the UO records.

Some departments have an officially designated "short" name. If you are in one of these departments, this should go here and will be used in the appropriate locations in the document.

\department
\degreetype

This is the official name of the students department.

Take the abbreviation of the degree that the document is for and expand it to its full name, e.g. Doctor of Philosophy, Master of Arts, Science, etc.

\degreemonth \degreeyear

\cochair

\committee

Month of graduation, either December, March, June, or August.

The year that the dissertation or thesis will be defended. Full name of the research advisor

\advisor Full name of the research advisor \chair Full name of the committee chair

Full name of the committee cochair, if applicable.

A list of the examining committee following the form: " $\langle full\ name \rangle \& \langle member\ type \rangle \$ " (see example below). This list can be of arbitrary length and is formatted using a table.

```
\committee{Dr. Person 1 & Member\\
Dr. Person 2 & Member\\
Dr. Person 3 & Outside Member\\
Dr. Person 4 & Honorary Member\\}
```

\graddean

The full name of the current dean of the University of Oregon Graduate School.

8.2 Chapter-like meta-data

Chapter-like meta-data are large blocks of text. These can be placed in the header file or they can be replaced with \include{} arguments and kept elsewhere to keep the header compact. The example header uses the latter option.

\abstract

Fully formatted abstract, as you turned in to the University of Oregon Graduate School. There are size restrictions placed on this document, 350 words and 150 words for the dissertation and the thesis respectively⁴

\acknowledge \dedication

Optional, the style guide⁵ indicates that this should be no more that 2 pages. Optional, small text block.

³Thesis and Dissertation Style and Policy Manual (v. Fall 2010), Pg. 22

⁴Thesis and Dissertation Style and Policy Manual (v. Fall 2010), Pg. 24

 $^{^5\}mathrm{Thesis}$ and Dissertation Style and Policy Manual (v. Fall 2010), Pg. 25

8.3 The Curriculum Vitae

\birthplace \birthday

\school

The birth place of the author

author's birthday

List of the schools attended by the author, with their city and state of location. Each school is on its own \school{} entry:

\school{University of Somewhere, City, State \school{University of Somewhere Else, City, State} \school{A State School, City, State}

\degree

List of the education of the author. Each degree has its own \degree{} entry. Each entry should be formatted so: $\langle full\ degree\ name \rangle$ in $\langle field \rangle$, $\langle year \rangle$, $\langle school\ name \rangle$. An example is below:

\interests \position

A comma delimited list of interests.

Work history related to the authors research, as with \school{} and \degree{}, one entry per macro call.

\award

Awards and honors, one per call to the macro as with \school{}, \degree{}, and \position{}.

\publication

This section should be formatted the same way as \schools{}, etc. The actual entries must be formatted exactly the same as the References Cited section of the document. The easiest way to do this is to take a bibtex file with the authors publications, and create a .bib file for that using the same bibtex style and then copy and pasting it into this section each \bibitem{} being placed inside a \publication{} macro call⁶. Bibdesk will do this by using one of the optional copy formats under file as should JabRef.

9 Trouble Shooting and FAQ's

First, every attempt has been made to make this package as general and stable as is possible. That said, bugs happen so please report them. *Before* reporting them however, there are somethings that you can do to trouble shoot. It is suggested that you try to answer each of these questions yourself before you contact the maintainer:

- What does your compile log say? Are there any errors?
- Are there any errors in your BibT_EXcompile log?
- Can you replicate the problem with a minimal example, i.e. A basic code chunk in a chapter with your header?
- Can you typeset just the front-matter (abstract, cv, etc.)?

 $^{^6\}mathrm{Yes},$ this is a little redundant, but it was done this way to avoid any potential conflicts with $\mathrm{BiBT}_{\mathrm{E}}\mathrm{X}$

- $\bullet\,$ Do you have any extra packages in stalled?
- Have you checked to see if your problem is caused by a specific package or combination of packages?
- \bullet Are you calling any packages that are already called by the class (section 3 of this document)?

10 Implementation

10.1 Preamble

First comes the preliminary declarations, the LATEX version that is needed, what the class file provides, etc.

- 1 (*class)
- 2 \ProvidesClass{uothesis} [2012/02/08 v2.5.6 Submission to
- 3 University of Oregon Graduate School]

Next, we print out some identifying text in the output window.

- 4 \typeout{UO Thesis Class}
- 5 \typeout{}
- 6 \typeout{Based on the UO Thesis macros by Bart Massey, et al.}
- 7 \typeout{Currently maintained by Michael D. Anderson}
- 8 \typeout{Accepted by the University of Oregon Graduate School}
- 9 \typeout{for general use with Masters Thesis <date goes here>}
- 10 \typeout{Accepted by the University of Oregon Graduate School}
- 11 \typeout{for general use with PhD Dissertations <date goes here>}
- 12 \typeout{}

And then list the files being called by the .tex file.

13 \listfiles

Here we declare the draft option flags and conditionals for the code.

- 14 \newif\ifthesis
- 15 \newif\ifdraftcopy
- 16 \newif\ifcommitteedraft
- 17 \newif\iflatedraft
- $18 \newif\ifdraftimage$
- $19 \newif\ifdraft$
- $20 \neq 20$
- 21 \newif\ifsc
 22 \newif\iflipsum
- 23 \newif\ifjustified
- 24 \newif\ifamstex
- $25 \newif\ifchem$
- $26 \neq 16$
- 27 \newif\ifnatbib
- 28 \newif\ifnotables
- 29 \newif\ifnofigures
- 30 \newif\if@dissertation
- $31 \neq 0$
- 32 \newif\if@gsmodern
- 33 \newif\if@numsections
- 34 \newif\if@contnumb
- 35 \newif\if@draftimage

Now we declare the class options and assign the flags for each option.

- 39 \DeclareOption{draftcopy}{\drafttrue\draftcopytrue\boundtrue}
- $40 \verb|\DeclareOption{committeedraft}{\drafttrue}| committeedrafttrue| \\$

```
41 \DeclareOption{latedraft}{\drafttrue\latedrafttrue}
42 \DeclareOption{copyright}{\@copyrighttrue}
43 \DeclareOption{gsmodern}{\@gsmoderntrue}
44 \DeclareOption{numsections}{\Qnumsectionstrue}
45 \DeclareOption{amstex}{\amstextrue}
46 \DeclareOption{chemistry}{\chemtrue\amstextrue}
47 \DeclareOption{smallcaps}{\sctrue}
48 \DeclareOption{justified}{\justifiedtrue}
49 \DeclareOption{nofigures}{\nofigurestrue}
50 \DeclareOption{notables}{\notablestrue}
51 \DeclareOption{cheqns}{}
52 \verb|\DeclareOption{final}{\draftcopyfalse\draftimagefalse}|
53 \committeedraftfalse\latedraftfalse\finaltrue}
54 \DeclareOption{lipsum}{\lipsumtrue}
55 \DeclareOption{bound}{\boundtrue}
56 \DeclareOption{natbib}{\natbibtrue}
57 \DeclareOption*{\PassOptionsToPackage{\CurrentOption}{natbib}}
 Finally, we process the options.
58 \ProcessOptions
 Now we check that a document type has been indicated in the .tex file.
59 \ifthesis\else
60 \typeout{warning: Neither msthesis nor dissertation specified}
 If the bound option is indicated in the .tex file, we need to warn the user.
62 \ifbound
63 \typeout{PAGE FORMAT CHANGED FOR BINDING AND PRINTING}
64 \typeout{This format DOES NOT COMPLY with University of Oregon Guidelines}
65 \typeout{For personal use only!}
 Now we pass options to the report class primitive based on the options declared
68 \ifcommitteedraft\PassOptionsToClass{12pt,draft}{report}\fi
```

in the .tex file.

```
67 \iflatedraft\PassOptionsToClass{12pt,draft}{report}\fi
69 \ifdraftcopy\PassOptionsToClass{10pt,draft}{report}
70 \PassOptionsToClass{draft}{todonotes}\fi
71 \iffinal
72 \ifbound
73 \PassOptionsToClass{12pt,twoside}{report}
75 \PassOptionsToClass{12pt}{report}
76 \fi\fi
 Now we load the LATEX report class primitive.
77 \LoadClass{report}
```

10.2 Required Packages

Call the required packages for uothesis.

```
78 \RequirePackage{float}
79 \RequirePackage{subfig}
```

```
80 \RequirePackage[dvipsnames] {xcolor}
 81 \RequirePackage{graphicx}
 82 \RequirePackage{setspace}
 83 \RequirePackage{xspace}
 84 \RequirePackage[left,pagewise]{lineno}
 85 \RequirePackage{layouts}
 86 \RequirePackage[colorinlistoftodos]{todonotes}
 87 \RequirePackage{ragged2e}
 88 \captionsetup{labelsep=space}
 89 \setlength\RaggedRightRightskip{Opt plus 1cm}
 90 \setlength\RaggedRightParindent{0.4in}
       Document-wide Macros and Options
package options conditionals (document wide)
```

10.3

chem Here we define the result of calling the chemistry option. We call chemstyle and mhchem.

