

# The kautools bundle\*

Stefan Berthold  
stefan.berthold@kau.se

August 18, 2014

## Abstract

The kautools bundle provides tools (L<sup>A</sup>T<sub>E</sub>X style files) for the kauthesis bundle.

## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	The kautitle package . . . . .	1
1.2	The kaumeta package . . . . .	2
1.3	The kaulist package . . . . .	2
1.4	The kauclear package . . . . .	2
1.5	The kauenvironments package . . . . .	2
1.6	The kauparts package . . . . .	2
1.7	The kaupaper package . . . . .	2
1.8	The kaustudies package . . . . .	2
1.9	The kaulanguage package . . . . .	3
1.10	The pgfcropmarks package . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	The kautitle package . . . . .	3
2.2	The kaumeta package . . . . .	4
2.3	The kaulist package . . . . .	5
2.4	The kauclear package . . . . .	6
2.5	The kauenvironments package . . . . .	7
2.6	The kauparts package . . . . .	8
2.7	The kaupaper package . . . . .	9
2.8	The kaustudies package . . . . .	12
2.9	The kaulanguage package . . . . .	13
2.10	The pgfcropmarks package . . . . .	13

---

\*This document corresponds to kautools v1.12, dated 2014/02/18.

# 1 Introduction

## 1.1 The kautitle package

The kautitle package defines an alternative title page using the logo of Karlstad University. Note that this is not an implementation of the Karlstad University Studies title page, i. e., this alternative title page won't be used for your thesis. The logo is available from

<http://www.kau.se/sites/default/files/image/press/kau-logo-tryck.pdf>

and must be available in L<sup>A</sup>T<sub>E</sub>X's search path before using this package.

At the moment, this package uses a manually installed font called **aun** and it's bold version **aub**. It might not be available on your system, though, and since the font is licensed, I may not distribute it. If you do not possess the font, you have to switch to another one.

Load the package without options. The title page can be created using `\maketitle`. Note that the previous definition of `\maketitle` is not destroyed, but preserved in the macro `\kut@maketitle`. You can use it in your document as follows:

`\maketitle`  
`\kut@maketitle`

```
\makeatletter
\kut@maketitle
\makeatother
```

Two fonts are used on the title page and can be changed using the macro `\setkautitlefont`. The argument `\setkautitlefont{<font>}` accepts key-value pairs where keys are **normalfont** and **titlefont** and values are any sequence of L<sup>A</sup>T<sub>E</sub>X's font commands. For switching to your standard sans-serif font, you should add these lines to your preamble:

```
\setkautitle%
{ normalfont=\sffamily\LARGE
, titlefont=\sffamily\bfseries\Huge }
```

## 1.2 The kaumeta package

The kaumeta package defines three macros, `\subject`, `\institute`, and `\place`, for providing additional meta data about the document and it's author. This meta data can be used, e. g., on the title page of the document.

## 1.3 The kaulist package

The kaulist package defines pretty printing macros for lists. For instance, a list "1,2,3" is transformed to "1, 2, and 3".

## 1.4 The kauclear package

This package replaces the macro `\cleardoublepage`. Empty pages with odd page numbers will not print the page number. Also, the macro `\pagestyle` is redefined. The new behaviour is to stores the page style for being able to restore it later on.

## 1.5 The `kauenvironments` package

This package defines the environments `researchquestions` and `contributions`.

## 1.6 The `kauparts` package

This package defines a new `\part` macro, `\kaupart`. It is independent of `\part`, but you should decide yourself for one alternative only. The `\kaupart` macro adds a cover page for the new part.

Use the package options `vshift` and `vstep` to adjust the placement of the thumb indices on the cover pages.

`\kaupart`      Use `\kaupart[⟨meta⟩]{⟨title⟩}` to create a numbered part with the given `⟨title⟩`. You may use the optional argument `⟨arg⟩` for adding meta data. This includes `body` for typing additional material on the cover page and `label` for creating a label such as usually created by `\label`. In addition, the switch `tocentry` may be set to false, if the macro should not add an entry to the table of contents.

`\kaupart*`      The starred version of `\kaupart` works exactly like the unstarred version, but creates an unnumbered part.

## 1.7 The `kaupaper` package

*Yet no description.*

## 1.8 The `kaustudies` package

This package sets the page dimensions so that your document does not need to be scaled for printing. It also chooses Garamond as the standard font.

You can use the package option `tinyfontswitch=false` in order to avoid the switch to sans-serif fonts when using `\tiny`. The switch is recommended by Karlstad University Studies, though, it is rather debatable whether this is necessary when using L<sup>A</sup>T<sub>E</sub>X and the correct page dimensions.

