

# The `uhthesis` class\*

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March 9, 2015

## 1 Introduction

This file is the main file for the `uhthesis` class, which is intended to meet the requirements for University of Hawai'i at Mānoa Masters theses and Ph.D. dissertations.

This document class is based on the “Style and Policy Manual For Theses and Dissertations” provided by the University of Hawai'i Graduate Division. The version used states “September 2014” on the title page [1].

The following pages must appear in the following order and have lower case Roman numeral page numbers, only the title page is unnumbered [1, p. 5]:

- title page (no page number)
- copyright page (optional)
- dedication page (optional)
- acknowledgements (optional)
- abstract
- table of contents
- list of tables (if applicable)
- list of figures/illustrations/graphs/charts/maps/plates (if any)
- list of abbreviations and symbols (optional)
- preface (optional)

Text and other pages following preliminary pages are numbered using Arabic numerals and must appear in the following order [1, p. 5]:

- text (chapters of the manuscript, including tables and figures)

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\*This document corresponds to `uhthesis` v2.2.0, dated 2015/03/09.

- appendices (if any)
- notes (if any)
- glossary (optional)
- bibliography/references
- index (optional)

There are a number of formatting requirements listed in the style guide which are already addressed by L<sup>A</sup>T<sub>E</sub>X either directly or through the report document class upon which this class is based. Care should be taken to insure that formatting changes made by authors do not violate the following requirements:

- headings and subheadings must be consistent
- every page should be counted in the numbering
- no text or marks around page numbers, no slash through zeros in page numbers
- 10 point or larger font

Some of the requirements in the style guide cannot be properly addressed within the uthesis document class. Authors should take care to ensure that the following requirements are met by their document:

- organized into either sections or chapters.
- if organized in chapters, each chapter must be titled and begin on a new page
- appendices may include schedules, lists, questionnaires, test, forms, case studies, series of plates and figures, etc., and each type of material forms a separate appendix which must be labelled separately
- the bibliography should be a style that is professionally acceptable within the field
- only references used in the preparation of the thesis/dissertation should be included in the bibliography
- consistent use and formatting of foreign words; italics or underlining is recommended. A quotation entirely in a foreign language should only appear in quotation marks and not be italicized or underlined.
- commas and periods should be placed within quotation marks
- i.e. and e.g. should always be followed by commas

appendices:

other formatting reqs: – page numbers centered 1 inch from bottom [1, p. 10]  
– major headings (acknowledgements, abstract, toc, list of tables, list of figures, preface, chapter headings, appendices, and biography) should appear centered at the top of a new page immediately followed by the text. chapter headings only appear on the first page of a new chapter. – minor headings: each subheading level must be distinguished by a different style, headings at the same sublevel must use the same style consistently throughout the work, subheadings should not begin on a new page unless the previous section ended at the bottom of a page. – whitespace between words must be approximately even, and so full justification is not recommended. – use of Hawaiian words should be consistent – 1.5 spacing except where required otherwise [1, p. 10] – no widows or orphans – no more than 3 hyphenations at the end of a line per page – no more than two consecutive lines with hyphens at the end. – every page should be numbered except the title and cover pages for parts – print on one side of page only – 8.5x11 in

tables: – "Table" then a number, then a period, followed by caption and then contents on next line – title can be flush left or centered, but must be consistent – can be all caps or mixed, but must be consistent – tables over half a page in length should appear on a separate page – wide tables may be placed broadside with title on binding side – tables may cover a number of pages in which case put " (Continued)" between period and caption – footnotes should use symbols or letters, but not numbers and be placed at the bottom of the table rather than the bottom of the page

figures: – captions should appear below, even if figure is broadside – positioning rules are the same as those for tables – if rotated, top toward binding

maps: – maps should have an accurate bar-type scale, some indication of lat & long, and a northward pointing arrow

## 2 Usage

See example thesis files.