92 \RequirePackage[version=3]{mhchem}

93**\fi**

amstex call amstex packages if option enabled

94 \ifamstex

95 \RequirePackage{amsmath,amsthm,amssymb}

96 \fi

lipsum call lipsum package if option enabled

97 \iflipsum

98 \RequirePackage{lipsum}

99\fi

natbib call natbib package if enabled, which is the default setting

100 \ifnatbib

101 \RequirePackage{natbib}

102 **\fi**

10.3.1 Draft Only Macros and Options

draftwatermark create draft watermark

```
103 \ifdraft
```

104 \RequirePackage{draftwatermark}

105 \newcommand{\watermark}[5]{\SetWatermarkAngle{#1}

106 \SetWatermarkLightness{#2}

107 \SetWatermarkFontSize{#3}

108 \SetWatermarkScale{#4}

109 \SetWatermarkText{\uppercase{#5}}}

 $110 \ \texttt{\fi} \ \texttt{\f$

111 \ifcommitteedraft\watermark $\{45\}\{0.95\}\{5cm\}\{2.25\}\{Committee\ Draft\}\$ fi

 $112 \left(\frac{45}{0.95} \right)$ Review Proof \fi

113 \fi

```
Here we create the editing markup commands. These are based off of the \todo
          command.
           114 \ifdraftcopy
           115 \RequirePackage[colorlinks=true,breaklinks=true]{hyperref}
\ednote Create \ednote command.
                 \newcounter{ednote}
           117 \@addtoreset{ednote}{chapter}
                 \newcommand{\ednote}[1]{\stepcounter{ednote}\todo[color=blue!40,size=\scriptsize,
           119 caption={NOTE \arabic{chapter}.\arabic{ednote}: #1},noprepend]%
           120 {\bf\hfil N.\arabic{chapter}.\arabic{ednote}\hfil}%
           121 {\textbf{\textcolor{blue}{[N.\arabic{chapter}.\arabic{ednote}]}}}}
  \here Create \here command.
           122 \newcommand{\here}{\textcolor{BrickRed}{$\blacksquare$}\todo[color=red!40,
           123 size=\small,caption={\uppercase{Incomplete Section: Section \arabic{chapter}.
           124 \arabic{section}})]{\hfil}textbf{\uppercase{Incomplete Section}}\hfil}
\needref create \needref command.
           125 \newcounter{citation}
           126 \newcounter{citationbychapter}
           127 \@addtoreset{citationbychapter}{chapter}
                  \newcommand{\needref}[1]{\stepcounter{citation}\stepcounter{citationbychapter}\todo[colo
           129 size=\scriptsize,caption={CITE \arabic{chapter}.\arabic{citation}: #1}]
           130 {\bf C.\arabic{chapter}.\arabic{citation}}
           131 {\textbf{\textcolor{ForestGreen}{[C.\arabic{chapter}.\arabic{citation}]}}}}
  \rfmk create \rfmk command.
                  \newcommand{\rfmk}{\stepcounter{citation}\stepcounter{citationbychapter}
           133 {\addcontentsline{tdo}{\todo}{\protect{\colorbox{green!40}{\textcolor{green!40}}\} Missing
           134 {{\textcolor{red}{\ensuremath{^\text{[REF: C.\arabic{chapter}.\arabic{citationbychapter}]}}}}
          If the draft mode is not enabled we need to remove commands so that they don't
          cause errors. This is done by setting them to be empty if \ifdraft comes back as
          false.
           135 \else
          136
                  \newcommand{\ednote}[1]{}
           137 \newcommand{\here}{}
           138 \newcommand{\needref}{}
           139 \newcounter{citation}
           140 \newcommand{\rfmk}{\stepcounter{citation}{\textcolor{red}{\cite{dummy_\arabic{citation}}}}}
           141 \fi
```

