

The brandeis-dissertation class*

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Abstract

This L^AT_EX 2_ε-class file contains to design to typeset your dissertation according to the guidelines of GSAS of Brandeis University.

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You have done all the research. The ideas are in your head. All you are missing is that little thing called a dissertation, which you are gung-ho on writing using L^AT_EX. This is where this class file enters: it allows you to use L^AT_EX while adhering to the formatting guidelines of Brandeis University Graduate School of Arts and Sciences (GSAS). In particular, it allows you to get the front matter correct.

The features are as follows:

- It provides correct margins for either single-paged output or double-paged output.
- It typesets the text with double-spaced line. However, footnotes, long quotations (the environment `quotation`), the bibliography, and the index is single-spaced.
- It provides commands to produce the front matter.

To use the class, you should begin your document file with

```
\documentclass{brandeis-dissertation}
```

instead of your usual document class declaration. The various options are described below in section 3.

*This file has CVS revision 1.95, dated 2008/01/14 00:47:04. The class has been redesigned by the author based on previous work by Pablo Funes, Andy Garland, LFBrown 30Aug87, and RJJLuoma. Some final fiddling by John Burt.

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1 Front Matter

The front matter is all the pages that comes before the main text of your dissertation, e.g., title page, dedication, abstract, table of contents. For the class to typeset the front matter, you should specify the formalities regarding your dissertation in the preamble of your document. You do this with the following commands.

`\title` `\title{title}`: The title of your dissertation.

`\author` `\author{name}`: Your full name.

`\department` `\department{department}`: Your department.

`\advisor` `\advisor{advisor}`: The full name of you advisor (chair of your committee) .

`\reader` `\reader{reader}`: Adds *reader* to your committee. You should have one `\reader`-command for each reader on the committee. You should provide them in the order you want them to appear on the signature page.

`\dean` `\dean{name}`: The full name of the dean who eventually signs off on the dissertation.

`\graduationyear` `\graduationyear{year}`: The year of your dissertation.

`\graduationmonth` `\graduationmonth{month}`: The month of your dissertation.

`\othercopyright{text}` (**optional**): Uses *text* to acknowledge other people's copyright on your copyright page. This is only printed if you print a copyright page.

As an example, the following is an except from the preamble of my dissertation:

```
\title{Complexity Aspects of Programming Language Design}
\author{Peter M{\o}ller Neergaard}
\dean{Adam B. Jaffe}
\advisor{Harry G. Mairson}
\department{Michtom School of Computer Science}
\reader{Peter Clote}
\reader{Simone Martini}
\reader{Timothy J. Hickey}
```

`\thesisfront` The command `\thesisfront[options]` should be used at the very beginning of your document to produce all the front matter for you, e.g.,

```
\begin{document}
\thesisfront
```

You need to specify the abstract and possible also the preface, dedication, and acknowledgments using the following commands:

`\thesisabstract` `\thesisabstract{text}`: Uses *text* as your abstract.

`\dedication` `\dedication{dedication}` (**optional**): The dedication of your dissertation to *dedication* appears on separate page.

`\acknowledgments` `\acknowledgments{text}` (**optional**): *text* is used as your acknowledgment.

`\preface` `\preface{<text>}` (**optional**): The preface of your dissertation.

As the abstract, preface and acknowledgments might be fairly long, it can be convenient to keep them in a separate file and include them using `\input`, e.g.

```
\thesisabstract{\input{abstract}}
```

where the abstract is stored in the file `abstract.tex`.

You can fine tune the behavior of `\thesisfront` with the following options. You provide them in an optional argument as a comma-separated list:

onlinesubmission: The signature page is typeset for online submission (default).

papersubmission: The signature page is typeset for paper submission.

copyright: Print a copyright page (default).

nocopyright: Do not print a copyright page.

lot: Print a list of tables.

no lot: Do not print a list of tables (default)

lof: Print a list of figures.

no lof: Do not print a list of figures (default).

For instance, the command to produce the front matter for a paper submission with a list of tables is:

```
\thesisfront[lot,papersubmission]
```

`\signaturepage` When submitting online, you need to produce a signature page to be signed before your defense. You can do this using `\signaturepage*` in front of `\thesisfront` sometimes before you make the final version.

1.1 Your Own Front Matter Layout

Instead of using `\thesisfront` to produce the front matter, you can build the front matter yourself with the command below. *However, this option is not recommended and you should ensure that you adhere to all the GSAS guidelines.*

`\thesistitlepage` `\thesistitlepage`: This command produces the front page of your dissertation.

