

# The `uiucborder` class

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## Abstract

Every UIUC graduate student dreads having to fill out the red-bordered form that gets attached to his thesis because of all the trial-and-error necessary to get the text to line up properly. The `uiucborder` class makes it easy to produce proper formatting on the first try.

## 1 Usage

### 1.1 Commands

There are four parameters that must be set in your document's preamble:

<code>\title</code>	<code>\title</code>	The title of your thesis
<code>\author</code>	<code>\author</code>	Your full name, exactly as it appears in the Graduate College's records
<code>\degreemonth</code>	<code>\degreemonth</code>	The month (spelled out) in which your degree will be conferred
<code>\degreeyear</code>	<code>\degreeyear</code>	The four-digit year in which your degree will be conferred
<code>\msthesis</code> <code>\phdthesis</code>		In addition, you must invoke either <code>\msthesis</code> or <code>\phdthesis</code> , depending on whether the red-bordered form is for a Master's thesis or a doctoral dissertation.
		Note that all of the above except for <code>\degreemonth</code> behave identically in <code>uiucthesis.sty</code> . (The thesis title page does not include the month in which the degree is awarded.) Thus, you can move all of the above definitions into a separate file which you can then <code>\input</code> into both your thesis and your red-bordered form. That way, if you change your thesis title or other information, the red-bordered form will always be up-to-date.
<code>\maketitle</code>		The body of your document should contain only a <code>\maketitle</code> , which will use the above parameters to fill in the red-bordered form.

## 1.2 Class options

The `uiucborder` class accepts the `10pt`, `11pt`, and `12pt` options for setting the font size, just like in the standard L<sup>A</sup>T<sub>E</sub>X classes. (The default is `10pt`.) In addition, the `linecentered` option centers each of your name, thesis title, and degree relative within the space provided on the corresponding line on the form. The default is to center each of those relative to the thesis title. `linecentered` looks a lot uglier and is recommended only if you desperately need an extra 3 cm of space for your name.

## 1.3 Other customizations

`\formattext` By default, `uiucborder` formats each piece of text in bold and uppercase. To alter that behavior, use `\renewcommand` to change the definition of `\formattext` to anything that accepts one argument and formats it appropriately.

## 2 Example

The following is typical usage of `uiucborder`:

```
\documentclass[11pt]{uiucborder}

\title{A \LaTeX\ Class for Filling in Red-Bordered Forms}
\author{Scott Pakin}
\degreeyear{2001}
\degreemonth{May}
\phdthesis

\begin{document}
\maketitle
\end{document}
```

## 3 Implementation

This section contains the complete source code for `uiucborder`. Most users will not get much out of it, but it should be of use to those who need more precise documentation and those who want to extend the `uiucborder` class.

```
1 <*class>
```

### 3.1 User parameters

```
\phdthesis The following were ripped out of uiucthesis.sty.
\msthesis 2 \def\phdthesis{\def\@degree{Doctor of Philosophy}}
\degreeyear 3 \def\msthesis{\def\@degree{Master of Science}}
4 \def\degreeyear#1{\def\@degreeyear{#1}}
```

`\degreemonth` We also need to know the graduation month, which `uiucthesis.sty` doesn't care about.

```
5 \def\degreemonth#1{\def\@degreemonth{#1}}
```

### 3.2 Lengths

There are four fields the student must fill in on the red-bordered form:

- the date (month + year) in which the degree will be conferred,
- the student's full name, exactly as it appears in UIUC's records,
- the thesis title, and
- the degree to be conferred ("M.S." or "Ph.D.," spelled out).

`\date@indent` Field indents are measured from the left edge of the paper and specify the horizontal offset that each field starts at.

```
\author@indent 6 \newlength{\date@indent}
\title@indent 7 \newlength{\author@indent}
\degree@indent 8 \newlength{\title@indent}
9 \newlength{\degree@indent}
```

`\date@width` Field widths are the width of each field.

```
\author@width 10 \newlength{\date@width}
\title@width 11 \newlength{\author@width}
\degree@width 12 \newlength{\title@width}
13 \newlength{\degree@width}
```

`\center@lines` Specify that each line should be centered individually. This looks a bit crooked, but may be needed if you have a very, very long name or use an especially wide font.

```
14 \def\center@lines{%
15 \setlength{\date@indent}{127mm}
16 \setlength{\author@indent}{39mm}
17 \setlength{\title@indent}{60mm}
18 \setlength{\degree@indent}{73mm}
19 %
20 \setlength{\date@width}{63mm}
21 \setlength{\author@width}{150mm}
22 \setlength{\title@width}{130mm}
23 \setlength{\degree@width}{118mm}
24 }
```