10.4 General Macros and Environments

\cleanbreak

A new command for clean line breaks in TOC, TOF, TOT. The version of the command paired with the RaggedRight option doesn't work particularly well. It is intended more for using the IATEX default of having a full justification in the text block.

```
142 \newcommand{\cleanbreak}{
143 \ifjustified
144 \\\hfil
```

```
145 \else
                                          146 \newline
                                          147 \fi}
                                        new chemical equation environments. (modified from mhchem documentation, pg.
                                        10-11) create reaction counter
                 reaction Modify the reaction counter to fit formatting requirements.
                                          148 \ifchem
                                          149 \newcounter{reaction}
                                          150 \renewcommand\thereaction{Formula\ \thechapter.\arabic{reaction}}
                                          151 \@addtoreset{reaction}{chapter}
                                         create new reaction tag
                                          152 \newcommand\reactiontag{\refstepcounter{reaction}\tag{\thereaction}}
                       \chem Create new chem environment (doesn't use line breaks)
                                           153 \newcommand{\chem}[2][]{\begin{equation}\cee{#2}%
                                          154 \ifx\@empty#1\@empty\else\label{#1}\fi\reactiontag\end{equation}}
                                       Create new chemarray environment (allows for mulitple equations with one reference
            \chemarrav
                                        and number). Requires \reactiontag to be placed explicitly in the equation.
                                          155 \newcommand{\chemarray}[3][]{\begin{equation}\begin{array}{#2}\cee{#3}%
                                          156 \end{array}\ifx\@empty#1\@empty\else\label{#1}\fi\reactiontag\end{equation}}
                       \Chem Create new Chem environment (enables line breaks)
                                          157 \newcommand{\Chem}[2][]{\begin{multline}\cee{#2}%
                                          158 \ \texttt{\general} \ \texttt{\generall} \ \texttt{\ge
                                          159 \fi
                                          160 \newcommand*{\cst@xspace}{\expandafter\xspace}
                                          161 \newcommand*{\cst@latin}{\expandafter}
                                          162 \end{\{\cst@etc.\cst@xspace\}} \label{thm:cst@etc.\cst@xspace\}}
                                          163 \newcommand*{\invacuo}{\cst@latin{in vacuo}\cst@xspace}
                                          164 \end{\{\cst@etal\}{\cst@etal\}{\cst@etal.\cst@xspace\}}}
                                          165 \newcommand*{\eg}{\cst@eg.}
                                          166 \newcommand*{\ie}{\cst@ie.}
                                          167 \newcommand*{\cst@etal}{\cst@latin{et~al}}
                                          168 \newcommand*{\cst@etc}{\cst@latin{etc}}
                                          169 \newcommand*{\cst@ie}{\cst@latin{i.e\spacefactor999\relax}}
                                          170 \newcommand*{\cst@eg}{\cst@latin{e.g\spacefactor999\relax}}
                                         10.5
                                                           Internal Variables and Commands
                                       Define a single spacing environment.
       \normalspace
                                          171 \newenvironment{normalspace}{\begin{singlespacing}}{\end{singlespacing}}}
            \@mydouble Define special double space environment.
                                          172 \def\@mydouble{\endsinglespace\large\normalsize\setstretch{1.7}}
\@mysinglespace Define second special single space environment.
                                          173 \def\@mysingle{\singlespace\large\normalsize\setstretch{1.7}}
```

```
Define third special single space environment.
\@mysinglespace
                                       174 \ensuremath{\tt large} \en
         \@draftdate Define draftdate: YYYY/MM/DD
                                       175 \def\@draftdate{{\the\year/\/\two@digits{\the\month}/\/\two@digits{\the\day}}}
\@longdraftdate Define longdraftdate: Day, Month, YYYY
                                       176 \def\@longdraftdate{\today}
                                     Define thesis and dissertation strings for abstract page
                                       177 \if@dissertation
                                       178
                                                     \ifdraftcopy
                                                         \gdef\@cappapertype{Dissertation Draft}
                                       179
                                       180
                                                         \gdef\@cappapertype{Dissertation}
                                       181
                                       182
                                                    \fi
                                       183 \ensuremath{\setminus} else
                                       184
                                                    \ifdraftcopy
                                                         \gdef\@cappapertype{Thesis Draft}
                                       185
                                       186
                                                     \else
                                                         \gdef\@cappapertype{Thesis}
                                       187
                                       188
                                                     \fi
                                       189 \fi
                                       190 \xdef\@upperpapertype{\uppercase{\@cappapertype}}
                                       191 \xdef\@papertype{\lowercase{\@cappapertype}}
    \@draftstring Define draft copy header string.
                                       192 \ifdraftcopy
                                                    \def\@draftstring{{{\sc Draft of} \@draftdate}}
                                       194 \else
                                                    \def\@draftstring{}
                                       195
                                       196 \fi
      \@disclaimer Define draft copy disclaimer for title pages.
                                       197 \def\@disclaimer{
                                       198 \ifcommitteedraft\textcolor{red}{\textbf{\uppercase{committee draft}}}\fi
                                       199 \iflatedraft\textcolor{red}{\textbf{\uppercase{review proof}}}\fi
                                       200 \ifdraftcopy\textcolor{red}{\textbf{\uppercase{editing draft}}}\fi\\
                                       201 \vspace*{0.5in}
                                       202 \textcolor{red}{\textbf{\uppercase{This is a draft copy for review
                                       203 and editing purposes only!}}}
                                       204 \vspace*{10pt}
                                       205 \setlength\fboxsep{10pt}
                                       206 \setlength\fboxrule{2pt}
                                       207 \ \texttt{[1\columnwidth]{\parbox{0.95\columnwidth}{\textcolor{black}}} \\
                                       208 {\textbf{This draft format in no way complies with the University
                                       209 of Oregon Style Graduate School Style Guide for theses or dissertations.
                                       210 This draft may employ 10 point fonts for paper conservation, line numbering
                                       211 for ease of editing, or watermarking and editing notations; all of which violate
                                       212 the Graduate School Style Guide for final documents. See the uothesis.cls
                                       213 documentation for instructions on producing a properly formatted document. } } } } }
```

```
Define bound disclaimer for copyright page
                                                214 \def\@bounddisclaimer{%
                                               215 \parbox{0.75\textwidth}{\centering
                                               216 \begin{spacing}{0.5}
                                               217 {\tiny This document is for the the personal use of the author and does not comply
                                                218 with the University of Oregon Graduate School. Please contact the University
                                                219 of Oregon Graduate School for information on how to obtain an official copy
                                               220 of this document.}
                                               221 \neq \{\text{spacing}\} \
                                               222 \vfill\LaTeX
                                               223 }
                                                                 User Accessible Variables and Commands
                                              10.6
                                             10.6.1 Titles
              \covertitle Define cover title string
                                                224 \def\covertitle#1{\gdef\@covertitle{#1}\gdef\@uppercovertitle{\begin{doublespace}
                                                       \uppercase{#1} \end{doublespace}}}
       \abstracttitle Define abstract title string
                                               225 \def\abstracttitle#1{\gdef\@abstracttitle{#1}\gdef\@upperabstracttitle{\uppercase{#1}}}
                                              10.6.2 Author Strings
                       \author Define author command
                                               {\tt 226 \def\author\#1} \\ {\tt 226 \def\author\#2} \\ {\tt 2
         \narrowauthor Define narrow author
                                               227 \ def\narrowauthor {1}\gdef\@narrowauthor{#1}} \\
                                              10.6.3 School Information and Examination Committee
              \department Define department
                                                228 \def\department#1{\gdef\@department{#1}}
\narrowdepartment Define narrow department
                                                229 \def\narrowdepartment#1{\gdef\@narrowdepartment{#1}}
                     \advisor Define advisor
                                                230 \end{advisor} 11{\end{advisor} 41}}
                          \chair Define chair
                                                231 \def\chair#1{\gdef\@chair{#1}}
                     \cochair Define cochair for disseration
                                               232 \newif\if@cochair
                                               233 \setminus if@dissertation
                                               234 \def\cochair#1{\gdef\@cochair{#1}\@cochairtrue}
                                                235 %Define the committee
                                                236 \def\committee#1{\gdef\@committee{#1}}
                                                237 \fi
```

```
\graddean Define the dean
                                               238 \end{an} 11{\gdef}@graddean{#1}}
                                             10.6.4 Degree and Graduation
                \degreetype Define degree type
                                               239 \def\degreetype#1{\gdef\@degree{#1}}
              \degreemonth Define degree month
                                               240 \ensuremath{\tt def\ensuremath{\tt l}{\tt def\ensuremath{\tt l}{\tt l}}}
                \degreeyear Define degree year
                                               241 \def\degreeyear#1{\gdef\thedegreeyear{#1}}
                                                              Abstract, Dedication, etc...
                    \abstract Define abstract
                                               242 \long\def\abstract#1{\gdef\@abstract{#1}}
                \dedication Define dedication
                                               243 \newif\if@dedication
                                               244 \long\def\dedication#1{\gdef\@dedication{#1}\@dedicationtrue}
             \acknowledge Define acknowledgement
                                               245 \label{longdef} 245 \label{longdef} 245 \label{longdef} $$245 \label{longdef} $$24
                                             10.6.6 Signature Page Internal Commands
                                            Define the optional arguement: c.f. David Solomon's "The Advanced TeXbook",
                  \@optional
                                             ISBN: 0-387-94556-3, p. 120-150. This macro is used to expand a name iff it is
                                             defined. Note that it is invoked as \@optional{foo} to expand \foo.
                                               246 \def\@optional#1{\let\what=\expandafter\csname #1
                                               247 \endcsname\ifx\what\relax\else\what\fi}
\sigline, \Sigline Define signature line commands
                                               248 \newcommand{\@sigline}[2]{Approved: \rule{#1}{.4pt}\\*[-0.25\baselineskip]{#2}}
                                               249 \newcommand{\@Sigline}[1]{Approved: \hrule\vspace*{-\parskip}\vspace*{4pt}{#1}}
                                             10.6.7 CV Internal Commands
                  \cvoneline Define single line environment for CV
                                               250 \def\cvoneline#1#2{ \ \\*[\baselineskip] {#1}: {#2}}
             \cvmultiline Define multiline environment for CV
                                               251 \def\cvmultiline#1#2{
                                               252 \par\vspace{1.5\baselineskip}\noindent
                                                                  {#1}: \* [\baselineskip] \nopagebreak
                                               253
                                                                  \indent\parbox[b]{5in}{#2}}
                                               254
         \@cvhangindent define CV hanging indent
                                               255 \newlength{\@cvhangindent}
```

```
256 \setlength{\@cvhangindent}{\parindent}
                                  257 \addtolength{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath}\amb}\amb}\amb}}}}}}}}}
                                  258 \long\def\cvpars#1{\par #1}
                                  259 \long\def\cvitem#1#2{\par\vspace{1.5\baselineskip}\noindent{#1}:\nopagebreak\par #2}
                                 10.6.8 CV commands
  CV Variables Define birthplace
    \birthplace
                                 260 \def\birthplace#1{\gdef\@birthplace{#1}}
        \birthday Define birthday
                                  261 \def\birthday#1{\gdef\@birthdate{#1}}
           \schools Define educational history
                                  262 \def\school#1{\expandafter\gdef\expandafter\@schools\expandafter{\@schools\cvpars{#1}}}
           \degrees Define the degrees received.
                                  263 \long\def\degree#1{\expandafter\gdef\expandafter\@degrees\expandafter{\@degrees\cvpars{#1}}}
      \interests Define interests
                                  264 \def\interests#1{\expandafter\gdef\expandafter\@interests\expandafter{\@interests\cvpars{#1}
    \experience Define professional experience.
                                  \awards Define awards. (optional)
                                  \publications Define publications. (optional)
                                  267 \def\publications\expandafter\gdef\expandafter\@publications\expandafter\@publications\cv
                                                 Preliminary page formatting, layout, and settings
                                Set the text spacing to a little under double spacing.
                                  268 \text{setstretch} \{1.7\}
                                 Set a standard header size
                                  269 \newcommand{\@normalheaderdims}{
                                  270 \textheight 620pt
                                  271 \headheight 14pt
                                  272 \headsep 14pt}
                                 Set standard page margins
                                  273 \ifbound
                                  274 \oddsidemargin 0.6in
                                  275 \evensidemargin 0.6in
                                  276 \textwidth 5.8in
                                  277 \footskip 0.5in
                                  278 \setminus footnotesep 15pt
                                  279 \parindent 24pt
                                  280 \topmargin Oin
```

Set the hanging indent length and deal with paragraph alignments within the CV.

```
281 \else
282 \oddsidemargin 0.25in
283 \evensidemargin 0.25in
284 \textwidth 6in
285 \footskip 0.25in
 286 \footnotesep 15pt
 287 \parindent 24pt
 288 \topmargin Oin
289 \fi
 290 \@normalheaderdims
Set vertical space net (relative to the top of the page).
 291 \def\@fromtopskip#1{
 292 \@tempdima=#1
       \advance\@tempdima by-1in
 293
       \advance\@tempdima by-\topmargin
 294
       \advance\@tempdima by-\headheight
 295
       \advance\@tempdima by-\headsep
 296
       \advance\@tempdima by-\baselineskip
 297
       \advance\@tempdima by12pt
 298
 299
       \hbox toOpt{}\nointerlineskip\vskip\@tempdima}
Setting section numbering for numbered and unnumbered sections. Include sections
in the TOC
301 \setcounter{tocdepth}{1}
Declare a new counter for section numbers
302 \newcounter{@shownumdepth}
Show section numbers with gsmodern.
303 \if@gsmodern
304 \setcounter{@shownumdepth}{2}
Show section numbers with numsection
 306 \if@numsections
      \setcounter{@shownumdepth}{2}
308 \ensuremath{\setminus} \texttt{else}
Suppress section numbers in TOC and section headings
       \setcounter{@shownumdepth}{0}
309
       \setcounter{secnumdepth}{1}
310
311 \fi
312 \fi
Write the appendix count in the main aux file
313 \def\@mit#1{\if@filesw\immediate\write\@mainaux{#1}\fi}
Increase the hyphenation penalty to prevent hyphenation.
314 \hyphenpenalty=500000
Increase tolerance of wider word spacing in lines.
315 \tolerance=5000
Increase the widow penalties.
316 \widowpenalty=10000
```

