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commandcolumns=flexible,frame=single,backgroundcolor=,xleftmargin=xrightmargin=escapeinside=  
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```

The `drexel-thesis` class*

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1 Introduction

This package defines a \LaTeX thesis class for Drexel University conforming to the [Drexel University Thesis Manual version 2009/06/01](#).

2 Usage

To write a thesis, you load the Drexel thesis definitions by loading the `drexel-thesis` class at the beginning of your \LaTeX document with the `\documentclass` command. For example, `drexel-thesis`

For [LyX](#) users, we include a LyX template (`drexel-thesis.layout`, originally by John K. Parejko) so that the previews generated in LyX are similar to those generated by the actual `drexel-thesis` class.

2.1 Options

options The default option (selected if not options are passed) is `final` mode, which has all the proper formatting and spacing for your final product. The other main option is `draft` mode, which reduces all the spacing in the document, so might be helpful when printing out drafts (saves paper).

`final` mode corresponds to (with Thesis Manual chapter and verse)

<code>oneside</code>	1.5 Library Submission Information, Print Version: “All copies must be: ... Typed/printed on only one side of the page (not double-sided).”
<code>finalspace</code>	Assorted single, double, and triple spacing directives.
<code>pagebreak</code>	Conform to thesis pagebreak rules.
<code>dottedtoc</code>	From the example on p17.
<code>nodraftwatermark</code>	Clear any earlier watermark options.

*This document corresponds to `drexel-thesis` 0.15, dated 2013/05/21.

	draft mode corresponds to
	twoside Save space.
	draftspace Save space.
	nopagebreak Save space.
	dottedtoc Might as well be consistent with final.
	xdraftwatermark It's good to have a timestamp.
option	subfig makes it easy to include and caption multi-part figures. However, getting
subfig	subfig to cooperate with floatrow and tocloft can be tricky. If you want to use subfig,
	just pass the subfig option to drexel-thesis, and all the pesky details will be taken
	care of. See §?? for an example.
option	Loosen spacing.
finalspace	Tighten spacing.
option	Break pages between chapters and chapter-like blocks.
draftspace	Don't break pages between chapters and chapter-like blocks (saves paper).
option	These options change how the relevant table of contents lines are printed.
pagebreak	LaTeX defaults to bold but not dots. The *toc options set all of the types. For
option	example, boldtoc is equivalent to boldchapter,boldpart.
nopagebreak	The example table of contents in the Manual p17 does not indent section
options	entries, etc., so neither does drexel-thesis. If you <i>do</i> want pretty, indented TOCs,
dottedtoc	like the LaTeX defaults pass indenttoc to drexel-thesis.
boldtoc	blackref colors all hyperref links black, so they won't stand out in your printed
dottedpart	document.
boldpart	draftwatermark adds "DRAFT <date>" watermarks to each page. A useful way
dottedchapter	to remember that the version you're looking at is not final. Also helps reviewers
boldchapter	tell you what version they're correcting. Requires the draftmark package, which
option	allows you to override the default watermark style if it is not to your liking (§ ??).
indenttoc	xdraftwatermark is also similar to draftwatermark but depends on the possibly
option	more common xcolor, eso-pic, and graphicx.
blackref	nodraftwatermark clears any earlier watermark options. For example [draft,nodraftwatermark]drexel-
option	thesis will format your thesis in draft mode but without a watermark. On the
draftwatermark	other hand, [draftmark,final]drexel-thesis will also format your thesis without a
option	watermark, because final sets nodraftwatermark internally.
xdraftwatermark	indentfirst indents the first paragraph after sections etc.
option	approvalform includes a copy of the T-1 approval form as the first page of your
nodraftwatermark	thesis/dissertation. This form is bound to the front of every thesis/dissertation
option	by the library. The version that is generated by this option is typeset in LaTeX
indentfirst	with the same margins, fonts, etc. as the rest of your document. The title of your
option	dissertation and your name are automatically entered.
approvalform	daring breaks the official thesis rules in pursuit of a nicer layout.
option	
daring	
	2.1.1 Interesting book options
option	Setup output for one-sided printing.
oneside	Setup output for two-sided printing.
option	leqno places the numbering of formulae on the left hand side instead of the
twoside	right.
option	
leqno	

option fleqn typesets displayed formulae left-aligned instead of centered.
fleqn

2.2 Macros

To help deal with name collisions, all `drexel-thesis` macros have “secret” aliases. For example, `\author` can also be used as `\DUTauthor`. This is useful if one of your packages clobbers a `drexel-thesis` macro, but you still want to use the original. `drexel-thesis` Your Name Here ...

