The ut-thesis class *

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INITIAL CODE

Switch for testing draft mode (toggled by 'draft' option).

- 1 \newif\if@draft
- 2 \@draftfalse

Switch for testing current page style.

- 3 \newif\if@thesispagestyle
- 4 \Othesispagestyletrue

Save original definitions of footnote and marginal note macros and lengths, to be able to reset them below as needed (when changing between single-spaced and standard-spaced notes).

- $\verb§5 $ \textbf{0} the sis @footnotetext \\ @footnotetext \\$
- 6 \let\@thesis@mpfootnotetext\@mpfootnotetext
- 7 \let\@thesis@marginparreset\@marginparreset
- 8 \newlength{\@thesisfootnotesep}
- 9 \newlength{\Othesismarginparpush}
- 10 \AtBeginDocument
- 11 {\setlength\@thesisfootnotesep{\footnotesep}
- 12 \setlength\@thesismarginparpush{\marginparpush}}

Save original definition of \cleardoublepage.

${\tt 13 \ let\ clearst} {\tt and} {\tt arddoublepage\ cleardoublepage}$

The \singlespacing macro from 'setspace' includes some vertical space (to make it easier to change line spacing within the document). Unfortunately, this has undesirable side-effects within macros, so we define our own replacement here for use within the class.

14 \newcommand*{\singlespacingnoskip}{\setstretch{\setspace@singlespace}}

OPTION DECLARATION

'draft' option: change default document settings.

- 15 \DeclareOption{draft}{\@drafttrue
- 16 \newcommand*{\tlDRAFT}%
- 17 {\raisebox{ 3ex}[0pt][0pt]{\llap{\sffamily\scriptsize DRAFT\ \ }}}
- 18 \newcommand*{\trDRAFT}%

^{*}v3.0.a [2020/09/01] CTAN repository: https://ctan.org/pkg/ut-thesis

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```
{\raisebox{ 3ex}[0pt][0pt]{\rlap{\sffamily\scriptsize \ \ DRAFT}}}
19
     \newcommand*{\blDRAFT}%
20
       {\raisebox{-3ex}[0pt][0pt]{\llap{\sffamily\scriptsize DRAFT\ \ }}}
21
     \newcommand*{\brDRAFT}%
22
       {\raisebox{-3ex}[0pt][0pt]{\rlap{\sffamily\scriptsize \ \ DRAFT}}}
23
24
     \ExecuteOptions{doublespaced}
25
     \PassOptionsToClass{draft,twoside,openany}{report}}
   Margin options.
26 \DeclareOption{narrowmargins}{\AtEndOfClass % 1 1/4" left, 3/4" others
    {\geometry{margin=.75in,left=1.25in,headsep=.375in-\headheight,
27
               footskip=.375in,marginparwidth=.5in,marginparsep=.125in}}}
28
29 \DeclareOption{normalmargins}{\AtEndOfClass \% 1 1/4" left, 1" others
    {\geometry{margin=1in,left=1.25in,headsep=.5in-\headheight,
30
               footskip=.5in,marginparwidth=.75in,marginparsep=.125in}}}
31
32 \DeclareOption{widemargins}{\AtEndOfClass % 1 1/4" all around
    {\geometry{margin=1.25in,headsep=.625in-\headheight,
33
               footskip=.625in,marginparwidth=.75in,marginparsep=.25in}}}
34
35 \DeclareOption{extrawidemargins}{\AtEndOfClass % 1 1/2" all around
    {\geometry{margin=1.5in,headsep=.75in-\headheight,
36
37
               footskip=.75in,marginparwidth=1in,marginparsep=.25in}}}
   Line Spacing options.
39 \DeclareOption{onehalfspaced}{\AtEndOfClass{\onehalfspacing}}
40 \DeclareOption{doublespaced}{\AtEndOfClass{\doublespacing}}
   Line spacing for notes.
41 \DeclareOption{singlespacednotes}{\AtBeginDocument
42
    {\setlength\footnotesep{\@thesisfootnotesep}
43
     \setlength\marginparpush{\Othesismarginparpush}
44
     \renewcommand{\@footnotetext}[1]%
       {\@thesis@footnotetext{#1\singlespacingnoskip}}
45
     \renewcommand{\@mpfootnotetext}[1]%
46
47
       {\@thesis@mpfootnotetext{#1\singlespacingnoskip}}
48
     \renewcommand*{\@marginparreset}%
       {\@thesis@marginparreset\singlespacingnoskip}}}
49
50 \DeclareOption{standardspacednotes}{\AtBeginDocument
    {\setlength\footnotesep{\baselineskip-\@thesisfootnotesep}
51
     \setlength\marginparpush{\baselineskip-\@thesismarginparpush}
52
     \let\@footnotetext\@thesis@footnotetext
53
54
     \let\@mpfootnotetext\@thesis@mpfootnotetext
     \let\@marginparreset\@thesis@marginparreset}}
   Page styles for cleared pages.
56 \DeclareOption{cleardoublepagestyleempty}
    {\AtEndOfClass{\let\cleardoublepage\clearemptydoublepage}}
58 \DeclareOption{cleardoublepagestyleplain}
    {\AtEndOfClass{\let\cleardoublepage\clearplaindoublepage}}
60 \DeclareOption{cleardoublepagestylestandard}
    {\AtEndOfClass{\let\cleardoublepage\clearstandarddoublepage}}
```

All other options are passed to the base class directly.

62 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{report}}

OPTION EXECUTION

Default settings: standard options followed by ut-thesis options.

- 63 \ExecuteOptions{letterpaper,oneside,openright}
- 64 \ExecuteOptions{normalmargins, onehalfspaced, singlespacednotes}

Process options.

65 \ProcessOptions

PACKAGE LOADING

Load base class using current setting for basic options.

66 \LoadClass{report}

To set/change page layout.

- 67 \RequirePackage{calc}
- 68 \RequirePackage{geometry}

To set/change line spacing.

69 \RequirePackage{setspace}

MAIN CODE

Parameters

The following five commands set the respective field values so we can generate the title page and abstract page automatically.