## 1.9 The `kaulanguage` package

This package defines a macro for supporting names in English and Swedish depending on the chosen language in `babel`.

## 1.10 The `pgfcropmarks` package

The package `pgfcropmarks` draws crop marks on A4 paper. This is supposed to be the last step after creating all tables, indices, and glosseries. When the package is loaded, L<sup>A</sup>T<sub>E</sub>X will not create or update any auxiliary files.

# 2 Implementation

## 2.1 The `kautitle` package

No package options are accepted.

```
1 ⟨*title⟩
2 \ProcessOptions\relax
```

Load dependencies.

```
3 \RequirePackage{xkeyval}
4 \RequirePackage{tikz}
5 \RequirePackage{hyphenat}
6 \RequirePackage{kaumeta}
```

**\setkautitlefont** The macro `\setkautitlefont` allows to choose another than the default font for the title page. The title page has only two different font settings, `titlefont` which is used for the title text and `normalfont` which is used otherwise.

```
7 \definecmdkeys[kut]{pkg}[kut@]{normalfont,titlefont}
8 \setkeys[kut]{pkg}%
9 { normalfont=\fontfamily{aun}\fontsize{18}{21.6}\selectfont\bfseries
10 , titlefont=\fontfamily{aub}\fontsize{28}{33.6}\selectfont }
11 \newcommand\setkautitlefont[1]{\setkeys[kut]{pkg}{#1}}
```

**\kut@maketitle** Preserve the previous version of `\maketitle`.

```
12 \let\kut@maketitle\maketitle
```

**\maketitle** The title page will consist of two background images (the Karlstad University logo), title, subject, author, and author's institute. Everything will be shaded except the title.

```
13 \renewcommand\maketitle{%
14   \thispagestyle{empty}
15   \begin{tikzpicture}[remember picture, overlay]%
```

Clipping the title page to the dimensions of the logical page. This is interesting when the physical and the logical page do not have the same dimensions.

```
16   \path (current page.north west) +(-4pt,4pt) node (NW) {};
17   \path (current page.south east) +(4pt,-4pt) node (SE) {};
18   \path (current page.north west) +(-3pt,3pt) node (NWC) {};
19   \path (current page.south east) +(3pt,-3pt) node (SEC) {};
20   \path[clip] (NWC) rectangle (SEC);
```

Background images.

```
21   \path (current page.south west) node[rotate=243.5] {\pgfimage{kau-logo-tryck}};%
22   \path (current page.north east) node[rotate=175] {\pgfimage{kau-logo-tryck}};%
```

Subject in the upper left corner of the page.

```
23   \path (current page.north west) node
24     [shift={(-10pt,-12pt)},anchor=south west,rotate=270
25     ,font=\kut@normalfont\phantom{Xy}]
26     {\@subject};
```

Institute in the lower right corner of the page.

```
27   \path (current page.south east) node
28     [shift={{-8pt,6pt}},anchor=north east,rotate=270
29     ,rounded corners,fill=black,text=white,inner sep=8pt
30     ,font=\kut@normalfont\phantom{Xy}]
31     {\@shortinstitute};
```

Title bar on vertically centered on the left side of the page.

```
32   \path
33     (current page.east) node[shift={{(-10,0)}}] (A) {}
34     (current page.east) node[shift={{(0,-2.5)}}] (B) {}
35     [shading=axis,left color=white,right color=black] (A) rectangle (B.south east)
36   ;
```

Author below the title bar.

```

37 \path (B) node
38 [anchor=north east
39 ,inner sep=8pt
40 ,text=black
41 ,font=\kut@normalfont\phantom{Xy}
42 ,text width=14cm,text ragged left]
43 {\@author};

```

Shading over the entire page (slightly bigger than the clipping).

```

44 \path[fill=white,opacity=0.90,transparency group] (NW) rectangle (SE);

```

Title text on the title bar. No hyphens are allowed in the title text.

```

45 \path (B) node
46 [anchor=south east,shift={(-3pt,0)}
47 ,text=yellow!75!red
48 ,font=\kut@titlefont\phantom{Xy}
49 ,text width=14cm,text ragged left]
50 {\nohyphens{\@title}};
51 \end{tikzpicture}%
52 \clearpage%
53 }
54 </title>

```

## 2.2 The kaumeta package

No package options are parsed.

```

55 <*meta>
56 \ProcessOptions\relax

```

Dependencies are loaded.

```

57 \usepackage{ifthen}

```

**\subject** The macro `\subject{<subject>}` can be used to set the subject of the document.  
**\@subject** The last `<subject>` set will be available in the macro `\@subject`.

```

58 \newcommand*\@subject{}
59 \newcommand\subject[1]{\renewcommand*\@subject{#1}}