**abstract**      abstract

## 3 Implementation

This class loads the standard report class after making some changes to the options. The twocolumn option is specifically disabled and a warning message will be printed if it is specified.

```
1 \newcommand{\@onehalfspacingp}{false}
2 \newcommand{\@draftp}{false}
3 \newcommand{\@englishp}{false}
4 \newcommand{\@letterpaperp}{false}
5 \newcommand{\@proposalp}{false}
6 \newcommand{\@thesisp}{false}
7 \newcommand{\@twosidep}{false}
```

```

8 \DeclareOption{actual}{}
9 \DeclareOption{dissertation}{}
10 \DeclareOption{onehalfspacing}{
11     \renewcommand{\@onehalfspacingp}{true}
12     \PassOptionsToPackage{\CurrentOption}{setspace}
13 }
14 \DeclareOption{draft}{
15     \renewcommand{\@draftp}{true}
16     \PassOptionsToClass{\CurrentOption}{report}
17 }
18 \DeclareOption{english}{\renewcommand{\@englishp}{true}}
19 \DeclareOption{hawaiian}{
20     \ClassErrorNoLine{uhthesis}
21     {The ‘hawaiian’ option is not supported at this time}}
22 \DeclareOption{letterpaper}{
23     \renewcommand{\@letterpaperp}{true}
24     \PassOptionsToClass{\CurrentOption}{report}
25 }
26 \DeclareOption{proposal}{\renewcommand{\@proposalp}{true}}
27 \DeclareOption{singlespacing}{\PassOptionsToPackage{\CurrentOption}{setspace}}
28 \DeclareOption{subfigure}{\PassOptionsToPackage{\CurrentOption}{tocloft}}
29 \DeclareOption{thesis}{\renewcommand{\@thesisp}{true}}
30 \DeclareOption{dissertation}{\renewcommand{\@thesisp}{false}}
31 \DeclareOption{twocolumn}{
32     \OptionNotUsed
33     \ClassWarningNoLine{uhthesis}{This class does not support the two column format}
34 }
35 \DeclareOption{twoside}{
36     \renewcommand{\@twosidep}{true}
37     \PassOptionsToClass{\CurrentOption}{report}
38 }
39 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{report}}
40 \ExecuteOptions
41 {11pt,actual,onehalfspacing,letterpaper,onecolumn,oneside,final,thesis}
42 \ProcessOptions\relax
43 \LoadClass[onecolumn]{report}

```

The class will emit warnings if the selected options are not compatible with the requirements of the Graduate Education. twoside, single spacing and paper formats other than letter are only allowed in draft mode [1].

```

44 \RequirePackage{ifthen}
45 \ifthenelse{\boolean{\@draftp}}{}{
46     \ifthenelse{\boolean{\@onehalfspacingp}}{}{
47         \ClassWarningNoLine{uhthesis}{final drafts should be 1.5 spaced}
48     }
49     \ifthenelse{\boolean{\@letterpaperp}}{}{
50         \ClassWarningNoLine{uhthesis}
51         {final drafts should be printed on letter paper}
52     }
53     \ifthenelse{\boolean{\@twosidep}}{

```

```

54      \ClassWarningNoLine{uhthesis}
55      {final drafts should be printed on only one side}
56    }{}
57 }

```

Margins are one-inch 1 inch all around the page (top, right, left, bottom) [1, p. 9]. We use the *includefoot* option to ensure that the page numbers fall within the margins of the page, as required [1, p. 10].

FIXME: maybe we should pass the *twoside* option to *geometry* when set by the user.

```

58 \RequirePackage[left=1.0in, right=1.0in, top=1.0in, bottom=1.0in,
59   includefoot]{geometry}

```

The *setspace* package is used to control line spacing.

```

60 \RequirePackage{setspace}

```

This document style was created for documents prepared in the English language. The Graduate Division specifies that dissertations may be in either English or Hawaiian, so we allow for the replacement of English labels and headings. If anyone is interested in making this style compatible with the Hawaiian language, please contact the authors.

Other English words that need replacement can be found in the macro supporting the title page.

