The **ukydissertation** class

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1   User Manual

This class attempts to provide a method of formatting a dissertation to the style guide for the graduate school at the University of Kentucky.

Your LaTeX file should begin with a preamble similar to this:

```
\documentclass[endorse]{ukydissertation}
%%[...load your packages...]%%
\usepackage{lipsum}
\usepackage{natbib}
\usepackage[numbered,open,openlevel=0]{bookmark}
\bibliographystyle{plainnat}
```

You must manually load the **bookmark** package and set the options as shown above to get the correct style for the dissertation. This is not done in the class definition because you may need to load other packages before loading **bookmark**.

The **endorse** class option causes signatures to appear in the appropriate blank spaces in front matter of the dissertation. This should be omitted (or replaced with the **noendorse** option) until the final stage of the dissertation approval process.

\title
\author
\department
\college
\director
\dgs
\date

Next, use these macros define the dissertation document metadata. In addition to the usual `title` and `author` macros, there are macros for your **department**, **college**, thesis **director** (advisor), and the director of graduate studies (**dgs**) for your department. Optionally, you may supply a **date**. This is only required if you do not want to use the LaTeX default, which is `\today`.

```
\title{A \textsf{ukydissertation} Example Document}
\author{Jeffrey Lebowsky}
\department{Slack}
\college{College of Theosophy}
\director{J.R ``Bob'' Dobbs}
\dgs{Constance M. Dobbs}
\date{19 Prairial CCXXIII}
```

\absract
\dedication
\acknowledgements
\keywords

In addition to the basic metadata, you must also define an **abstract** and keywords. The **dedication**, and **acknowledgements** pages are optional, and will only be added if you supply content.

```
\abstract{This is a example of the ukydissertation class.
  This class for the \LaTeX{} document system \citep{latex}
  produces a pdf file conforming to the style guidelines of
  the \citet{ukdiss}.}

\keywords{U of Kentucky, dissertation, latex, documentclass, example}
\dedication{Dedicated to the Flying Spagetti Monster.}
```

`\makefrontmatter` The first thing in the `document` environment should be the `\makefrontmatter` macro. This will use the previous definitions to setup the pages prior to the start of the main dissertation material.

```
\begin{document}
\makefrontmatter
```

`\chapter`
`\section`
`\subsection`
`\subsubsection`

You then proceed to write your dissertation using the classic LaTeX commands. The `chapter`, and `section` through `subsubsection` environments have been defined, although a `subsubsection` will not be numbered, appear in the ToC, or be bookmarked.

```
\chapter{The First Chapter}
\lipsum[4-10]

\begin{figure}
  \centering
  \framebox[3in][c]{The First Figure}
  \caption[A name for the ToC]{A caption for the first figure.}
  \label{fig:numberone}
\end{figure}

\section[A Shorter Title for ToC]
{The First Subsection Has A Long Title}

\lipsum[11]
\begin{table}
  \caption[A Short Table Title for the ToC]%
  {Tables captions should appear before the beginning of the table.}
  \vspace{\baselineskip}\centering
  \begin{tabular}{ccc}
    \hline
    X & Y & Z\\
    \hline
    1750 & 250 & 56\\
    1760 & 218 & 57\\
    1770 & 204 & 59\\
    \hline
  \end{tabular}
\end{table}
\lipsum[12-15]
```

\backmatter
\bibliography

The `\backmatter` macro signals the end of the main text. It is similar in effect to LaTeX's `\appendix`. It should be placed before any appendices and the `\bibliography`.

```
\backmatter
\chapter{The First Appendix}
\lipsum[16-17]

\section{First Apppendix section}
\lipsum[18-22]

\bibliography{example}
```

\vita

The Vita section is the final section of the dissertation, appearing after the bibliography. Use the `\vita` macro to signal the beginning of this material.

```
\vita
\lipsum[23-25]
```

And finally, end the document environment.

```
\end{document}
```

2 Implementation

2.1 Initial Code

Here we define some switches for use later.

\if@endorse

Switch indicating if endorsements should be printed in the front matter of the thesis.

```
1 \newif\if@endorse
```

\if@dedication

Switch indicating if a dedication section has been supplied.

```
2 \newif\if@dedication
3 \@dedicationfalse
```

\if@acknowledgements

Switch indicating if an acknowledgements section has been supplied.

```
4 \newif\if@acknowledgements
5 \@acknowledgementsfalse
```

\if@mainmatter

Indicates whether the current location within the main matter or not.

```
6 \newif\if@mainmatter
7 \@mainmatterfalse
```

2.2 Option Declarations

The `endorse`/`noendorse` options enable/disable the printing of names in the blank spaces available in the front matter.

```
 8 \DeclareOption{endorse}{\@endorsetrue}
 9 \DeclareOption{noendorse}{\@endorsefalse}
```

The `ukydissertation` class is based on the LaTeX `report` class on letter paper in a 12pt font.

```
10 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{report}}
11 \ExecuteOptions{noendorse, 12pt, letterpaper}
12 \ProcessOptions
13 \LoadClass{report}
```

Here we load a few packages to help get the page layout and style set up correctly.

```
14 \RequirePackage[hmargin={1.5in,1in},vmargin=1in,foot=0.5in]{geometry}
15 \RequirePackage[nottoc]{tocbibind}
16 \RequirePackage{needspace}
```

2.3 Defining Document Metadata

These macros define the metadata for the dissertation document.