```

**\institute** The macro `\institute[<short>]{<institute>}` can be used to set the institute of the document's author. It is possible to provide a shorter version of the institute in the optional argument `<short>`. If not explicitly set, the short version is the same as the long version `<institute>`. The values are available in the macros `\@institute` and `\@shortinstitute`.

```

\@institute
\@shortinstitute
60 \newcommand*\@institute{}
61 \newcommand*\@shortinstitute{}
62 \newcommand\institute[2][]{%
63 \renewcommand*\@institute{#2}%
64 \ifthenelse{\equal{#1}{}}{%
65 \renewcommand*\@shortinstitute{#2}%
66 }{%
67 \renewcommand*\@shortinstitute{#1}%
68 }%
69 }

```

`\place` The macro `\place{<place>}` can be used to set the place of the document's author.

`\@place` The last `<place>` set will be available in the macro `\@place`.

```

70 \newcommand*\@place{}
71 \newcommand\place[1]{\renewcommand*\@place{#1}}

```

`\supervisor` `{<name>}` sets the supervisor's name for the kaumasters class.

```

72 \newcommand\@supervisor{}
73 \newcommand\supervisor[1]{\renewcommand*\@supervisor{#1}}

```

`\examiner` `{<name>}` sets the examiner's name for the kaumasters class.

```

74 \newcommand\@examiner{}
75 \newcommand\examiner[1]{\renewcommand*\@examiner{#1}}
76 </meta>

```

## 2.3 The kaulist package

No options are parsed.

```

77 <*list>
78 \ProcessOptions\relax
79 \RequirePackage{kaulanguage}

```

For `\prettylist`, the packages `pgffor`, `pgfmath`, and `pgfkeys` are required.

```

80 \RequirePackage{tikz}

```

`\commasign` defines a comma (","), if one is to be used before "and".

```

81 \AtBeginDocument{%
82   \setname{commasign}{},{,}%
83 }

```

`\andname` defines the word used as "and".

```

84 \AtBeginDocument{%
85   \setname{andname}{and}{och}%
86 }

```

`\prettylist` `{<list>}` transforms a comma separated list into a list in natural language.

```

87 \newcommand\prettylist[1]{%

```

The number of list elements is stored in `\num`.

```

88   \foreach[count=\xi] \x in #1 {%
89     \let\num=\xi%

```

The first element is just printed without any changes.

```

90   \foreach[count=\xi] \x in #1 {%
91     \ifnum \xi=1%
92       \x%

```

The last element is printed with preceding `\commasign`, if there are more than two elements in the list, and otherwise without.

```

93     \else%
94       \ifnum \xi=\num%
95         \ifnum \num=2%
96           {} \andname{} \x%
97         \else%
98           \commasign{} \andname{} \x%
99         \fi%

```

Elements in between the first and the last one are printed with a preceding hard-coded comma sign (not `\commasign`).

```

100     \else%
101     , \x%
102     \fi%
103     \fi%
104   }%
105 }%
106 </list>

```

## 2.4 The `kauclear` package

No options are parsed.

```

107 <{*clear>
108 \ProcessOptions\relax

```

`\kuc@currentpagestyle` The page style is stored in `\kuc@currentpagestyle`. Default: `plain`

```

109 \newcommand\kuc@currentpagestyle{plain}

```

`\pagestyle` The macro `\pagestyle` is redefined to update the page style in `\kuc@currentpagestyle`.

```

110 \let\pagestyle@orig\pagestyle
111 \renewcommand\pagestyle[1]{%
112   \renewcommand\kuc@currentpagestyle{#1}%
113   \pagestyle@orig{#1}%
114 }

```

`\kuc@restorepagestyle` The page style can be restored with `\kuc@restorepagestyle` after (temporarily) switching to another one using `\pagestyle@orig`.

```

115 \newcommand\kuc@restorepagestyle{%
116   \pagestyle@orig{\kuc@currentpagestyle}%
117 }

```

`\cleardoubpage@orig` The previous definition of `\cleardoublepage` is preserved in `\cleardoublepage@orig`.

```

118 \let\cleardoubpage@orig\cleardoublepage

```

`\cleardoublepage` The macro `\cleardoublepage` is redefined. The new definition switches temporarily to the page style `empty`.

```

119 \renewcommand\cleardoublepage{%
120   \clearpage%
121   \pagestyle@orig{empty}%
122   \cleardoubpage@orig%
123   \kuc@restorepagestyle%
124 }
125 </clear>

```

## 2.5 The `kauenvironments` package

No package options are parsed.

```

126 <{*environments>
127 \ProcessOptions\relax