```
70 \newcommand*{\degree}[1]%
    {\ifx\empty#1\empty\else\gdef\@degree{#1}\fi}
72 \newcommand*{\department}[1]%
   {\ifx\empty#1\empty\else\gdef\@department{#1}\fi}
74 \newcommand*{\gradyear}[1]%
   {\ifx\empty#1\empty\else\gdef\@gradyear{#1}\fi}
76 \renewcommand*{\author}[1]%
    {\ifx\empty#1\empty\else\gdef\@author{#1}\fi}
78 \renewcommand*{\title}[1]%
   {\ifx\empty#1\empty\else\gdef\@title{#1}\fi}
   Default values for the required fields.
```

```
80 \degree{\emph{(degree)}}
```

- 81 \department{\emph{(department)}}
- 82 \gradyear{\emph{(year of graduation)}}
- 83 \author{\emph{(author)}}
- 84 \title{\emph{(title)}}

New formatting environments and commands.

\begin{preliminary} sets the pagestyle and page numbering for the preliminary sections; \end{preliminary} resets the page numbering. The default page style is used outside of the preliminary block.

```
85 \newenvironment*{preliminary}%
```

- {\pagestyle{plain}\pagenumbering{roman}}%
- {\cleardoublepage\pagenumbering{arabic}}