`\author` ‘`\author{<name>}`’ Use this macro to set your full name to *<name>*, including
`\DUTauthor` your middle initial or name. For example Richard P. Feynman See the Manual
§3.1 p8.
`\title` ‘`\title{<title>}`’ Use this macro to set your thesis title to *<name>*. For example
`\DUTtitle` See the Manual p16.
`\advisor` ‘`\advisor{<name>}`’ Use this macro to set your advisor’s name to *<name>*. For
`\DUTadvisor` example John A. Wheeler, Ph.D. You can set multiple advisors, if appropriate,
by calling `\advisor` multiple times. John A. Wheeler, Ph.D. Advisor 2 See the
Manual §3.1 p8.
`\DUTmonth` ‘`\DUTmonth{<month>}`’ ‘`\DUTyear{<year>}`’ Use these macros to set the month
`\DUTyear` with *<month>* (spelled out) and year with *<year>* (four digits) of your thesis defense.
For example June 1942 See the Manual §3.1 p8. There are no non-DUT versions of
these commands to avoid collisions with the plain TeX `\month` and `\year` (see the
month and year entries in the HTML version of David Bausum’s *TeX Reference*
Manual).
`\degree` ‘`\degree{<degree>}`’ Set your target degree with *<degree>*. From the Manual
`\DUTdegree` §3.1 p8.

Write out the name of the degree for which you are a candidate.
All Ph.D. candidates must use **Doctor of Philosophy**. All Mas-
ter’s degree candidates should use the precise degree name (e.g.,
Master of Science in Mechanical Engineering).

So, for a Ph.D candidate, **Doctor of Philosophy**

`\copyrighttext` ‘`\copyrighttext{<text>}`’ Use this macro to set the copyright text to *<text>*.
`\DUTcopyrighttext` The default value is “All Rights Reserved.” Released to the Public Domain.
See the Manual §3.2 p9.
`\copyrighttextCCBYSA` ‘`\copyrighttextCCBYSA`’ There are a number of predefined copyright mes-
`\DUTcopyrighttextCCBYSA` sages for ease of use
`\copyrighttextCCBYSA` Creative Commons Attribution-ShareAlike License Version 3.0.
`\tableofcontents` ‘`\tableofcontents`’ Write the table of contents (Manual §3.5 p9). You
`\DUTtableofcontents` can control the verbosity by setting `\tocdepth` according to the following ta-
ble (source).

Depth in document	Section Command	Depth for <code>\secnumdepth</code> Command
-1	<code>\part</code>	1
0	<code>\chapter</code>	2
1	<code>\section</code>	3
2	<code>\subsection</code>	4
3	<code>\subsubsection</code>	5
4	<code>\paragraph</code>	6
5	<code>\subparagraph</code>	7

For example, to expose everything down to and including the `\subsection` level, you would add `\secnumdepth` to your preamble (the section before `\begin{document}`, not the `preamble` environment discussed below).

Note that the Manual §3.5 p9 requires “List chapter titles and at least the first and second order subdivisions.”, which corresponds to a `\tocdepth` of at least 2.

<code>\listoftables</code>	‘ <code>\listoftables</code> ’ Write the List of Tables page (Manual §3.6 p10). Skip if you have no tables in your thesis.
<code>\DUTlistoftables</code>	
<code>\listoffigures</code>	‘ <code>\listoffigures</code> ’ Write the List of Figures page (Manual §3.7 p10). Skip if you have no figures in your thesis.
<code>\DUTlistoffigures</code>	
<code>\blanklines</code>	‘ <code>\blanklines{<num>}</code> ’ Insert <code><num></code> blank lines. For example <code>\blanklines{2}</code> The skipped lines are always <i>single spaced</i> lines, regardless of the current line spacing in the environment calling this macro.
<code>\DUTblanklines</code>	
<code>\iffinal</code>	‘ <code>\iffinal{<final-mode-action>}{<draft-mode-action>}</code> ’ Include final- or draft-specific code. We’re in finaldraft mode!
<code>\DUTiffinal</code>	
<code>\ifdraftwatermark</code>	‘ <code>\ifdraftwatermark{<draftwatermark-mode-action>}{<other-action>}</code> ’ Include draftwatermark-specific code (e.g. <code>\draftmarksetup</code> , § ??).. We arearen’t in draftwatermark mode!
<code>\DUTifdraftwatermark</code>	
<code>\ifdaring</code>	‘ <code>\ifdaring{<daring-action>}{<wimpy-action>}</code> ’ Include daring-specific code, with wimpy fallbacks. Muahahahaha!mumble mumble.
<code>\DUTifdaring</code>	
<code>\drexellogobw</code>	‘ <code>\drexellogobw</code> ’ Draws a black-and-white official vector Drexel logo. The image is exactly 1 inch wide and 1.016 inches tall. This is accomplished using the <code>tikz</code> package (§ ??). You can enclose this command in a <code>\scalebox</code> to alter its size.