```

Load dependencies.

```
128 \RequirePackage{xspace}
129 \RequirePackage{xcolor}
```

**researchquestions** The environment is an enumeration derived from `enumerate`. The argument of `\item[question]` is used to formulate the research question.

```
130 \newenvironment{researchquestions}%
131   {\begin{enumerate}%
132     \let\kue@item\item%
133     \renewcommand\item[1][Research question]%
134       {\kue@item\emph{##1}\nopagebreak\par}%
135   }%
136   {\end{enumerate}}%
```

**contributions** The environment is an enumeration derived from `enumerate`. The argument of `\item[contrib]` is used to formulate the contribution.

```
137 \newenvironment{contributions}%
138   {\begin{enumerate}%
139     \let\kue@item\item%
140     \renewcommand\item[1][%
141       \textcolor{red}{\emph{write your contribution between brackets
142         as optional argument of \texttt{\string\item}.}}}%
143     {\kue@item\emph{##1}\xspace}%
144   }%
145   {\end{enumerate}}%
146 \end{environments}
```

## 2.6 The kauparts package

```
147 \begin{parts}
148 \RequirePackage{xkeyval}
149
150 \define@cmdkeys[kup]{pkg}[kup@]{vshift,vstep}
151 \setkeys[kup]{pkg}{vshift=2,vstep=0.8}
152
153 \ProcessOptionsX[kup]<pkg>
154
155 \RequirePackage{calc}
156 \RequirePackage{ifthen}
157 \RequirePackage{suffix}
158 \RequirePackage{tikz}
159 \usetikzlibrary{positioning}
160
161 \define@cmdkeys[kup]{part}[kup@]{body,label}
162 \define@boolkeys[kup]{part}[kup@]{tocentry}
163
164 \newcounter{kup@part}
165 \newcounter{kup@vertical}
166 \setcounter{kup@vertical}{0}
167
168 \newcommand\kup@parheadline[2]{%
169   \path[node distance=1ex] (current page.north east) +(3pt,\kup@vshift+\kup@vstep*\arabic{kup@part})
170   node%
```



```

171     [ anchor=north east%
172     , minimum width=2cm+3pt%
173     %, minimum height=7mm%
174     %, draw=black%
175     %, fill=black%
176     , left color=white%
177     , right color=black%
178     , text=white%
179     , font=\LARGE\bfseries%
180     ] (bar) {#1}%
181     node[base left=of bar,font=\LARGE\bfseries] {#2};%
182 }

\kaupart

183 \newcommand\kaupart[2] [] {%
184   \cleardoublepage%
185   \thispagestyle{plain}%
186   \stepcounter{kup@part}%
187   \setkeys[kup]{part}{body=\relax,label=,tocentry=true,#1}%
188   \ifkup@tocentry%
189     \providecommand\phantomsection{}%
190     \phantomsection%
191     \addcontentsline{toc}{part}{\numberline{\Roman{kup@part}}\textsc{#2}}%
192   \fi%
193   \renewcommand\@currentlabel{\Roman{kup@part}}%
194   \ifthenelse{\equal{kup@label}{}}{\label{kup@label}}%
195   \begin{tikzpicture}[remember picture,overlay,yscale=-1]%
196     \kup@partheadline{\Roman{kup@part}}{#2}%
197   \end{tikzpicture}%
198   \kup@body
199   \stepcounter{kup@vertical}%
200   \cleardoublepage%
201 }

\kaupart*

202 \WithSuffix\newcommand\kaupart*[2] [] {%
203   \cleardoublepage%
204   \thispagestyle{plain}%
205   \setkeys[kup]{part}{body=\relax,tocentry=true,#1}%
206   \ifkup@tocentry%
207     \providecommand\phantomsection{}%
208     \phantomsection%
209     \addcontentsline{toc}{part}{\textsc{#2}}%
210   \fi%
211   \begin{tikzpicture}[remember picture,overlay,yscale=-1]%
212     \kup@partheadline{\vphantom{X}}{#2}%
213   \end{tikzpicture}%
214   \kup@body
215   \stepcounter{kup@vertical}%
216   \cleardoublepage%
217 }
218 \</parts>