Increase the orphan penalties
317 \clubpenalty=10000
Allow ragged bottom pages
318 \raggedbottom

10.8 The Title Page Layout

```
Define the title page
\@maketitlepage
                    319 \def\@maketitlepage{
                   create a new page
                    320 \newpage
                   make the page empty
                    321 \text{ } \text{thispagestyle} \{ \text{empty} \}
                   if draft mode start numbers here
                    322 \ifdraftcopy\linenumbers\fi
                   begin center justification
                    323 \begin{center}
                   position title start 0.25 in from top of text block
                    324 \vspace*{0.25in}
                   set line spacing to double spacing for title
                    325 \setminus doublespacing
                   call uppercovertitle
                    326 \@uppercovertitle
                   set line spacing to single spacing
                    327 \setminus single spacing
                   fill to by line
                    328 \vfill
                   set by line and start new line
                    329 by \\*[\baselineskip]
                   call upper case author string
                    330 \@upperauthor\\
                   fill to gs declaration
                    331 \vfil
                   if draft mode set disclaimer
                    332 \ifdraft\@disclaimer\\\fi\vfill
                   declaration to the graduate school.
                    333 A \@upperpapertype \\*[\baselineskip]
                    334 Presented to the \mbox{@narrowdepartment }\
                          and the Graduate School of the
                    335
                    336 University of Oregon \\*
                          in partial fulfillment of the requirements \\*
                    337
                           for the degree of \
                    338
                   call degree
```

339 \@degree *[\baselineskip]

```
call degree month
  340 \@degreemonth ~\thedegreeyear\\
close center justification
  341 \end{center}}
```

10.9 The Approval Page

Define the approval signature page

```
\@makeapprovepage
```

```
342 \def\@makeapprovepage{
create clear page
343 \clearpage
344 \thispagestyle{plain}
place the heading.
 345 \@startchapter{\@upperpapertype\ APPROVAL PAGE}
begin single spacing
346 \geq 346 \leq 346
3 ex of vertical space
347 \vspace*{3ex}
suppress indenting in the page
348 \noindent
call author string.
349 Student: \@author\\*[\baselineskip]
call the document title.
350 Title: \@abstracttitle\\*[\baselineskip]
place the GS mandated text
351 \text{ This } \ensuremath{\texttt{Qpapertype}}\ has been accepted and approved
352 in partial fulfillment of the requirements for the
353 \Odegree\ degree in the \Onarrowdepartment\ by:\\*[\baselineskip]
create a table with the names of the examining committee
354 \begin{tabular}[t]{p{2.25in} p{3.25in}}
call chair string then label
 355 \@chair & Chair\\
call cochair string then label if it exists
356 \if@cochair
357 \@cochair& Co-chair\\
358 \fi
call advisor
 359 \@advisor & Advisor\\
call committee string
360 \ensuremath{\mbox{0committee}\ensuremath{\mbox{\mbox{}}}}
361 and & \\ \\
362 \@graddean & Vice President for Research \& Innovation/ Dean of the Graduate School
```

```
end tablular environment

363 \end{tabular}\\*[\baselineskip]

remainder of the text required by GS

364 Original approval signatures are on file with the

365 University of Oregon Graduate School.\\*[\baselineskip]

degree date

366 Degree awarded \@degreemonth ~\thedegreeyear

end single spacing

367 \end{spacing}}
```

10.10 The Copyright Page

\@makecopyrightpage

Define the copyright page.

 ${\tt 368 \setminus def \setminus @makecopyrightpage \{}}$

begin copyright conditional

369 \if@copyright

create clear page

370 \clearpage

371 \thispagestyle{plain}

4 in vertical space

372 \@fromtopskip{5in}

create a centered line with copyright symbol followed by degree year and author string

373 \ifbound\else\centerline{\copyright ~ \t thedegreeyear ~ \c author}\fi

vertical fill to bottom of the page if draft mode set disclaimer

 $374 \end{\centering\\\bound disclaimer}\else\vfill\fi\vfil$

end copyright conditional

375 \fi}

10.11 The Abstract Page

\@makeabstractpage

Define the abstract page.

 $376 \verb|\def|@makeabstractpage||$

create clear page

377 \clearpage

 $378 \neq 378$

place the heading.

379 \@startchapter{\@upperpapertype\ ABSTRACT}

begin single spacing

 $380 \geq 380 \leq 13$

3 ex of vertical space

 $381 \vspace*{3ex}$

suppress indenting in the page

382 \noindent

```
call author string.
 383 \ensuremath{\mbox{\tt @author}\mbox{\tt &[\baselineskip]}}
call the degree type.
 384 \@degree\\*[\baselineskip]
call the department name
 385 \@department\\*[\baselineskip]
the date
 386 \@degreemonth ~\thedegreeyear\\*[\baselineskip]
call the document title.
 387 Title: \@abstracttitle\\*[\baselineskip]
 388 \operatorname{parbox[t]}{5in}{\operatorname{raggedright}}
begin co-chair conditional
 389 \if@cochair
signature lines for advisor
 390 \co-chair{\hspace*{1.5in}\@advisor, Co-chair}\\*[\baselineskip]
signature lines for cochair.
 391 \@sigline{3.5in}{\hspace*{1.5in}\@cochair, Co-chair}
if no co-chair
 392 \else
signature line for advisor.
 393 \ensuremath{\tt 0.5in}{\hspace*{1.5in}\@advisor}
end co-chair conditional
 394 \fi}\ [2\baselineskip]
 395 \end{spacing}
set text block to full justification if option is called
 396 \ifjustified\else\RaggedRight\fi
 397 \@abstract}
          The Acknowledgments Page
10.12
Define the acknowledgements page
 398 \def\@makeackpage{
```

```
else
 406 \else
place acknowledgments set text block to full justification if option is called
 407 \ifjustified\else\RaggedRight\fi
408 \@acknowledge
begin late draft conditional statement
 409 \iflatedraft
vertical fill
410 \vfill
begin center justification
411 \begin{center}
mark as review proof
412 \textcolor{red}{\textbf{\uppercase{review proof}}}\\
end centering
 413 \end{center}
end late draft conditional
414\fi
end draft conditional
415 \fi}
```

10.13 The Dedication Page

```
Define the dedication page
\@makededpage
                                                                                 416 \def\@makededpage{
                                                                             begin dedication conditional
                                                                                 417 \if@dedication
                                                                             create clear page
                                                                                 418 \clearpage
                                                                                 419 \times pagestyle{plain}
                                                                             set page to width of dedication
                                                                                  420 \settowidth{\@tempdima}{\@dedication}
                                                                              begin short dedication conditional
                                                                                 421 \setminus ifcommitteedraft
                                                                             exclude from the committee draft.
                                                                                 422 \verb|\eff] {\tt Qtempdima} {\tt Opt} \\
                                                                             end short dedication conditional
                                                                                  423 \fi
                                                                             begin long dedication conditional
                                                                                 424 \ \ensuremath{$\mbox{\tt difdim}$\ensuremath{$\mbox{\tt dim}$\ensuremath{$\mbox{\tt dim}$\ensuremath{}\mbox{\tt dim}$\ensuremath{$\mbox{\tt dim}$\ensuremath{}\mbox{\tt dim}$\ensuremath{$\mbox{\tt dim}$\ensure
                                                                             4 in vertical space from top of page
                                                                                  425 \@fromtopskip{4in}
                                                                             set dedication header
                                                                                  426 \@chapterline{}
```

```
if dedication longer than 1 line of text
 427 \else
3 in vertical space from top of page
 428 \@fromtopskip{3in}
set dedication header
 429 \@startchapter{}
end long dedication conditional
430 \fi
vertical space
 431 \vspace*{\baselineskip}
end of paragraph
 432 \par
begin draft conditional
 433 \ifcommitteedraft
print disclaimer
434 \begin{center}\@disclaimer\end{center}
else
 435 \ensuremath{\setminus} \texttt{else}
begin center justification
436 \begin{center}
place the dedication...
437 \@dedication
end center justification
 438 \end{center}
vertical fill to center on page
 439 \vfill
begin late draft conditional
 440 \iflatedraft
begin center justification
441 \ge \{center\}
set review proof notification
442 \textcolor{red}{\textbf{\uppercase{review proof}}}\\ \\
end center justification
 443 \end{center}
end late draft conditional
444 \fi
end draft conditional
 445 \fi
end dedication conditional
 446 \fi}
```