```
Change \maketitle to follow SGS guidelines.
88 \renewcommand*{\maketitle}%
     {\begin{titlepage}
89
      \large\singlespacingnoskip
90
91
      \begin{center}
92
         \mbox{}
         \vfill
93
         \textsc{\@title}\\
94
         \vfill
95
         by \\
96
         \vfill
97
         {\@author}\\
98
         \vfill
99
100
         \vfill
         A thesis submitted in conformity with the requirements\
101
         for the degree of {\@degree}\\
102
         Graduate Department of {\@department}\\
103
104
         University of Toronto\\
105
         \vfill
         106
         \vspace{.01\textheight}
107
         \mbox{}
108
      \end{center}
109
      \setcounter{page}{1}
110
111
      \end{titlepage}
      \setcounter{page}{2}}
112
    Change \begin{abstract}...\end{abstract} to follow SGS guidelines.
113 \renewenvironment*{abstract}%
114
     {\begin{center}
         \section*{Abstract}
115
      \end{center}
116
      \begin{center}
117
         {\c}^{\c} = {\c}^{\c}
118
119
         {\@author}\\
         {\@degree}\\
120
         Graduate Department of {\@department}\\
121
         University of Toronto\\
122
         {\@gradyear}\\
123
      \end{center}
124
125
      \begingroup
      %% Adjust line spacing: if it was less than 2, increase it to 2;
126
      %% otherwise, leave it as is.
      \ifdim \baselinestretch pt < 1.6pt \doublespacing\fi}%
128
     {\par\endgroup\newpage}
129
    \begin{dedication}...\end{dedication} formats a dedication section (*not*
on a separate page – just a paragraph formatted flush right).
```

130 \newenvironment*{dedication}%
131 {\begin{flushright}}%

```
{\end{flushright}}
    \begin{acknowledgements}...\end{acknowledgements} formats an acknowl-
edgements section (*not* on a separate page).
133 \newenvironment*{acknowledgements}%
     {\begin{center}
134
         \section*{Acknowledgements}
135
      \end{center}
136
137
      \begingroup\noindent}%
     {\par\endgroup}
    Redefine 'thebibliography' environment so that it generates headers in the same
style as the rest of the document.
139 \let\@thesisthebibliography\thebibliography
140 \renewcommand*{\thebibliography}[1]{\@thesisthebibliography{#1}
      Variations of \cleardoublepage that explicitly set the pagestyle of any in-
serted blank page.
142 \newcommand*{\clearemptydoublepage}%
     {{\pagestyle{empty}\clearstandarddoublepage}}
144 \newcommand*{\clearplaindoublepage}%
     {{\pagestyle{plain}\clearstandarddoublepage}}
146 \newcommand*{\clearthesisdoublepage}%
     {{\pagestyle{thesis}\clearstandarddoublepage}}
147
    Single-spaced quotes and quotations.
148 \newenvironment*{longquote}%
     {\begin{quote}\singlespacingnoskip}{\end{quote}}
150 \newenvironment*{longquotation}%
     {\begin{quotation}\singlespacingnoskip}{\end{quotation}}
    Page Styles
    Redefine all four standard page styles (empty, plain, headings, myheadings),
based on the definitions in 'report', so that they conform to the SGS guidelines
(and include draft information if applicable). Then, define a new pagestyle 'thesis'.
    TODO: Get rid of copy-pasted definitions for pagestyles?
    Pagestyle 'empty'.
152 \renewcommand*{\ps@empty}%
     {\@thesispagestylefalse
153
      \let\@mkboth\@gobbletwo
154
155
      \def\@oddfoot{\if@draft\blDRAFT\hfil
         {\slshape\small\today}\hfil\brDRAFT\fi}%
156
157
      \let\@evenfoot\@oddfoot
      \def\@oddhead{\if@draft\tlDRAFT\hfil
158
         {\slshape\small\today}\hfil\trDRAFT\fi}%
159
      \let\@evenhead\@oddhead}
160
    Pagestyle 'plain'.
161 \renewcommand*{\ps@plain}%
     {\@thesispagestylefalse
```