```

## 2.7 The kaupaper package

```

219 <*paper>
220 \RequirePackage{xkeyval}
221
222 \define@cmdkeys[kua]{paper}[kua@]{author,title,subtitle,reference,email,refstr,vanity,subdelim}
223 \setkeys[kua]{paper}{refstr=\reprintedname}
224
225 \ProcessOptionsX[kua]<paper>
226
227 \RequirePackage{kauparts}
228 \RequirePackage{ifthen}
229 \RequirePackage{tikz}
230
231 \RequirePackage{ragged2e}
232 \RequirePackage{hyphenat}
233
234 \RequirePackage{kaulanguage}
235
236 \AtBeginDocument{%
237   \setname{reprintedname}{Reprinted from}{Ursprungligen publicerad i}%
238   \setname{appendedpapersname}{List of Appended Papers}{Bifogade publiceringar}%
239   \setname{participationname}{Comments on my Participation}{Kommentarer p\aa{} min medverka}%
240   \setname{papername}{Paper}{Publicering}%
241 }
242
243 \newcounter{kua@section}
244 \newcounter{kua@equation}
245 \newcounter{kua@figure}
246 \newcounter{kua@table}
247
248 \newcounter{kua@paper}
249
250 \providecommand\thepaper{}
251 \providecommand\thepapertitle{}
252
253 \newcommand\kua@warning\relax
254 \newcommand\kua@dowarn{\gdef\kua@warning{\@latex@warning@no@line{List data created from the ka
255 \AtEndDocument{\kua@warning}
256
257 \newcommand\kua@listof[4]{%
258   \IfFileExists{\jobname.#1}%
259     {% check whether empty file
260       \newread\reader%
261       \openin\reader\jobname.#1%
262       \read\reader to \readmacro%
263       \ifeof\reader%
264         \textcolor{red}{\ldots} will be available after the next \LaTeX{} run.}%
265       \@starttoc{#1}%
266       %\AtEndDocument{\@latex@warning@no@line{Rerun to get the list of #2 right}}%
267       \kua@dowarn%
268     }% file not empty -> create list
269     #3\@starttoc{#1}#4%
270   \fi%

```

```

271 }%
272 {% file does not exist
273 \textcolor{red}{\ldots{}} will be available after the next \LaTeX{} run.}%
274 \@starttoc{#1}%
275 %\AtEndDocument{\@latex@warning@no@line{Rerun to get the list of #2 right}}%
276 \kua@dowarn%
277 }%
278 }

\listofpapers

279 \newcommand\listofpapers{%
280 \section*{\appendexpapersname}%
281 \addcontentsline{toc}{section}{\appendexpapersname}%
282 \kua@listof{pap}{appendexpapers}{%
283 \begin{enumerate}%
284 \renewcommand\theenumi{\textbf{\Roman{enumi}}}%
285 }\end{enumerate}}%
286 \subsection*{\participationname}%
287 \kua@listof{pcp}{participation in appendexpapers}{}%
288 }

289
290 \newcommand\l@paper[2]{%
291 \item #1%
292 }
293
294 \newcommand\listofsummaries{%
295 \kua@listof{sum}{paper summaries}{}%
296 }
297
298 \newcommand\l@summary[2]{%
299 #1%
300 }
301
302 \newcommand\l@limit[2]{%
303 %\paragraph{Limitations.}
304 #1%
305 }
306
307 \newcommand\l@participation[2]{%
308 #1%
309 }
310
311 \newcommand\papercover{%
312 \begin{tikzpicture}[remember picture,overlay]%
313 \path (current page.center)%
314 node%
315 [ node distance=\baselineskip%
316 , text width=\textwidth%
317 , text centered%
318 ] (refstr) {\kua@refstr};%
319 \ifthenelse{\equal{\kua@subtitle}{}}{%
320 \node%
321 [ node distance=1.5\baselineskip%
322 , above=of refstr%