10.14 The Cirriculum Vitae

```
\@makevita Define the CV
             447 \def\@makevita{
             create clear page
              448 \clearpage
             449 \thispagestyle{plain}
             place the heading.
              450 \@startchapter{CURRICULUM VITAE}
             begin single spacing
              451 \begin{singlespacing}
             3 ex of vertical space
              452 \text{vspace}*{3ex}
             call author string.
              453 \noindent NAME OF AUTHOR:\quad \@author \vskip\baselineskip
             call birthplace string.
              454\ \%\ noindent PLACE OF BIRTH:\quad \@birthplace \vskip\baselineskip
             call birthday string.
              455\ \mbox{\em M}\ noindent DATE OF BIRTH:\quad \@birthdate \vskip\baselineskip
              456 \everypar={\hangindent=\@cvhangindent}
             call the educational history string.
              457 \noindent GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:
              458 \c ools
              459 \ \vskip \baselineskip
             call the degrees string.
              460 \noindent DEGREES AWARDED:
              461 \@degrees
              462 \ \vskip \baselineskip
             call the interests string.
              463 \noindent AREAS OF SPECIAL INTEREST:
              464 \@interests
             change the paragraph spacing.
              465 \everypar={\parskip=0.75\baselineskip
              466 \hangindent=\@cvhangindent
                                  \interlinepenalty=\@M}
             call the experience string.
              468 \cvitem{PROFESSIONAL EXPERIENCE}{\@experience}
             call the awards string.
              469 \cvitem{GRANTS, AWARDS AND HONORS}{\@awards}
             call the publications string.
              470 \cvitem{PUBLICATIONS}{\@publications}
             end the alternate paragraph spacing.
              471 \par
             end single spacing
```

472 \end{singlespacing}}

10.15 Full Draft Front Matter

```
Here we call the previously defined pages in their proper order.
\@maketitlepages
                  473 \def\@maketitlepages{
                 set the page numbering to roman
                  474 \pagenumbering{roman}
                 call the pages
                  475 \@maketitlepage
                  476 \@makeapprovepage
                  477 \@makecopyrightpage
                  478 \@makeabstractpage
                  479 \@makevita
                  480 \@makeackpage
                  481 \@makededpage
                  begin single spacing before TOC, etc...
                  482 \begin{singlespacing}
                 adjust the formatting for the TOC's
                  483 \clearpage
                 set the page style for non-"tocheadings" style TOC, LOF, LOT figures.
                  484 \@tableofcontents
                  485 \ifnofigures\else
                  486 \IfFileExists{\jobname.\ext@figure}{\@listoffigures}{\@starttoc{\ext@figure}}
                  487 \fi
                  488 \ifnotables\else
                  490 \fi
                 create clear page
                  491 \clearpage
                  reset to normal header dimensions
                  492 \@normalheaderdims
                 create clear page
                  493 \clearpage
                  end single spacing
                  494 \end{singlespacing}}
                  10.16
                           Working Draft Front Matter
                 Here we call the previously defined pages with the exception of using the draft
\@makedraftcover
                 cover instead of the Full cover and the omission of the table of contents.
                  495 \def\@makedraftcover{
                  page break
                  496 \clearpage
                 blank page
                  497 \thispagestyle{empty}
                 start line numbers for drafts
```

498 \linenumbers

```
begin center justification
 499 \verb|\begin{center}|
02.5 in vertical space
500 \vspace*{0.25in}
call document string in large font
501 {\large \@upperpapertype}\\
begin single spacing
 502 \begin{singlespacing}
call the cover title
 503 {\large \@covertitle}\\
vertical space
504 \vspace*{\baselineskip}
state the draft date.
505\: \texttt{Draft} of \@longdraftdate\\
call the author string.
506 \@author
end single spaceing
507 \end{singlespacing}
end center justification
508 \end{center}
small font
 509 {\small
begin single spacing
510 \begin{singlespacing}
place the abstract header
511 \begin{center}ABSTRACT\end{center}
call the abstract string.
512 {\footnotesize \par\@abstract}
vertical fill
513 \vfill
begin center justification
514 \begin{center}
suppress indenting
515 \noindent
call disclaimer
516 \@disclaimer\\
end center justification
517 \end{center}
end single spacing
518 \end{singlespacing}}
clear page
519 \clearpage}
```

```
Typeset the appropriate frontmatter
520 \def\maketitle{}
521 \ifdraftcopy
522 \iflatedraft
523 \@maketitlepages
524 \else
525 \ifcommitteedraft
526 \@maketitlepages
527 \ensuremath{\setminus} else
528 \@makedraftcover
529 \pagenumbering{roman}
530 \listoftodos\clearpage
531 \@tableofcontents
532 \ifnofigures\else
533 \IfFileExists{\jobname.\ext@figure}{\@listoffigures}{\@starttoc{\ext@figure}}
534 \fi
535 \ifnotables\else
536 \IffileExists{\jobname.\ext@table}{\@listoftables}{\@starttoc{\ext@table}}
537 \fi
538 \fi
539 \fi
540 \ensuremath{\setminus} else
541 \@maketitlepages
542 \fi
543 \pagestyle{plain}
544 \ifjustified\else\RaggedRight\fi
545 \pagenumbering{arabic}
546 \setcounter{page}{1}}
         General Heading Formatting
10.18
page headings
548 \ifbound
549 \def\@footer{\hfill\rm\thepage}
551 \def\@footer{\hfil\rm\thepage\hfil}
define the toc chapter and page labels for first page
553 \def\ps@tocheadings{
554 \def\@oddfoot{\@footlines{\@footer}}
555 \def\@oddhead{}
556 \let\@evenfoot\@oddfoot
557 \let\@evenhead\@oddhead}
define the toc, tof, and lot labels for additional pgs.
```

558 \def\ps@tocextraheadings{

561 \def\@evenfoot\@oddfoot

563 \textheight 620pt 564 \headheight 14pt 565 \headsep 14pt}

559 \def\@oddfoot{\@footlines{\@footer}}

 $560 \end{cond} \label{lem:chapterhfil} $$ 560 \end{cond} $$ io\textwidth{Chapter \infil{Page}}} $$$

 $562 \ensuremath{$

```
566 \def\ps@lofextraheadings{
567 \def\@oddfoot{\@footlines{\@footer}}
568 \def\@oddhead{{\hbox to\textwidth{Figure\hfil{Page}}}}
569 \def\@evenfoot\@oddfoot
570 \def\@evenhead{{\hbox to\textwidth{Figure\hfil{Page}}}}
571 \textheight 620pt
572 \headheight 14pt
573 \headsep 14pt}
574 \def\ps@lotextraheadings{
575 \def\@oddfoot{\@footlines{\@footer}}
576 \def\@oddhead{{\hbox to\textwidth{Table\hfil{Page}}}}
577 \def\@evenfoot\@oddfoot
578 \end{{\tt hbox to\textwidth{Table\hfil{Page}}}} \}
579 \textheight 620pt
580 \headheight 14pt
581 \headsep 14pt}
redefine the plain page headers and footers for bound option.
582 \def\ps@plain{
583 \def\@oddfoot{\@footlines{\@footer}}
584 \def\@oddhead{}
585 \let\@evenfoot\@oddfoot
586 \let\@evenhead\@oddhead
587 \textheight 620pt
588 \headheight 14pt
589 \headsep 14pt}
10.18.1 TOC, TOF, etc... Headers
590 \def\@tableofcontents{%
591 \clearpage
592 \markboth{Chapter}{Chapter}
593 \thispagestyle{tocheadings}
594 \@startchapter{TABLE OF CONTENTS}
595 \vspace*{14pt}
596 \noindent
597 \makebox[\textwidth][1]{Chapter \hfill Page}
598 \pagestyle{tocextraheadings}\@mysingle\@starttoc{toc}}
599 \def\@listoffigures{%
600 \clearpage
601 \markboth{Figure}{Figure}
602 \thispagestyle{tocheadings}
603 \@startchapter{LIST OF FIGURES}
604 \vspace*{14pt}
605 \noindent
606 \makebox[\textwidth][1]{Figure \hfill Page}
607 \pagestyle{lofextraheadings}\@mydouble\@starttoc{\ext@figure}}
608 \def\@listoftables{%
609 \clearpage
610 \markboth{Table}{Table}
611 \thispagestyle{tocheadings}
612 \@startchapter{LIST OF TABLES}
613 \vspace*{14pt}
614 \noindent
615 \makebox[\textwidth][1]{Table \hfill Page}
```