FIXME: In the future we should probably use the *babel* package here.

```

61 \newcommand{\acknowledgname}{Acknowledgments}
62 \newcommand{\prefacename}{Preface}
63 \renewcommand{\contentsname}{Table of Contents}
64 \renewcommand{\listfigurename}{List of Figures}
65 \renewcommand{\listtablename}{List of Tables}
66 %bibliography:
67 %-- the heading "Literature Cited" may be used if it only contains references
68 %actually cited
69 \renewcommand{\bibname}{Bibliography}
70 \renewcommand{\indexname}{Index}
71 \renewcommand{\figurename}{Figure}
72 \renewcommand{\tablename}{Table}
73 \renewcommand{\chaptername}{Chapter}
74 \renewcommand{\appendixname}{Appendix}
75 \renewcommand{\partname}{Part}
76 \renewcommand{\abstractname}{Abstract}
77 \renewcommand{\acknowledgname}{Acknowledgments}

```

– if dissertation is divided into "Parts" then each new part designation should appear on a separate cover page. numbering for chapters does not begin anew for each part.

The style guide has the following requirements for chapter headings:

- chapter titles should be centered and consistently use the same size and style of font

- no cover pages, just center the title of the appendix on the first page
- if there is only one appendix it must be titled "Appendix", not "Appendix A"

FIXME: address "Appendix A" issue

```

78 \renewcommand{\@makechapterhead}[1]{
79   \begin{Large}
80   \begin{bf}
81   \begin{singlespacing}
82   \begin{center}
83     \MakeUppercase{\@chapapp}\thechapter\par
84     \MakeUppercase{#1}\par
85     ~\par
86   \end{center}
87   \end{singlespacing}
88   \end{bf}
89   \end{Large}
90 }
91 \renewcommand{\@makeschapterhead}[1]{
92   \begin{Large}
93   \begin{bf}
94   \begin{singlespacing}
95   \begin{center}
96     \MakeUppercase{#1}\par
97     ~\par
98   \end{center}
99   \end{singlespacing}
100   \end{bf}
101   \end{Large}
102 }

```

`\degreemonth` The month the degree will be officially conferred, capitalized normally. The default month is May since most students graduate at the end of the Spring semester.

```

103 \newcommand{\@degreemonth}{May}
104 \newcommand{\degreemonth}[1]{\renewcommand{\@degreemonth}{#1}}

```

`\degreeyear` The year the degree will be officially conferred.

```

105 \newcommand{\@degreeyear}{2015}
106 \newcommand{\degreeyear}[1]{\renewcommand{\@degreeyear}{#1}}

```

`\degree` The full (unabbreviated) name of the degree, capitalized normally.

```

107 \newcommand{\@degree}{Master of Science}
108 \newcommand{\degree}[1]{\renewcommand{\@degree}{#1}}

```

`\versionnum` The version of this draft only appears when in draft mode or a proposal.

```

109 \newcommand{\@versionnum}{1.0.0}
110 \newcommand{\versionnum}[1]{\renewcommand{\@versionnum}{#1}}

```

`\chair` The name of your committee's chair.

```

111 \newcommand{\@chair}{No Such Person}
112 \newcommand{\chair}[1]{\renewcommand{\@chair}{#1}}

```

`\othermembers` The names of your other committee members, one per line.

```

113 \newcommand{\@othermembers}{}
114 \newcommand{\othermembers}[1]{\renewcommand{\@othermembers}{#1}}

```

`\field` The name of your degree's field (e.g., Psychology, Computer Science), capitalized normally.

```

115 \newcommand{\@field}{}
116 \newcommand{\field}[1]{\renewcommand{\@field}{#1}}

```

`\subfield` The name of your degree's subfield (e.g., Computer Science (Bioinformatics)), capitalized normally.

```

117 \newcommand{\@subfield}{}
118 \newcommand{\subfield}[1]{\renewcommand{\@subfield}{#1}}

```

`\keywords` Four to six optional keywords or short key phrases that could be used as search terms to find your thesis or dissertation during a library catalog or web search.

```

119 \newcommand{\@keywords}{}
120 \newcommand{\keywords}[1]{\renewcommand{\@keywords}{%
121     \ifthenelse{\equal{#1}{}}%
122     {}%
123     {Keywords: #1}%
124 }}

```

`frontmatter` The FRONTMATTER environment makes sure that page numbering is set correctly (roman, lower-case, starting at 2) for the front matter. It also resets page-numbering for the remainder of the dissertation (arabic, starting at 1). **FIXME:** the book class provides this functionality, perhaps we should use book instead of report?

```

125 \newenvironment{frontmatter}{
126     \pagenumbering{roman}
127     \setcounter{page}{2}
128 }{
129     \pagenumbering{arabic}
130     \setcounter{page}{1}
131 }

```

`\maketitle` This macro outputs the complete title page. It requires all the above macros. Based on the options provided, it will customize the title page: thesis vs. dissertation, proposal vs. actual.