`\center@globally` Specify that the student's name, thesis title, and degree should all be centered relative to each other. One might think that the degree field, which is the narrowest and most indented, should determine the indentation for the other two fields. However, we can actually use the wider and less-indented title field for this

purpose, because we know *a priori* that the text in the degree field will be short relative to the length of line on the form.

```

25 \def\center@globally{%
26   \setlength{\date@indent}{127mm}
27   \setlength{\author@indent}{60mm}
28   \setlength{\title@indent}{60mm}
29   \setlength{\degree@indent}{60mm}
30 %
31   \setlength{\date@width}{63mm}
32   \setlength{\author@width}{130mm}
33   \setlength{\title@width}{130mm}
34   \setlength{\degree@width}{130mm}
35 }

```

### 3.3 Filling in the form

`\formattext` The `\formattext` macro is applied to each chunk of text we output. The default is to make the text bold and uppercase, but the user can change that behavior with `\renewcommand`.

```

36 \newcommand{\formattext}[1]{\textbf{\MakeUppercase{#1}}}

```

`\maketitle` We define the `\maketitle` macro to fill in the form with the contents of `\@degreemonth`, `\@degreeyear`, `\@author`, `\@title`, and `\@degree`.

```

37 \newcommand{\maketitle}{%
38   \thispagestyle{empty}%
39   \setlength{\baselineskip}{11mm}\setlength{\parindent}{0pt}%
40   \vspace*{65mm}\hspace*{\date@indent}%
41   \parbox[t]{\date@width}{%
42     \hfil\formattext{\@degreemonth} \@degreeyear\hfil}\par
43   \vspace*{22mm}\hspace*{\author@indent}%
44   \parbox[t]{\author@width}{%
45     \hfil\formattext{\@author}\hfil}\par
46   \hspace*{\title@indent}%
47   \begin{minipage}[t][3\baselineskip]{\title@width}
48     \begin{center}
49       \setlength{\baselineskip}{11mm}\setlength{\parindent}{0pt}%
50       \formattext{\@title}
51     \end{center}
52   \end{minipage}\par
53   \vspace*{-1mm}\hspace*{\degree@indent}%
54   \parbox[t]{\degree@width}{\hfil\formattext{\@degree}\hfil}
55 }

```

### 3.4 Option processing

`\center@globally` is the default. The `linecentered` option invokes `\center@lines`.

```

56 \center@globally
57 \DeclareOption{linecentered}{\center@lines}

```

Let the user set the font size, just like in the standard L<sup>A</sup>T<sub>E</sub>X classes. Use 10pt by default.

```
58 \newcommand{\@ptsize}{0}
59 \DeclareOption{10pt}{\renewcommand\@ptsize{0}}
60 \DeclareOption{11pt}{\renewcommand\@ptsize{1}}
61 \DeclareOption{12pt}{\renewcommand\@ptsize{2}}
```

Process our options.

```
62 \ProcessOptions\relax
63 \input{size1\@ptsize.clo}
```

### 3.5 Margins

Set the margins to zero, so we can work with absolute lengths.

```
64 \geometry{noheadfoot,letterpaper,marginparsep=0pt}
65 \geometry{lmargin=0mm,rmargin=0mm}
66 \geometry{tmargin=0mm,bmargin=0mm}
67 </class>
```

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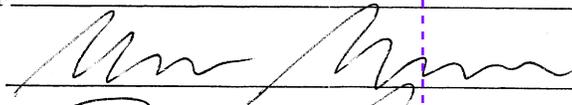
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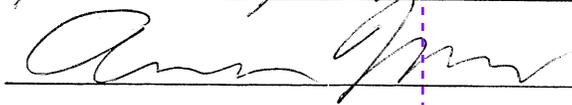
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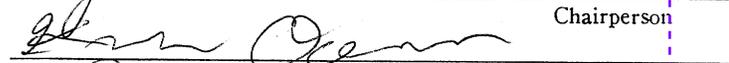


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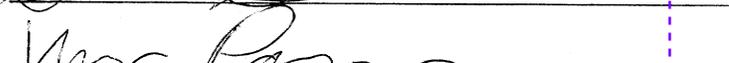


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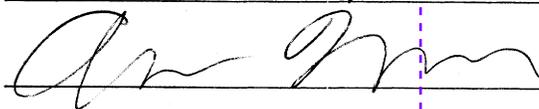
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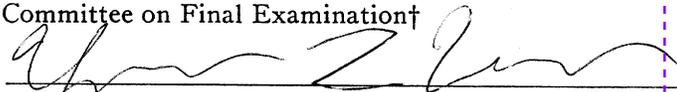


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