```

```

323         , text width=\textwidth%
324         , text centered%
325         , font=\LARGE\bfseries%
326     ] {\nohyphens{\kua@title}};%
327 }{%
328     \node%
329     [ node distance=1.5\baselineskip%
330     , above=of refstr%
331     , text width=\textwidth%
332     , text centered%
333     , font=\large\bfseries%
334     ] (sub) {\nohyphens{\kua@subtitle}};%
335     \node%
336     [ node distance=1pt%
337     , above=of sub%
338     , text width=\textwidth%
339     , text centered%
340     , font=\LARGE\bfseries%
341     ] {\nohyphens{\kua@title}};%
342 }%
343     \node%
344     [ node distance=\baselineskip%
345     , below=of refstr%
346     , text width=\textwidth%
347     , text centered%
348     , font=\large%
349     ] {\nohyphens{\kua@reference}};%
350 ;%
351 \end{tikzpicture}%
352 }
353
354 \newenvironment{kaupaper}[1][{}]{%
355     \setcounter{kua@section}{\value{section}}%
356     \setcounter{kua@equation}{\value{equation}}%
357     \setcounter{kua@figure}{\value{figure}}%
358     \setcounter{kua@table}{\value{table}}%
359     \setcounter{section}{0}%
360     \setcounter{equation}{0}%
361     \setcounter{figure}{0}%
362     \setcounter{table}{0}%
363     \setkeys{kua}{paper}{subtitle=,vanity=,subdelimiter={---},label=,summary={\string\textcolor{black}{%
364     \setcounter{kua@paper}{\value{kup@part}}\stepcounter{kua@paper}%
365     \ifthenelse{\equal{\kua@subtitle}{}}{%
366         {\addcontentsline{pap}{paper}{\kua@author. \kua@title. In \kua@reference}}%
367         {\addcontentsline{toc}{part}{\textsc{\papername} \Roman{kua@paper}\kua@title}}%
368         {\addcontentsline{pap}{paper}{\kua@author. \kua@title\kua@subdelimiter\kua@subtitle. In \kua@reference}}%
369         {\addcontentsline{toc}{part}{\textsc{\papername} \Roman{kua@paper}\kua@title\kua@subdelimiter}}%
370     \addcontentsline{sum}{summary}{\string\subsubsection*{\papername~\Roman{kua@paper} -- \kua@title}}%
371     \ifthenelse{\equal{\kua@limitations}{}}{%
372         \addcontentsline{sum}{limit}{\kua@limitations}}%
373     \addcontentsline{pcp}{participation}{\string\paragraph{\papername~\Roman{kua@paper}}\kua@participation}%
374     \kaupart[tocentry=false,label=\kua@label,body=\papercover\kua@vanity]{\papername}%
375     \renewcommand*{\thepaper}{\papername~\Roman{kua@paper}}%
376     \renewcommand*{\thepapertitle}{\kua@title}%

```

```

377 \renewcommand\maketitle{%
378 \thispagestyle{plain}%
379 \centering%
380 \Large\bfseries%
381 \vspace*{0.15\textheight}%
382 \kua@title\par%
383 \addvspace{1ex}%
384 \ifthenelse{\equal{\kua@subtitle}{}}{\large\kua@subtitle}%
385 \par\addvspace{\baselineskip}%
386 \normalsize%
387 \kua@author\[\[0.25\baselineskip]%
388 \normalfont%
389 \kua@email%
390 \par\addvspace{2\baselineskip}\justifying%
391 }%
392 }{%
393 \setcounter{section}{\value{kua@section}}%
394 \setcounter{equation}{\value{kua@equation}}%
395 \setcounter{figure}{\value{kua@figure}}%
396 \setcounter{table}{\value{kua@table}}%
397 \clearpage%
398 }
399 </paper>

```

## 2.8 The kaustudies package

```

400 <*studies>
401 \RequirePackage{xkeyval}
402
403 \define@boolkey[kus]{pkg}[kus@]{tinyfontswitch}[true]{}
404
405 \presetkeys[kus]{pkg}{tinyfontswitch}{}
406 \ProcessOptionsX[kus]<pkg>
407
408 \RequirePackage[twoside]{geometry}
409 \RequirePackage{garamondx}
410 \RequirePackage[garamondx,cmbraces]{newtxmath}
411
412 \geometry
413 { paperwidth=165mm
414 , paperheight=242mm
415 , inner=27mm
416 , outer=27mm
417 , top=24mm
418 , bottom=22mm
419 }
420
421 \ifkus@tinyfontswitch
422 \let\kus@tiny@orig\tiny
423 \renewcommand*\tiny{\sffamily\kus@tiny@orig}
424 \fi
425 </studies>

```

## 2.9 The kaulanguage package

```

426 <*language>
427 \ProcessOptions\relax
428 \newif\ifbabel
429 \babe>false
430 \AtBeginDocument{%
431   \@ifpackageloaded{babel}%
432     {\babeltrue}%
433     {\babe>false}%
434 }
\setname  {\<macro name>}{\<english>}{\<swedish>}
435 \newcommand\setname[3]{%
436   \IfFileExists{swedish.ldf}{%
437     \ifbabel%
438       \expandafter\edef\csname #1\endcsname{\noexpand\iflanguage{swedish}{#3}{#2}}%
439     \else%
440       \expandafter\edef\csname #1\endcsname{#2}%
441     \fi%
442   }%
443   {\expandafter\edef\csname #1\endcsname{#2}}%
444 }
445 </language>

```

## 2.10 The pgfcropmarks package

No options are parsed.

```

446 <*crop>
447 \ProcessOptions\relax
448 \RequirePackage{pgfpages}%

No files are created or updated.
449 \nofiles%

Boolean, true on odd pages.
450 \newif\if@kus@isodd%
451 \@kus@isoddtrue%

```

`\cropmarklen` The length of the crop mark lines.

```

452 \newlength{\cropmarklen}\setlength{\cropmarklen}{40pt}%