The following items must be included on the title page [1, p. 5–6]:

- an ‘okina before the final “i” in Hawai‘i
- a kahakō over the ‘a’ (e.g. ā) in Mānoa

- name of the author
- degree being awarded
- field of study
- Specializations are generally not permitted on the title page. The only specializations that may be included, with permission of the graduate program, are: “Ecology, Evolution and Conservation Biology”, “Marine Biology”, “Neurosciences”, “Japanese, Korean, or Chinese in East Asian Languages”, “Tropical Medicine in Biomedical Sciences” in parenthesis after field.
- the author’s graduation month (December, May, or August) and year. Do not use the date you completed or turned in the thesis/dissertation.
- committee members names, University representative (outside member) is usually last
- Titles such as Dr. or Ph.D. for committee members or for yourself are not included. However, the chair should be designated by the word ”chairperson.”
- Optionally, you can list four to six keywords or short key phrases that could be used as search terms to find your thesis or dissertation during a library catalog or web search.

```

132 \newcommand{\@papertype}{ }
133 \ifthenelse{\boolean{\@thesisp}}{
134     \renewcommand{\@papertype}{Thesis}
135 }{
136     \renewcommand{\@papertype}{Dissertation}
137 }
138 \renewcommand{\maketitle}{
139     \thispagestyle{empty}
140     \large
141     \begin{singespacing}
142     \begin{center}
143         \null\vspace{3ex}\par
144         \MakeUppercase{\@title}\par
145         \vspace{1in}\par
146         \ifthenelse{\boolean{\@proposalp}}{
147             A \MakeUppercase{\@papertype} PROPOSAL SUBMITTED TO MY COMMITTEE\par
148         }{
149             A \MakeUppercase{\@papertype} SUBMITTED TO THE GRADUATE DIVISION OF THE\par
150             UNIVERSITY OF HAWAI'I AT M{\=A}NOA%
151         }
152         IN PARTIAL FULFILLMENT\par
153         OF THE REQUIREMENTS FOR THE DEGREE OF\par
154         \vspace{2ex}\par
155         \MakeUppercase{\@degree}\par
156         \vspace{2ex}\par

```



```

157      IN\par
158      \vspace{2ex}\par
159      \MakeUppercase{\@field}
160      \ifthenelse{\equal{\@subfield}{}}{\}{(\MakeUppercase{\@subfield})}\par
161      \vspace{2ex}\par
162      \ifthenelse{\boolean{\@proposalp}}{
163          \par
164      }{
165          \vspace{1ex}\par
166          \MakeUppercase{\@degreemonth~\@degreeyear}\par
167      }
168      \vfill\par
169      By\par
170      \vspace{1ex}\par
171      \@author\par
172      \vspace{2ex}\par
173      \@papertype~Committee:\par
174      \vspace{1ex}\par
175      \@chair, Chairperson\par
176      \@othermembers\par
177      \vspace{3ex}\par
178      \@keywords\par
179      \ifthenelse{\boolean{\@proposalp}\or\boolean{\@draftp}}{
180          \vspace{2ex}\par
181          \today\par
182          Version \@versionnum
183      }{}
184      \end{center}
185      \end{singlespacing}
186      \normalsize
187      \cleardoublepage
188 }

```

**\copyrightpage** While it's technically optional, you probably want a copyright page. This is a macro, not an environment, because it can be generated from the degreeyear macro.

```

189 \newcommand{\copyrightpage}{
190     \large
191     \null\vspace{0.45\textheight}\par
192     {\centering
193         Copyright \copyright{} {\@degreeyear} by \par
194         \@author\par
195     }
196     \normalsize
197     \cleardoublepage
198 }

```

**abstract** The ABSTRACT environment allows for multi-page abstracts. abstract page:

- not required for thesis, required for dissertation

- title "ABSTRACT"
- thesis abstract no more than 150 wds, dissertation no more than 350
- 1.5 spaced