10.19 Table of Contents Formatting

Here we set up the formatting for the TOC, TOF, etc... 617 \if@gsmodern $\label{lem:line} $$ \operatorname{line}_1{\hox to}\operatorname{line}_1{\hox to} 0.75em $$\#1\hfil}$$ 618 619 \else 620 621 \fi 622 \def\@dottedtocline#1#2#3#4#5{ \ifnum #1>\c@tocdepth 623 624 \else $\$ \vskip \z0 \0plus.2\p0 625 {\leftskip=#2\relax \rightskip=\@tocrmarg 626 627 \parfillskip=-\rightskip \parindent=#2\relax \hangindent=1.5em 629 \singlespace\@afterindenttrue \interlinepenalty\@M 630 \leavevmode 631 \@tempdima=#3\relax 632 \advance\leftskip by\@tempdima \null\nobreak 633 634 \hskip -\leftskip 635 ${#4}\nobreak$ 636 \leaders\hbox{\$\m@th 637 \mkern \@dotsep mu\hbox{.}\mkern 638 \@dotsep mu\$}\hfill 639 \nobreak 640 \hb@xt@\@pnumwidth{\hfil\normalfont 641 642 \normalcolor #5} \par} 643 644 \fi} 645 \def\@sechack{\relax} 646 \def\l@chapter#1#2{ \pagebreak[3]\par\vskip\baselineskip 647 648 649 \nopagebreak\par \gdef\@sechack{\vskip\baselineskip\gdef\@sechack{\relax}}} 650 651 \if@gsmodern $\label{losection} $$ \end{0.5in} 0.5in} $$ \end{0.5in} $$ (0.5in) $$ (0.5in$ 652 653 \else 654 \if@numsections \def\l@section{ 655 656 \@sechack\@dottedtocline{1}{0.5in}{0.5in}} \def\l@section{ $659 \verb|\colored]{0.75in}{0.5in}}$ 660 \fi 661 \fi $662 \end{figure} \end{figure} $$ \end{figure$

663 \def\l@table{\@dottedtocline{0}{0in}{0.5in}}

10.20 The Chapter Headings Formatting

\@chapapp Here we define the chapter heading format and all the conditionals for appendices etc...

```
664 \def\@chapapp{CHAPTER}
665 \verb|\command{\thechapter}{\command{chapter}}|
666 \def\@makechapterhead#1{{
667 \centering
668 \ifnum \c@secnumdepth>\m@ne
669 \@chapapp{}
670 \if@appendices
671 \ifnum 1=\aux@appendices
672 \ifnum 1=\c@chapter\else
673 \typeout{warning:
674 extra appendices; rerun LaTeX}
675 \thechapter
676 \fi
677 \else
678 \thechapter
679 \fi
680 \ensuremath{\setminus} else
681 \Roman{chapter}
682 \fi
683 \par
684 \vskip 2ex
685 \fi
686 \ifsc\textsc{#1}\else\uppercase{#1}\fi\par\nopagebreak\vskip 4ex}}
687 \def\@makeschapterhead#1{{
688 \@startchapter{\ifsc\textsc{#1}\else\uppercase{#1}\fi}\par
689 \nopagebreak\vskip 4ex}}
690 \def\chapter{
691 \clearpage\global\@topnum\z@
692 \@afterindenttrue\secdef\@chapter\@schapter}
693 \def\@chapter[#1]#2{
694 \stepcounter{chapter}
695 \if@appendices
696 \protected@edef\@currentlabel
697 {\csname p@chapter\endcsname\Alph{chapter}}
699 \protected@edef\@currentlabel
700 {\csname p@chapter\endcsname\Roman{chapter}}
701 \fi
702 \typeout{[#1]}
703 \if@appendices
704 \ifnum\c@chapter=1
705 \ifnum\aux@appendices=1
706 \addtocontents{toc}{
707 \protect\pagebreak[3]\protect\vspace{3ex}
708 \protect\nopagebreak\protect\noindent
709 {}\protect\nopagebreak}
710 \ensuremath{\setminus} else
711 \addtocontents{toc}{
712 \protect\pagebreak[3] \protect\vspace{3ex}
713 \protect\nopagebreak\protect\noindent
```

```
714 {APPENDICES}\protect\nopagebreak}
715 \fi
716 \fi
717 \fi
718 \@emit{\string\global\string\aux@appendices=\number\c@chapter}
719 \ifnum \c@secnumdepth >\m@ne
720 \if@appendices
721 \ifnum\aux@appendices=1
722 \addcontentsline{toc}{chapter}
723 {APPENDIX:
724 \ifsc\textsc{#1}\else\uppercase{#1}\fi
725 \else\ifnum\aux@appendices > 1
726 \addcontentsline{toc}{chapter}
727 {\protect\number@appendix{\number\c@chapter
728 }{\Alph{chapter}.}
729 \ifsc\textsc{#1}\else\uppercase{#1}\fi}
730 \fi\fi
731 \else
732 \addcontentsline{toc}{chapter}
733 {\protect\numberline{\Roman{chapter}.}\ifsc\textsc{#1}
734 \else\uppercase{#1}\fi}
735 \fi
736 \fi
737 \chaptermark{\ifsc\textsc{#1}\else\uppercase{#1}\fi.}
738 \if@twocolumn
739 \@topnewpage[\@makechapterhead{\ifsc\textsc{#2}
740 \else\uppercase{#2}\fi}]
742 \mbox{\mbox{\mbox{$makechapterhead}\ifsc\textsc{$\#2}\else\uppercase{$\#2}\fi}
743 \@afterheading
744 \fi}
745 \def\@schapter#1{
746 \if@twocolumn
748 \uppercase{#1}\fi}]
749 \else
750 \mbox{\colored} \Qmakeschapterhead{\ifsc\textsc{#1}\else\uppercase{#1}\fi}
751 \@afterheading
752 \fi}
753 \def\chapter{
754 \clearpage\global\@topnum\z@
755 \@afterindenttrue \secdef\@chapter\@schapter}
756 \def\@chapterline#1{\centerline{#1}}
757 \def\@startchapter#1{\@chapterline{#1}}
```

10.21 Section Headings formatting

```
\Qunderbar Here we define the code for a package specific underlining environment.

758 \def\Qunderbar#1{{$\setbox0=\hbox{#1}\dp0=0pt\underline{\box0}$}}
\Quad \text{Vestartsection} Here we define the section command with all its associated conditionals.

759 \def\Quad \text{Vestartsection}#1#2#3#4#5#6{\ifQnoskipsec \leavevmode \fint{760 \par \Quad tempskipa #4\relax}}
```

```
\@afterindenttrue
761
                  \ifdim \@tempskipa <\z@ \@tempskipa -\@tempskipa \@afterindentfalse\fi
762
                  \if@nobreak
763
764 \everypar{}
765 \ensuremath{\setminus} else
                        \addpenalty{\@secpenalty}\addvspace{\@tempskipa}
766
767 \fi
768 \ensuremath{\mbox{\sc t}{\#2}{\#3}{\#4}{\#5}{\#6}}{\ensuremath{\mbox{\sc t}{\#0}}}
769 \@sect{#1}{#2}{#3}{#4}{#5}{#6}}}}
770 \def\@sect#1#2#3#4#5#6[#7]#8{
                       \if@gsmodern
771
                             \refstepcounter{#1}
772
                             \edef\@svsec{\csname the#1\endcsname~~}
773
                       \else
774
775 \if@numsections
                            \refstepcounter{#1}
776
                            \edef\@svsec{\csname the#1\endcsname~~}
777
778
                            \ifnum #2>\c@@shownumdepth
779
780
                                 \def\@svsec{}
781 \else
                                 \edef\@svsec{\csname the#1\endcsname\hskip 1em }
782
783 \fi
                            \ifnum #2>\c@secnumdepth\else\refstepcounter{#1}\fi
784
785
                       \fi
786 \fi
                       \@tempskipa #5\relax
787
                         \ifdim \@tempskipa>\z@
788
789
                               \if@gsmodern
790
                                    \begingroup
                                         791
                                         \interlinepenalty \@M
792
793
                                    \endgroup
                              \else
794
795 \if@numsections
                                    \begingroup #6\relax
796
797
                     \@hangfrom{#6\relax\hskip #3\relax}{
798 \in \#2=1 \
799 \ifnum #2=3 \it\else\fi\fi
800 \interlinepenalty \@M
                          \liminf #2=1 \ensuremath{$ \ensuremath{$} \ensuremath{} \ensuremath{$} \ensuremath{} \ensuremath{$} \ensuremath{} \ensuremath{$} \ensuremath{} \ensuremath{} \ensuremath{$} \ensuremath{$} \ensuremath{$} \ensuremath{} \ensur
802 \ifnum #2=2 \@underbar{#8}\else#8\fi\fi
                                         \par}
803
                                         \interlinepenalty \@M
804
805
                                    \endgroup
                               \else
806
               \begingroup #6\relax
807
                     \@hangfrom{\hskip #3\relax\@svsec}{
809 \liminf #2=1 \left| \frac{1}{1} \right|
810 \ifnum #2=2 \it\else\fi\fi
811 \interlinepenalty \@M
                          \  \fi \ifnum #2=3 \@underbar{#8} \else #8 \fi
812
813
                     \par}
814
               \endgroup
```

```
\fi
           815
           816 \fi
                      \csname #1mark\endcsname{#7}\addcontentsline{toc}{#1}{
           817
                      \ifnum #2>\c@@shownumdepth
           818
           819 \else
           820 \protect\numberline{\csname the#1\endcsname}
           821 \fi#7}
           822 \else
           823 \left( \frac{46}{8} \right) #3\ensuremath{\ \ }
           824 \csname #1mark\endcsname{#7}\addcontentsline{toc}{#1}{
           825 \ifnum #2>\c@@shownumdepth
           826 \else
                                            \protect\numberline{\csname the#1\endcsname}
           827
           828 \fi#7}}
           829 \fi
           830 \@xsect{#5}}
           831 \def\@ssect#1#2#3#4#5#6{\@tempskipa #4\relax
           832 \ifdim\@tempskipa>\z@
           833 \begingroup #5\@hangfrom{\hskip #2}{\interlinepenalty \@M
           834 \ifodd #1
           835 \liminf #1 >3 \
           836 \else
           837
                                      \@underbar{#6}
           838 \fi
           839 \else
                                  #6
           840
           841 \fi \par}\endgroup
                  \else
           843 \def\@svsechd{#5\hskip #2\relax {#6}}
           844 \fi
           845 \c \x = 14}
          10.21.1 Numbering Hierarchies
\section Here we define the numbering hierarchy for the various numbering modes.
          846 \if@gsmodern
          gsmodern sets hierarchy to be numbered C.sec.sub.sub.s
           847 \def\section{\@startsection{section}{1}{\z@}{3ex}{2ex}{}}
           848 \renewcommand{\thesection}{\thechapter.\arabic{section}.}
           849 \def\subsection{\@startsection{subsection}{2}{\z@}{3ex}{2ex}{}}
           850 \mbox{\thesubsection}{\thesection\arabic{subsection}.}
           851 \def\subsubsection{\@startsection{subsubsection}{3}{\z@}{3ex}{2ex}{}}
           852 \renewcommand{\thesubsubsection}{\thesubsection\arabic{subsubsection}.}
```