`\signaturepage` `\signaturetitlepage*`: This produces a signature page. The unstarred version is for online submission, while the starred version is for paper submission.

`\copyrightpage` `\copyrightpage{<your name>}{<year>}`: This produces the copyright page.

`\dedicationpage` `\dedicationpage{<dedication>}`: This produces a page with the dedication.

`optionalpage` `optionalpage*` The environments `optionalpage` and `optionalpage*` produce other parts of the front matter, for instance the preface. The part will be typeset as if it was a chapter. They take the title of the part as a single argument. You can thus produce a preface as follows:

Table 1: The two options for margins

	Minimum margins	Consistent 1.5in
Left margin	1.5in	1.5in
Right margin	1in	1.5in
Top margin	1in	1.5in
Bottom margin	1in	1.5in

```
\begin{optionalpage}{Preface}
```

```
...
```

```
\end{optionalpage}
```

By default an entry is added to the table of contents. This can be disabled by using the starred form.

When printing double-sided, you might `\cleardoublepage` to get the pages positioned on a right hand side.

2 Margins and Line-spacing

The GSAS guidelines call for the minimum margins given in Table 1. This is the default margins for the class. If you prefer, you can get a consistent 1.5in margins by using the class option `15margins` (see below).

The class uses the package `geometry` to set the margins. This provides a very simple way to change the paper layout, e.g., to change the margins to 2 inches you just need to use:

```
\geometry{top=2in, bottom=2in, left=2in, right=2in }
```

Note that the `\geometry` can only be used only in the document preamble.

By default, the dissertation class uses page style `brandeisheadings`. This page style will place the chapter title, centered, in slanted type, in the header, and the page number, centered, in the footer. If you change the page style (to `headings` or `myheadings`) in the preamble, the dissertation class will adjust the margins accordingly. However, if you use a non-standard heading (for instance from `fancyhdr`) you will need to adjust the margins accordingly.

`singlespacing` You can use the environment `singlespacing` to single-space a block of text.

3 Class Options

The class takes the following options provided as optional arguments to the `\documentclass` command:

minmargins: Use the minimum margins called for by GSAS (default).

15margins: Use a consistent 1.5in margin.

oneside: Single-sided output (from `book` class, default).

twoside: Double-sided output. This gives different headers on left and right pages. Some pages might be left blank to have chapters start on right pages (from the `book` class).

You are prone to get some overfull `\vbox` warnings when using this option.¹ They can be avoided by using `\raggedbottom`, but the result can be very aesthetically unpleasant as you get facing pages with different text height. Therefore, you are recommended to ignore the overfull boxes if you cannot rearrange the paragraphs to avoid them.

draft: Draft version—this marks overfull boxes and might also effect other packages (from the `book` class).

final: Final version (from the `book` class, default).

openright: For double-sided printing: chapters always open on the right page (from the `book` class, default).

openany: For double-sided printing: chapters can open on either a left or a right page (from the `book` class).

blankcleared: For double-sided printing: when a page is cleared to make a chapter start on a right page, leave out page number and headers.

numbercleared: For double-sided printing: when a page is cleared to make a chapter start on a right page, put page number and headings on the cleared page.

leqno: Equation number are placed to the left (from `book` class).

fleqno: Equation number are placed flushed to the left (from the `book` class).

openbib: A more open layout of the bibliography (from the `book` class).

12pt: The main text is set in 12pt font size (from the `book` class, default)

11pt: The main text is set in 11pt font size; `\small` and `\footnotesize` do not change the font size (essentially from the `book` class, *not recommended by GSAS*).

10pt: The main text is set in 10pt font size; `\small` and `\footnotesize` do not change the font size (essentially from the `book` class, *not recommended by GSAS*).

4 Issues To Be Aware Of

The following is a list of issues you should be aware of. It might be a little \TeX nical so skip it, if it does not apply to your dissertation.

¹With double-sided printing, \LaTeX attempts to fill every page to the bottom to avoid ragged bottoms. Its main remedy for this is to stretch the spacing between paragraphs. When this does not provide enough extra space, you get an underfull `\vbox`.

4.1 Margin Notes

While the class allows margin notes set with the L^AT_EX command `\marginpar`, the margins are not designed for margin notes.

If you use margin notes they will come as close as .35in from the border of the paper. If you use them extensively, this is unlikely to be kosher and you should adjust the margin parameters. You can solve this by including the following in your preamble.

```
\geometry{marginparwidth=w, marginparsep=s, includemp}
```

where *w* is the width of your margin notes and *s* their separation from the text

You should check with the GSAS for more guidance.