`\college` Use to define the name of the college granting the degree.

```
17 \newcommand{\college}[1]{\renewcommand{\@college}{#1}}
18 \newcommand{\@college}{\@latex@warning@no@line%
19   {No \noexpand\college given} COLLEGE}
```

`\director` Define the name of the committee chair/director (your advisor).

```
20   \newcommand{\director}[1]{\renewcommand{\@director}{#1}}
21   \newcommand{\@director}{\@latex@warning@no@line%
22     {No \noexpand\director given} Advisor}
```

`\dgs` Define the director of graduate studies for your program.

```
23 \newcommand{\dgs}[1]{\renewcommand{\@dgs}{#1}}
24 \newcommand{\@dgs}{\@latex@warning@no@line%
25   {No \noexpand\dgs given} DGS}
```

`\department` The department granting the degree.

```
26 \newcommand{\department}[1]{\renewcommand{\@department}{#1}}
27 \newcommand{\@department}{\@latex@warning@no@line%
28   {No \noexpand\department given} DEPARTMENT}
```

`\keywords` Define five keywords for the thesis.

```
29 \newcommand{\keywords}[1]{\renewcommand{\@keywords}{#1}}
30 \newcommand{\@keywords}{\@latex@warning@no@line%
31   {No \noexpand\keywords given}}
```

<dl>
<dt>\abstract</dt>
<dd>Define the dissertation abstract content.</dd>
</dl>

```
32 \renewcommand{\abstract}[1]{\renewcommand\@abstract{#1}}
33 \newcommand{\@abstract}{\@latex@warning@no@line%
34   {No \noexpand\abstract given}}
```

2.4   Document Control Macros

<dl>
<dt>\makefrontmatter</dt>
<dd>This command replaces the \maketitle macro.</dd>
</dl>

```
35 \newcommand\makefrontmatter{%
36   \maketitle \@makeabstract \@makeapproval
37   \@makededication \@makeacknowledgements
38   \clearpage
39   \pdfbookmark[chapter]{\contentsname}{toc}
40   \tableofcontents \listoftables \listoffigures
41   \clearpage
42   \pagenumbering{arabic} \global\let\thanks\relax
43   \global\let\maketitle\relax \global\let\title\relax
44   \global\let\author\relax \global\let\date\relax
45   \global\let\and\relax \global\let\abstract\relax
46   \global\let\dedication\relax}
```

<dl>
<dt>\backmatter</dt>
<dd>This macro replaces the \appendix macro.</dd>
</dl>

```
47 \newcommand{\backmatter}{\@mainmatterfalse\appendix}
```

<dl>
<dt>\vita</dt>
<dd>This macro begins the vita section of the thesis.</dd>
</dl>

```
48 \newcommand{\vita}{\clearpage\chapter*{Vita}%
49   \addcontentsline{toc}{chapter}{Vita}}
```

2.5   Section header definitions

```
50 \renewcommand{\@makechapterhead}[1]{%
51   {\parindent \z@ \centering \normalfont
52     \ifnum \c@secnumdepth >\m@ne
53     \bfseries \@chapapp\space \thechapter
54        \par\nobreak
55        \vskip 10\p@
56     \fi
57     \interlinepenalty\@M
58     \bfseries #1\par\nobreak
59     \vskip 20\p@
60   }}
61 \renewcommand{\@makeschapterhead}[1]{%
62   {\parindent \z@ \raggedright
63     \normalfont
64     \interlinepenalty\@M
65     \centering\bfseries  #1\par\nobreak
66     \vskip 20\p@
67   }}
68 \renewcommand{\section}{%
```

```
69    \@startsection {section}{1}{\z@}%
70    {-3.5ex \@plus -1ex \@minus -.2ex}%
71    {2.3ex \@plus.2ex}%
72    {\normalfont\bfseries}}
73 \renewcommand{\subsection}{%
74    \@startsection{subsection}{2}{\z@}%
75    {-3.25ex\@plus -1ex \@minus -.2ex}%
76    {1.5ex \@plus .2ex}%
77    {\normalfont\bfseries}}
78 \newcommand{\@period}[1]{#1.--- }
79 \renewcommand{\subsubsection}{%
80    \@startsection{subsubsection}{3}{\z@}%
81    {3.25ex \@plus1ex \@minus.2ex}%
82    {\z@}%
83    {\normalfont\normalsize\itshape\@period}}
```