```
\let\@mkboth\@gobbletwo
163
      \def\@oddfoot{\if@draft\blDRAFT\fi\hfil
164
         \thepage\hfil\if@draft\brDRAFT\fi}%
165
      \let\@evenfoot\@oddfoot
166
      \def\@oddhead{\if@draft\tlDRAFT\hfil
167
168
         {\slshape\small\today}\hfil\trDRAFT\fi}%
169
      \let\@evenhead\@oddhead}
    Pagestyle 'headings'.
170 \if@twoside % two-sided printing
171 \renewcommand*{\ps@headings}%
     {\@thesispagestylefalse
      \let\@mkboth\markboth
173
174
      \def\@oddfoot{\if@draft\blDRAFT\hfil
175
         {\slshape\small\today}\hfil\brDRAFT\fi}%
176
      \let\@evenfoot\@oddfoot
177
      178
         \theta \simeq \theta^{t}\
179
      \def\@evenhead{\if@draft\tlDRAFT\fi\thepage\hfil
         {\slshape\leftmark}\if@draft\trDRAFT\fi}%
180
      \def\chaptermark##1{\markboth
181
         {\MakeUppercase{\ifnum \c@secnumdepth >\m@ne
182
            183
      \def\sectionmark##1{\markright
184
         {\MakeUppercase{\ifnum \c@secnumdepth >\z@
185
            \thesection. \ \fi ##1}}}
186
187 \else % one-sided printing
188 \renewcommand*{\ps@headings}%
189
     {\@thesispagestylefalse
190
      \let\@mkboth\markboth
      \def\@oddfoot{\if@draft\blDRAFT\hfil
191
192
         {\slshape\small\today}\hfil\brDRAFT\fi}%
      \def\@oddhead{\if@draft\tlDRAFT\fi{\slshape\rightmark}\hfil
193
194
         \thepage\if@draft\trDRAFT\fi}%
      \def\chaptermark##1{\markright
195
         {\MakeUppercase{\ifnum \c@secnumdepth >\m@ne
196
            \@chapapp\ \thechapter. \ \fi ##1}}}
197
198 \fi%@twoside
    Pagestyle 'myheadings'.
199 \renewcommand*{\ps@myheadings}%
     {\@thesispagestylefalse
200
      \let\@mkboth\@gobbletwo
201
202
      \def\@oddfoot{\if@draft\blDRAFT\hfil
         {\slshape\small\today}\hfil\brDRAFT\fi}%
203
204
      \let\@evenfoot\@oddfoot
205
      \def\@oddhead{\if@draft\tlDRAFT\fi{\slshape\rightmark}\hfil
206
         \thepage\if@draft\trDRAFT\fi}%
      \def\@evenhead{\if@draft\tlDRAFT\fi\thepage\hfil
207
208
         {\slshape\leftmark}\if@draft\trDRAFT\fi}%
209
      \let\chaptermark\@gobble\let\sectionmark\@gobble}
```

```
Pagestyle 'thesis' (based on 'headings').
210 \if@twoside % two-sided printing
211 \newcommand*{\ps@thesis}%
     {\@thesispagestyletrue
212
213
      \let\@mkboth\markboth
      \def\@oddfoot{\if@draft\blDRAFT\hfil
214
         {\c {\c slshape\small\today}\hfil\brDRAFT\fi}{\c slshape\small\today}\hfil\brDRAFT\fi}{\c slshape\small\today}
215
216
      \let\@evenfoot\@oddfoot
      217
218
         \thepage\if@draft\trDRAFT\fi}%
      \def\@evenhead{\if@draft\tlDRAFT\fi\thepage\hfil
219
220
         {\slshape\leftmark}\if@draft\trDRAFT\fi}%
221
      \def\chaptermark##1{\markboth
         {\textsc{\ifnum \c@secnumdepth >\m@ne
222
223
             \@chapapp\ \thechapter. \ \fi ##1}}{}}%
      \def\sectionmark##1{\markright
224
         {\textsc{\ifnum \c@secnumdepth >\z@
225
             \thesection. \ \fi ##1}}}
226
227 \else % one-sided printing
228 \newcommand*{\ps@thesis}%
229
     {\@thesispagestyletrue
      \let\@mkboth\markboth
230
      \verb|\def|@oddfoot{\if@draft\blDRAFT\hfil|
231
         {\slshape\small\today}\hfil\brDRAFT\fi}%
232
      \def\@oddhead{\if@draft\tlDRAFT\fi{\slshape\rightmark}\hfil
233
234
         \thepage\if@draft\trDRAFT\fi}%
      \def\chaptermark##1{\markright
235
236
         {\textsc{\ifnum \c@secnumdepth >\m@ne
             \@chapapp\ \thechapter. \ \fi ##1}}}
237
238 \fi\%0twoside
    Default page style.
239 \pagestyle{thesis}
240 \endinput
    End of file 'ut-thesis.cls'.
```