858 \def\subsection{\@startsection{subsection}{2}{\z@}{3ex}{2ex}{\centering}}

860 \def\subsubsection{\@startsection{subsubsection}{3}{\z@}{2ex}{\centering}}

853 \renewcommand{\theequation}{Equation\ \thechapter.\arabic{equation}.}

 $856 \end{artsection} {1}{\z0}{3ex}{\centering}}$

857 \renewcommand{\thesection}{\thechapter.\arabic{section}.}

854 \else

855 \if@numsections

numsections numbers C.sect.

859 \renewcommand{\thesubsection}{}

```
861 \renewcommand{\thesubsubsection}{}
862 \mbox{ } \text{command{\the equation} } Equation \ \ \mbox{equation}.}
863
864 \else
865 \def\section{\@startsection{section}{1}{\z@}{3ex}{\centering}}
866 \def\subsection{\@startsection{subsection}{2}{\z@}{3ex}{2ex}{\centering}}
867 \def\subsubsection{\@startsection{subsubsection}{3}{\z@}{2ex}{2ex}{}}
868 \fi
869 \fi
```

10.22**Bibliography Formatting**

\@bibsection Here we create the bibsection command from a chapter and add an entry to the

```
870 \newcommand{\@bibsection}[1]{
                   871 \clearpage
                   872 \addcontentsline{toc}{chapter}{#1}
                   873 \@startchapter{#1}
                   874 \ifnum \c@citation > 0
                   875 \centering
                   876 \setlength\fboxsep{10pt}
                   877 \setlength\fboxrule{2pt}
                   878 \begin{center}
                   879 \framebox[1\columnwidth] {\parbox{0.95\columnwidth}{\textcolor{red}}
                   880 {\centering\textbf{There are unresolved citation issues!\\*%
                   881 Number of unresolved citations: \arabic{citation}.\\*%
                   882 }}}}
                   883 \end{center}
                   884 \fi
                   885 \singlespacing
                   886 \@mybibsingle
                   887 \vspace*{3ex}}
\thebibliography Here we build the bibliography using the bibsection command.
                   888 \def\thebibliography#1{
```

```
889 \@bibsection{REFERENCES CITED}\list
890 {[\arabic{enumi}]}{\labelwidth\z@ \itemindent-\parindent
891 \leftmargin\parindent
892 \interlinepenalty\@M
893 \usecounter{enumi}}
894 \ensuremath{\mbox{heip}} .11em plus .33em minus -.07em}
895 \sloppy
896 \raggedright
897 \sfcode'\.=1000\relax}
898 \let\endthebibliography=\endlist
899 %%\newcommand{\formatbib}{
900 \% \addcontentsline{toc}{chapter}{REFERENCES CITED}
901 %% \renewcommand\bibname{REFERENCES CITED}}
902 \texttt{\AtEndOfClass{\renewcommand\bibname{REFERENCES}} CITED}}\}
```

10.23Float Labels

\thefigure Formatting for the floats.

```
903 \def\thefigure{\@arabic\c@figure}
  904 \def\fnum@figure{FIGURE \thefigure.}
  905 \def\thetable{\@arabic\c@table}
  906 \def\fnum@table{TABLE \thetable}
Table and figure numbering by chapter or continuous
   907 \if@gsmodern
  908 \else
  909 \def\cl@chapter{\@elt{section}\@elt{footnote}\@elt{equation}}
  910 \fi
gsmodern sets figures and tables to be numbered C.Fig. and C.Tab.
  911 \if@gsmodern
  912 \renewcommand{\thefigure}{\thechapter.\arabic{figure}.}
  913 \renewcommand{\thetable}{\thechapter.\arabic{table}.}
  914 \mbox{ }\mbox{\command{\the equation} \equation} \ \mbox{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\co
  915 \fi
```

10.24 **Italicized Description Labels**

\descriptionlabel Setting italics labels

```
916 \renewcommand{\descriptionlabel}[1]{
917 \hspace{\labelsep}\textit{#1}}
```

10.25Appendix Formatting

\appendix Define the appendix and set up the formatting for the chapter heading.

```
918 \newif\if@appendices
919 \newcount\aux@appendices
920 \ensuremath{ \mbox{\sc Qappendix}\#1\#2\{}
921 \ifnum 1=\aux@appendices
922 \ifnum 1=#1
923 {\protect\hspace*{0.5in}}
924 \else
925 \numberline{#2}
926\fi
927 \else
928 \numberline{#2}
929 \fi}
930 \def\appendix{
931 \par
932 \setcounter{chapter}{0}
933 \def\@chapapp{\uppercase{appendix}}
934 \def\thechapter{\Alph{chapter}}
935 \@appendicestrue}
```

Correction of Spacing Problems

... Not really sure what this code does. It is legacy form an earlier version.