```

`\cropmarksep` The space between cropmark and paper edge.

```

453 \newlength{\cropmarksep}\setlength{\cropmarksep}{15pt}%

```

The cropmark page layout.

```

454 \pgfpagesdeclarelayout{cropmarks}%
455 {%
456 }%
457 {%
458   \pgfpagesphysicalpageoptions%
459   {%
460     logical pages=1,%
461     physical height=297mm,%
462     physical width=210mm%
463   }%

```

```

464 \pgfpageslogicalpageoptions{1}%
465 {%
466     border code=%
467     \if@kus@isodd
468     \global\@kus@isoddfalse
469     \pgfsetlinewidth{0.6pt}%
470     \pgfusepath{discard}%
471     \pgfmoveto{\pgfpoint{-\cropmarksep}{0pt}}%
472     \pgflineto{\pgfpoint{-\cropmarklen}{0pt}}%
473     \pgfmoveto{\pgfpoint{0pt}{-\cropmarksep}}%
474     \pgflineto{\pgfpoint{0pt}{-\cropmarklen}}%
475     \pgfmoveto{\pgfpoint{\paperwidth+\cropmarksep}{0pt}}%
476     \pgflineto{\pgfpoint{\paperwidth+\cropmarklen}{0pt}}%
477     \pgfmoveto{\pgfpoint{\paperwidth}{-\cropmarksep}}%
478     \pgflineto{\pgfpoint{\paperwidth}{-\cropmarklen}}%
479     \pgfmoveto{\pgfpoint{-\cropmarksep}{\paperheight}}%
480     \pgflineto{\pgfpoint{-\cropmarklen}{\paperheight}}%
481     \pgfmoveto{\pgfpoint{0pt}{\paperheight+\cropmarksep}}%
482     \pgflineto{\pgfpoint{0pt}{\paperheight+\cropmarklen}}%
483     \pgfmoveto{\pgfpoint{\paperwidth}{\paperheight+\cropmarksep}}%
484     \pgflineto{\pgfpoint{\paperwidth}{\paperheight+\cropmarklen}}%
485     \pgfmoveto{\pgfpoint{\paperwidth+\cropmarksep}{\paperheight}}%
486     \pgflineto{\pgfpoint{\paperwidth+\cropmarklen}{\paperheight}}%
487     \pgfusepath{stroke}%
488     \else
489     \global\@kus@isoddtrue
490     \fi,%
491     center=\pgfpoint{.5\pgfphysicalwidth}{.5\pgfphysicalheight}%
492 }%
493 }%

```

Activate the cropmark page layout.

```

494 \pgfpagesuselayout{cropmarks}%
495 </crop>

```

## Change History

v1.0	files	.....	1
General: SBe's licentiate version	..	1	v1.4
v1.1	General: Fixed babel.sty support	..	1
General: Initial public release	....	1	v1.5
v1.10	General: Added templates for kau-		
General: Version bump without	collection and kaureport	.....	1
changes	.....	1	v1.6
v1.11	General: Merged the styles' dtx		
General: Fixed missing file in babel	files	.....	1
support	.....	1	v1.7
v1.2	General: Added macros for supervi-		
General: Support for babel.sty,	sor and examiner in kaumeta	..	1
Documentation added	.....	1	v1.8
v1.3	General: Added macros pretty		
General: Merged the classes' dtx	printing lists in kaulist	.....	1

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in **roman** refer to the code lines where the entry is used.