2.3 Environments

To help deal with name collisions, all `drexel-thesis` environments have “secret” aliases. For example, `preamble` can also be used as `DUTpreamble`. This is useful if one of your packages clobbers a `drexel-thesis` environment, but you still want to use the original. `drexel-thesis` Thwarted again, evil one! ...

<code>preamble</code>	Generalize the <code>\frontmatter</code> for the thesis, setting up page numbering, including the title page, copyright page etc. The <code>preamble</code> environment should contain the following elements (in order, see the Manual p8)
<code>DUTpreamble</code>	

- `dedication` environment (optional)
- `acknowledgments` environment (optional)
- `\tableofcontents`

- `\listoftables`
- `\listoffigures`
- `abstract` environment

This will take care of everything from the title page (Manual §3.1), up through the blank page before the text (Manual §3.9).

`dedications`
`DUTdedications` Set the dedications text. Highlights from the Manual §3.3 p9:

The `Dedications` page is optional.

`acknowledgments`
`DUTacknowledgments` Set the acknowledgments text. Highlights from the Manual §3.4 p9:

The `Acknowledgments` page is optional, but most theses do include a brief statement of thanks or recognition of any special assistance.

`abstract`
`DUTabstract` Set the thesis abstract text. In the Thesis Manual, see §3.8 Abstract (p10) for details, p20 for an example.
Highlights from the Manual:

The abstract is a summary that allows readers to determine the value of reading the full thesis. It should include a statement of the problem, an outline of procedures or methods, and a summary of results and conclusions.

- Word limits: 600 for a Master’s thesis, 350 for a Ph.D. thesis.

`thesis`
`DUTthesis` Set the thesis text. In the Thesis Manual, see §3.10 Thesis (p11) for details.
Highlights from the Manual:

Divide the text into its major parts/chapters/subsections. No fixed arrangement is necessary. The major parts may contain such subjects as introduction, general argument, description of experimental procedures, research methods, discussion, summary, conclusions, recommendations, and other pertinent topics that are necessary for a complete understanding on the part of a sophisticated or professional reader.

`vita`
`DUTvita` Set the thesis vita text (Ph.D. only). See the Manual §3.15 p12, “Vita”, for details.

Highlights from the Manual:

The Vita is a biography of the student written in the third person in either essay or outline form. It should include the full name, place and date of birth (optional), country of citizenship (optional), institutions attended, degrees and honors received, titles of publications, teaching and professional experience, and other pertinent data. The Vita must be one page or less.

Table 1: Some caption text

...

2.4 Hints

2.4.1 Package installation

All the packages this class depends on must be installed somewhere in your texmf tree (they probably already are). If not, you will receive warning messages on compilation such as ! LaTeX Error: File ‘missing-package.sty’ not found. You should then install the missing package(s) using your operating systems package manager, or grab the missing package from [CTAN](#), and install them following TODO.

2.4.2 Tables and Figures

drexel-thesis loads [graphicx](#) to define the `\includegraphics` macro, [caption](#) for pretty caption formatting, [floatrow](#) for placing captions, and [hypcap](#) for placing caption anchors.

Simple float definitions will look like `or ... Some caption text` For more useful float information, see the examples in §?? and the [L^AT_EX wikibook page](#).

2.4.3 Citations

I highly recommend using `BIBTEX` and [natbib](#). See §?? for a simple example.

Suggested options:

`super` selects citations in superscript mode.
`sort&compress` automatically sorts and compresses compound citations (`\pcite{a,b,...}`).

2.4.4 References

Easier cross referencing with [cleveref](#). Is a wonderful tool for easy, consistent crosslinking via `\cref`, `\Cref`, etc.. The manual is also very good. Note that if you use `\parts` in your document, you need to tell [cleveref](#) how to deal with them: `cleveref partpartparts`

2.4.5 Hyperlinks

drexel-thesis loads [hyperref](#). with the options:

`colorlinks` color the link letters instead of drawing colored boxes.

The default [hyperref](#) colors can be a bit jarring. Feel free to use [blackref](#) or override them yourself: `xcolor` See [the hyperref manual](#) (§3.4 Extension options) for a list of `*color` options.

If running with a pdf_{tex}-based driver, `\author`, `\title`, and `\degree` automatically set `pdfauthor`, `pdftitle`, and `pdfsubject` respectively. You can use the `\hypersetup` macro to set options overriding these defaults.

2.4.6 Developing large L^AT_EX documents

A thesis may take a while to compile, especially if it contains lots of images, etc.. One way to save time, is to use `\includeonly` when including chapter `*.tex` files (see [the T_EX Wikibook](#)). Usage would be something like `drexel-thesis ... chapter2.tex,chapter3.tex ...`

...