FIXME: really should be able to check for presence of abs in dissertation  
 FIXME: any way to generate a warning if word count is exceeded?

```
199 \renewenvironment{abstract}{
200   \chapter*{\abstractname}
201   \addcontentsline{toc}{chapter}{\abstractname}
202 }{
203   \cleardoublepage
204 }
```

**dedication** The dedication environment just makes sure the dedication gets its own page.

```
205 \newenvironment{dedication}{}{
206   \cleardoublepage
207 }
```

**acknowledgments** The acknowledgments environment puts a large, bold, centered "Acknowledgments" label at the top of the page. acknowledgement page: – do not show author's name or date – should show up in toc

```
208 \newenvironment{acknowledgments}{
209   \chapter*{\acknowledgname}
210   \addcontentsline{toc}{chapter}{\acknowledgname}
211 }{
212   \cleardoublepage
213 }
```

**preface** The preface environment just makes sure the preface gets its own page.

```
214 \newenvironment{preface}{
215   \chapter*{\prefacename}
216   \addcontentsline{toc}{chapter}{\prefacename}
217 }{
218   \cleardoublepage
219 }
```

table of contents:

- includes acknowledgements, abstract, list of tables, list of figures, list of abbreviations and/or symbols, appendices, bibliography, and major sections of the text, does not list title page, or dedication
- must have dot leaders between end of heading and page number
- word headings in toc must match those in the text precisely
- each new sub-level must be indented to distinguish it from the previous level

```

220 \RequirePackage[nottoc]{tocbibind}
221 \RequirePackage[titles]{tocloft}
222 \renewcommand{\cftchapleader}{\cftdotfill{\cftdotsep}}

```

While the tocloft package affords the ability to customize the table of contents, it does do two annoying things: it changes the commands to generate the table of contents, list of tables, and list of figures so that they no longer automatically generate page breaks and it uses AtBeginDocument to renew the commands, which means that to add the page breaks back in we must also use AtBeginDocument *after* including the tocloft package.

```

223 \AtBeginDocument{
224   \let\origtableofcontents\tableofcontents
225   \renewcommand{\tableofcontents}{
226     \begin{singlespacing}
227       \setlength{\parskip}{\baselineskip}
228       \setlength{\cftbeforechapskip}{0pt}
229       \origtableofcontents
230     \end{singlespacing}
231     \cleardoublepage
232   }
233   \let\origlistoftables\listoftables
234   \renewcommand{\listoftables}{
235     \begin{singlespacing}
236       \setlength{\parskip}{\baselineskip}
237       \origlistoftables
238     \end{singlespacing}
239     \cleardoublepage
240   }
241   \let\origlistoffigures\listoffigures
242   \renewcommand{\listoffigures}{
243     \begin{singlespacing}
244       \setlength{\parskip}{\baselineskip}
245       \setlength{\cftbeforechapskip}{0pt}
246       \origlistoffigures
247     \end{singlespacing}
248     \cleardoublepage
249   }
250 }

```

list of tables: – tables numbered using arabic numerals – titles may be shorter than they appear in the text so long as they are not misleading – tables may either be numbered consecutively starting with 1, or using chapter number . index – single space within titles longer than one line, but double space between entries – requirements are otherwise the same as for the table of contents

list of figures/etc: – figure numbers are done the same as table numbers, plate numbers with capital roman numerals – if there are both figures and plates arrange them in separate lists – requirements are otherwise the same as for list of tables

## References

- [1] etd (electronic thesis and dissertation) style & policy guide. [http://manoa.hawaii.edu/graduate/sites/manoa.hawaii.edu/graduate/files/documents/misc/tdstylepolicy\\_e.pdf](http://manoa.hawaii.edu/graduate/sites/manoa.hawaii.edu/graduate/files/documents/misc/tdstylepolicy_e.pdf), September 2014.

## Change History

v0.1	General: Initial version, not for public release . . . . .	1	General: Initial version, not for public release . . . . .	1
v2.0.0	General: Beta release, use at own risk. Version bumped so it will be higher than the version of old uhthesis2e class, to avoid confu-		v2.1.0	General: Revisions to comply with Sep 2010 Style & Policy guide . . .
			v2.2.0	General: Revisions to comply with Sep 2014 Style & Policy guide . . .