2.6   Front Matter Layouts

Setup the page layouts for the title, abstract, approval, dedication, acknowledgements, table of contents and list of figures/tables pages.

```
84 \renewcommand\maketitle{%
85    \setcounter{page}{0}
86    \pagestyle{empty}
87    {\let\footnotesize\small
88     \let\footnoterule\relax
89     \let\footnote\thanks
90     \null
91     \bookmark[named=FirstPage,level=0]{Title Page}
92     \vskip 1.5in%
93     \begin{center}%
94     \parbox[t][1.5in]{\textwidth}%
95     {\centering\MakeUppercase\@title\par}%
96     \par
97     \parbox[t][3\baselineskip]%
98     {0.5\textwidth}{\hrule\vskip\baselineskip%
99       \centering DISSERTATION%
100      \par\vskip\baselineskip\hrule}
101    \vskip\baselineskip%
102    {A dissertation submitted in partial fulfillment of the \\
103      requirements for the degree of Doctor of Philosophy in the \\
104      \@college\\ at the University of Kentucky\par}%
105    \vskip 2\baselineskip%
106      {By\par\vskip 0.5\baselineskip\@author\par}%
107      \vskip 0.5\baselineskip%
108      {Lexington, Kentucky\par}%
109      \vskip 1em%
110      {Director: Dr. \@director, Professor of \@department\par}%
111      \vskip 0.5\baselineskip%
112      {Lexington, Kentucky\par}%
113      \vfill
```

```latex
114     {Copyright \textcopyright\ \@author\ \the\year\par}%
115     \vspace*{1.5in}\par
116   \end{center}\par
117   \null}
118   \clearpage
119   \setcounter{footnote}{0}}
120
121 \newcommand\@makeabstract{%
122   \pagestyle{empty}
123   \pagenumbering{Roman}
124   \hypertarget{abstract}{}
125 \bookmark[dest=abstract,level=0]{Abstract}
126 \null\vskip 1.5in
127 \begin{center}%
128   \parbox[t][1in]{\textwidth}{\centering ABSTRACT OF DISSERTATION\par}
129   \MakeUppercase\@title\par
130 \end{center}
131 \@abstract
132 \par\vspace\baselineskip\noindent
133   KEYWORDS: \parbox[t]{0.8\textwidth}{\@keywords}
134   \par\needspace{1.5in}\null\vfill
135   \hfill\parbox[t][1.5in]{0.5\textwidth}{%
136     \if@endorse
137     {\centering\MakeUppercase\@author\par}\vskip 2pt
138     \else\fi
139     \hrule
140     \vskip 2pt
141     Student's Signature\par
142     \vfil
143     \if@endorse
144     {\centering\MakeUppercase\@date\par}\vskip 2pt
145     \else\fi
146     \hrule
147   \vskip 2pt
148   Date\par}
149   \par\null\clearpage}
150
151 \newcommand\@makeapproval{
152   \pagenumbering{roman}
153   \null\vskip 2in
154   \noindent\parbox[t][1in]{\textwidth}%
155   {\centering\MakeUppercase\@title\par}\par
156   \begin{centering}
157     By
158     \vskip0.5\baselineskip
159     \@author\par
160   \end{centering}
161   \vfill
162   \hfill\parbox[t][3in]{0.5\textwidth}{%
163     \if@endorse
```

```
164      {\centering\MakeUppercase\@director\par}\vskip 2pt
165      \else\fi
166      \hrule
167      \vskip 2pt
168      Director of Dissertation\par
169      \vfil
170      \if@endorse
171      {\centering\MakeUppercase\@dgs\par}\vskip 2pt
172      \else\fi
173      \hrule
174      \vskip 2pt
175      Director of Graduate Studies\par
176      \vfil
177      \if@endorse
178      {\centering\MakeUppercase\@date\par}\vskip 2pt
179      \else\fi
180      \hrule
181    \vskip 2pt
182    Date\par}\hskip 1in
183      \par\vfil\clearpage}
184
185 \newcommand{\dedication}[1]{\@dedicationtrue
186   \newcommand{\@dedication}{#1}}
187 \newcommand{\acknowledgements}[1]{\@acknowledgementstrue
188   \newcommand{\@acknowledgements}{#1}}
189
190 \newcommand\@makeacknowledgements{
191   \setcounter{page}{3}
192   \pagestyle{plain}
193   \if@acknowledgements%
194   \phantomsection
195   \addcontentsline{toc}{chapter}{Acknowledgements}
196   \null
197   {\centering ACKNOWLEDGEMENTS \par}
198   \vspace{\baselineskip}\noindent
199   \@acknowledgements
200   \par\vfil\clearpage\fi}
201
202 \newcommand\@makededication{%
203   \if@dedication
204 \null\vfil
205   \@dedication
206   \par\vfil
207   \clearpage\fi}
208 \renewcommand{\contentsname}{Table of Contents}
```