\@savdim

```
936 \ifx\@savdim\undefined
937 \let\@savdim\@savsk
```

```
938 \newskip\@savsk
                        939 \fi
           \@bsphack
                        940 \def\@bsphack{\relax
                        941 \ifmmode
                        942 \else
                        943 \ensuremath{\$0}savsk\ensuremath{\$1}astskip
                        944 \c savsf
                        945 \setminus ifhmode
                        946 \setminus spacefactor
                        947 \ensuremath{\setminus} \mathtt{else}
                        948 \arrowverth\mbox{\em prevdepth}\
                        949 \fi
                        950 \fi}
           \@esphack
                        951 \def\@esphack{\relax
                        952
                               \ifmmode
                        953
                               \else\ifvmode
                        954
                                        \penalty\if@nobreak\@M
                                                 \else\if@inlabel\@M
                        955
                                                       \else\if@noskipsec\@M
                        956
                                                             \else\@savsf
                        957
                                                             \fi
                        958
                                                       \fi
                        959
                                                 \fi
                        960
                        961
                                        \verb|\prevdepth@savdim|vskip@savsk|
                        962
                        963
                                        \spacefactor\@savsf\relax
                        964
                                        \ifdim\@savsk>\z@\ignorespaces
                        965
                        966
                                     \fi
                               fi
                        967
                                  Environment Refinements
                        10.27
    \@@begintheorem
                        968 \def\@@begintheorem#1#2#3{\noindent}
                        969 \list{}{\rightmargin=\leftmargin
                        970 \itemindent=\leftmargin}
                        971 \item[\underline{#1\ #2}#3] \hskip
                        972 Opt\par\nobreak\ignorespaces}
     \@begintheorem
                        973 \def\@begintheorem#1#2{
                        974 \@@begintheorem{#1}{#2}{}}
\@opargbegintheorem
                        975 \def\@opargbegintheorem#1#2#3{
                        976 \@@begintheorem{#1}{#2}{ (#3)}}
```

```
\@qed
               977 \end{{\unskip\nobreak}}
               978 \hfil\penalty50\hskip1em\null\nobreak\hfil
               979 \qedsymbol\parfillskip\z@\finalhyphendemerits0\par}}
\@endtheorem
               980 \def\@endtheorem{\expandafter}
               981 \ifx\csname qedsymbol\endcsname\relax
               982 \else\@qed\fi\endlist}
      qedbox
               983 \def\qedbox{{\mathsurround\z@$\Box$}}
               984 \let\labelitemi=\labelitemii
               985 \let\labelitemii=\labelitemiii
               986 \let\labelitemiii=\labelitemiv
               987 \catcode '\*=11
               988 \let\itemize*=\enumerate
               989 \let\enditemize*=\endenumerate
               990 \@makeother\*
               991 \let\@itemize=\itemize
    \itemize
               992 \def\itemize{
               993 \typeout{Warning: Itemize
               994 deprecated by Grad. School}
               995 \global\let\itemize=\@itemize
               996 \itemize}
      quote*
               997 \newenvironment{quote*}
               998 {\list{}{\rightmargin\leftmargin}
               999 \item\relax}
              1000 {\endlist}
       quote
              1001 \renewenvironment{quote}
              1002 {\begin{quote*}\setstretch{1.7}}
              1003 {\end{quote*}}
              10.28
                        Reference Pages
   \pagesref
              1004 \newif\if@pagesspecial
              1005 \newcommand{\pagesref}[5]{{
              1006 \@pagesspecialtrue
              1007 \expandafter\ifx\csname r@#1\endcsname\relax
              1008 \@pagesspecialfalse\else\fi
              1009 \expandafter\ifx\csname r@#2\endcsname\relax
              1010 \@pagesspecialfalse\else\fi
              1011 \if@pagesspecial
              1012 \@tempcnta=\pageref{#1}
              1013 \@tempcntb=\pageref{#2}
```

```
1014 \verb|\difnum\\@tempcnta=\\@tempcntb\\else\\@pagesspecialfalse\\fi
          1016 \verb|\ifnum\\@tempcnta=\\cOpage|
          1017 {#5}
          1018 \ensuremath{\setminus} \texttt{else}
          1019 \mbox{{#3}\pageref{#1}}
          1020 \fi
          1021 \fi
          1022 \fi
         1023 \if@pagesspecial
          1024 \; \backslash \texttt{else}
          1025 \mbox{{#4}\pageref{#1}--\pageref{#2}}
          1026 \fi\}
\pages
          1027 \newcommand{\pages}[2]{\pagesref{#1}{#2}}
          1028 \{p.\hspace*\{0.2em\}\}\{pp.\hspace*\{0.2em\}\}\{this\ page\}\}
         </class>
```

11 Change History

2.5	v2.0c
General: Major restructuring of the CV area to allow for a more LaTeX-like experience. Borrowing code ideas from alternate physics LaTeX Code 19, 20	General: Updated draftcopy option. Added new features and tuned others. Added the ednote command (mooched from the 1.0 example documents) with some modifications. Added the HERE
v1.0 General: Everything previous to $2009/07/24 \dots \dots 1$ v2.0a	command (mooched from the 1.0 example documents) with some modifications. Added the needref command. Added support for draft option in graph-
General: Initial work started. Con-	ics package (figures show bound-
sidering all previous versions "1.0." Cleaning up comments up- dating out dated package used and added packages to provide	ing boxes rather than figures in draftcopy mode). varioref support corrected
new functionality. Removed support for "tech report." Removed normalspace command, will use setspace options from now on. Updated the chair and advisor	v2.0d General: Refined editing tools to only appear in editing mode and not cause errors during fi- nal typesetting
listings to be more general. Corrected a formatting issue on the signature page	General: Created draftimages option, which sets the include-graphics command in graphicx to "draft" mode
General: Removed outdated cap-	v2.0f
tion.cls support. Cleaning up the error codes during the compile	General: Started cleaning up the comments and logic hierarchies. Using Tabs not spaces for nest-

	$1 \hspace{1cm} \text{all draft modes.} \hspace{1cm} \ldots \hspace{1cm} 1$
v2.0g	v2.0k
General: Corrected comments from	General: Corrected conditional ap-
the UO graduate school. Ti-	pendix formatting to account
tle Page: Title double spaced.	for the formatting difference
No hyphenation throughout (us-	between a singular appendix
ing hyphenation penalties). Sup-	and multiple appendices. Im-
pressed widows and orphans.	plemented watermarking on
CV: Rolled Grants into Awards	the various draft environments.
and Honors . TOC: Set the	Employed draftwatermark.cls:
"Chapter" column heading to ap-	Currently only places water-
pear on extra TOC pages. Cor-	marks on the first page may
rected References to be single	change this in the future. Imple-
spaced with 1 line between each	mented Layouts package in draft
entry. Correct References prob-	mode only: Places a schematic
lem with TOC, spacing, and for-	of the page layout after the draft
matting. (found to be a conflict	copy cover 1
with chemstyle). gsmodern set	v2.0l
to be bold sections rather than	General: Added new environments
underlined to prevent obscuring	chem and Chem based on a com-
subscripts	1 bination of amsmath equation
v2.0h	environments and mhchem calls.
General: Corrected comments from	chem is for use in short equations
UO graduate school: Cor-	and uses amsmath equation envi-
rected chapter number spac-	ronments. Chem is for use in long
ing in TOC/TOT/TOF. Cor-	equations requiring linebreaks
rected fonts to force 12pt on	and uses amsmath multline envi-
final draft. Various improve-	ronments. Also added rxn: tag
ments and new features: Imple-	for cross referencing. allow for
mented cleanbreak command	the use of typical ref commands
for TOC/TOT/TOF linebreaks.	or eqref from amsmath which
Implemented smallcaps option	produced parentheses 1
for which allows small caps in	v2.0m
the titles for use with subscripts.	General: Reworked the editing
Refined various modes (Draft,	markup to use the todonotes
Committee draft, etc.) added	package. Now adds a list of edit-
red disclaimers to all drafts im-	ing marks and the pages before
plemented line numbers on draft	the document in draft mode. \dots 1
modes added ams math files to	v2.0n
default loading. Implemented	General: Added support for lorem
final option to turn all draft	ipsum dummy text through the
modes off for dead sure	1 1
v2.0i	ment header. Cleaned up psue-
General: Created the option	docode 1
contnumbering: Provides op-	v2.0o
tion of having the figure and	General: Brought abstract and ap-
tables numbered continuously	proval pages into compliance
J I	with new graduate student for-
v2.0j	matting guidelines 1
General: Fixed numbering issues	v2.0p
with appendices. Corrected cod-	General: Fixed comments from grad-
ing for gsmodern to be the hier-	uate student thesis editor. Cor-
archical level numbering. Imple-	rected Appendix bug (somebody
mented overfull hbox marking in	tied the appendix marker to the

back flyleafâ Ăę). Got the page number placement sorted out 1	document is for personal use and is not to be confused with the of-	
v2.1	ficial formatting (i.e. final with	
General: Tweaked gsmodern, num- section, and default numbering schemes for sections, tables and	bound off). First version in .dtx format	1
figures	error here when the command is used with the ragged right text	
General: Made flush left text the de-	95 5	15
fault for the text block. Added	v2.5	
"justified" option for full justified	General: A significant rewrite of the	
(LaTeX default) text block. Ad-	CV handling	10
justed the default indent to 24pt	Added formatbib	38
as per the GS recommendation. 1	changed the awards command,	
v2.3	and turned it into a 1 entry	
General: added "amstex" and "chem-		10
istry" options. amstex loads	changed the degrees command,	
the ams packages amsthm, ams-	and turned it into a 1 entry	
math, and amssymb packages		10
in the appropriate order as in-	changed the experience command,	
dicated by the ams-tex manual.	and turned it into a 1 entry	
chemistry loads mhchem and cre-	macro	10
ates new environments for long	changed the publications com-	
chemical equations as well as the	mand, and turned it into a 1	
"reaction" environment 1	entry macro	10
v2.4	changed the schools command,	
$\c \c \$	and turned it into a 1 entry	
RaggedRight option to ab-	macro	10
stract	v2.5.1	
\@makeackpage: Added RaggedRight		12
option to acknowledgements 26	Added natbib option	12
General: added bound option for	Added new single space command	
formatting the document as for	for the bibliography	20
printing/binding. Currently this	Removed formatbib command	
only handles 1 sided printing	8 · · F	38
based on the previous disserta-	natbib: Added natbib optional call	
tion class. Also ties the bound	here	14
mode to the draft mode, al-	v2.5.3	
lowing the printing and 3 hole	- · · · · · · · · · · · · · · · · · · ·	40
punching of documents. A dis-	v2.5.4	
claimer is placed on the copy-	General: Corrected formatting in ex-	0.1
right page indicating that the	tra tof and lot pages	31

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