16



\kua@participation . 373	\newread . . . . . 260	\ProcessOptions . . . . . 2, 56, 78, 108, 127, 427, 447
\kua@reference . . . . . 349, 366, 368	\node . 320, 328, 335, 343	\ProcessOptionsX . . . . . 153, 225, 406
\kua@refstr . . . . . 318	\noexpand . . . . . 438	\providecommand . . . . . 189, 207, 250, 251
\kua@subdelimiter . . . . . 368, 369	\nofiles . . . . . 449	
\kua@subtitle . . . . . 319, 334, 365, 368, 369, 384	\nohyphens . . . . . 50, 326, 334, 341, 349	
\kua@summary . . . . . 370	\nopagebreak . . . . . 134	<b>R</b>
\kua@title 326, 341, 366–370, 376, 382	\normalfont . . . . . 388	\read . . . . . 262
\kua@vanity . . . . . 374	\normalsize . . . . . 386	\reader . . . . . 260–263
\kua@warning . . . . . 253–255	\num . . . . . 89, 94, 95	\readmacro . . . . . 262
\kuc@currentpagestyle . . . . . 109, 112, 116	\numberline . . . . . 191	\relax . . . . . 2, 56, 78, 108, 127, 187, 205, 253, 427, 447
\kuc@restorepagestyle . . . . . 115, 123	<b>O</b>	\reprintedname . . . . . 223
\kue@item . . . . . 132, 134, 139, 143	\openin . . . . . 261	\RequirePackage 3–6, 79, 80, 128, 129, 148, 155–158, 220, 227–229, 231, 232, 234, 401, 408–410, 448
\kup@body . . . . . 198, 214	<b>P</b>	researchquestions (environment) 130
\kup@label . . . . . 194	\pagestyle . . . . . 110	\Roman . . . . . 191, 193, 196, 284, 367, 369, 370, 373, 375
\kup@parheadline . . . . . 168, 196, 212	\pagestyle@orig . . . . . 110, 113, 116, 121	
\kup@vshift . . . . . 169	\papercover . . . . . 311, 374	<b>S</b>
\kup@vstep . . . . . 169	\paperheight . . . . . 479–486	\section . . . . . 280
\kus@tiny@orig 422, 423	\papername . . . . . 367, 369, 370, 373–375	\selectfont . . . . . 9, 10
\kut@maketitle . . . . . 1, 12	\paperwidth . . . . . 475–478, 483–486	\setcounter 166, 355–362, 364, 393–396
\kut@normalfont . . . . . 25, 30, 41	\par . . . . . 134, 382, 385, 390	\setkautitlefont . . . . . 1, 7
\kut@titlefont . . . . . 48	\paragraph . . . . . 303, 373	\setkeys . . . . . 8, 11, 151, 187, 205, 223, 363
<b>L</b>	\participationname . 286	\setlength . . . . . 452, 453
\l@limit . . . . . 302	\path . . . . . 16–23, 27, 32, 37, 44, 45, 169, 313	\setname . . . . . 82, 85, 237–240, 435
\l@paper . . . . . 290	\pgfimage . . . . . 21, 22	\ssfamily . . . . . 423
\l@participation . . . . . 307	\pgflineto . . . . . 472, 474, 476, 478, 480, 482, 484, 486	\stepcounter . . . . .
\l@summary . . . . . 298	\pgfmoveto . . . . . 471, 473, 475, 477, 479, 481, 483, 485	\string 142, 363, 370, 373
\label . . . . . 194	\pgfpagesdeclarelayout . . . . . 454	\subject . . . . . 58
\LARGE 179, 181, 325, 340	\pgfpageslogicalpageoptions . . . . . 464	\subsection . . . . . 286
\Large . . . . . 380	\pgfpagesphysicalpageoptions . . . . . 186, 199, 215, 364	\subsubsection . . . . . 370
\large . . . . . 333, 348, 384	\pgfpagesuselayout . . . . . 494	\supervisor . . . . . 72
\LaTeX . . . . . 264, 273	\pgfphysicalheight . . . . . 491	
\ldots . . . . . 264, 273	\pgfphysicalwidth . . . . . 491	<b>T</b>
\listofpapers . . . . . 279	\pgfpoint . . . . . 471–486, 491	\textbf . . . . . 284
\listofsummaries . . . . . 294	\pgfsetlinewidth . . . . . 469	\textcolor . . . . . 141, 264, 273, 363
<b>M</b>	\pgfusepath . . . . . 470, 487	\textheight . . . . . 381
\maketitle 1, 12, 13, 377	\phantomsection . . . . . 189, 190, 207, 208	\textsc 191, 209, 367, 369
<b>N</b>	\place . . . . . 70	
\newcounter . . . . . 164, 165, 243–246, 248	\presetkeys . . . . . 405	
\newif . . . . . 428, 450	\prettylist . . . . . 87	
\newlength . . . . . 452, 453		

<code>\texttt</code> . . . . .	142, 363	<b>U</b>	<code>\vspace</code> . . . . .	381
<code>\textwidth</code> . . .	316,	<code>\usepackage</code> . . . . .	57	
	323, 331, 338, 346	<code>\usetikzlibrary</code> . . .	159	<b>W</b>
<code>\theenumi</code> . . . . .	284		<code>\WithSuffix</code> . . . . .	202
<code>\thepaper</code> . . . .	250, 375	<b>V</b>		
<code>\thepapertitle</code>	251, 376	<code>\value</code> . . . . .	355–	<b>X</b>
<code>\thispagestyle</code> . . . .		358, 364, 393–396	<code>\x</code>	88, 90, 92, 96, 98, 101
	14, 185, 204, 378	<code>\vphantom</code> . . . . .	<code>\xi</code> . . . . .	88–91, 94
<code>\tiny</code> . . . . .	422, 423	25, 30, 41, 48, 212	<code>\xspace</code> . . . . .	143