

# The kautools bundle\*

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## 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 . . . . .	3
1.7	The kaupaper package . . . . .	3
1.8	The kaustudies package . . . . .	3
1.9	The pgfcropmarks package . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	The kautitle package . . . . .	3
2.2	The kaumeta package . . . . .	5
2.3	The kaulist package . . . . .	6
2.4	The kauclear package . . . . .	7
2.5	The kauenvironments package . . . . .	7
2.6	The kauparts package . . . . .	8
2.7	The kaupaper package . . . . .	9
2.8	The kaustudies package . . . . .	13
2.9	The pgfcropmarks package . . . . .	14

## 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

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\*This document corresponds to kautools v1.10, dated 2013/05/28.

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:

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

Two fonts are used on the title page and can be changed using the macro `\setkautitlefont` `\setkautitlefont{<font>}`. The argument `<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 `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 glossaries. 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 \define@cmdkeys[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\vphantom{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\vphantom{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\vphantom{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\vphantom{Xy}
49 ,text width=14cm,text ragged left]
50 {\nohyphens{\@title}};
51 \end{tikzpicture}%
52 \clearpage%
53 }
54 \end{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`.

```

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

```

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

```

79 \RequirePackage{tikz}

```

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

```

80 \AtBeginDocument{%
81   \ifpackageloaded{babel}
82     {\newcommand*\commasign{\iflanguage{swedish}{},{,}}}%
83     {\newcommand*\commasign{,}}%
84 }

```

`\andname` defines the word used as “and”.

```

85 \AtBeginDocument{%
86   \ifpackageloaded{babel}
87     {\newcommand*\andname{\iflanguage{swedish}{och}{and}}}%
88     {\newcommand*\andname{and}}%
89 }

```

`\prettylist` `{⟨list⟩}` transforms a comma separated list into a list in natural language.

```

90 \newcommand\prettylist[1]{%
  The number of list elements is stored in \num.

```

```

91   \foreach[count=\xi] \x in #1 {%
92     \let\num=\xi%

```

The first element is just printed without any changes.

```

93   \foreach[count=\xi] \x in #1 {%
94     \ifnum \xi=1%
95       \x%

```

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

```

96     \else%
97       \ifnum \xi=\num%
98         \ifnum \num=2%
99           {} \andname{} \x%
100        \else%
101          \commasign{} \andname{} \x%
102        \fi%

```

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

```

103     \else%
104       , \x%

```

```

105     \fi%
106     \fi%
107   }%
108 }%
109 \end{list}

```

## 2.4 The kauclear package

No options are parsed.

```

110 \clear
111 \ProcessOptions\relax

```

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

```

112 \newcommand\kuc@currentpagestyle{plain}

```

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

```

113 \let\pagestyle@orig\pagestyle
114 \renewcommand\pagestyle[1]{%
115   \renewcommand\kuc@currentpagestyle{#1}%
116   \pagestyle@orig{#1}%
117 }

```

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

```

118 \newcommand\kuc@restorepagestyle{%
119   \pagestyle@orig{\kuc@currentpagestyle}%
120 }

```

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

```

121 \let\cleardoubpage@orig\cleardoublepage

```

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

```

122 \renewcommand\cleardoublepage{%
123   \clearpage%
124   \pagestyle@orig{empty}%
125   \cleardoubpage@orig%
126   \kuc@restorepagestyle%
127 }
128 \clear

```

## 2.5 The kauenvironments package

No package options are parsed.

```

129 \*environments
130 \ProcessOptions\relax

```

Load dependencies.

```

131 \RequirePackage{xspace}
132 \RequirePackage{xcolor}

```

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

```

133 \newenvironment{researchquestions}%
134   {\begin{enumerate}%
135     \let\kue@item\item%
136     \renewcommand\item[1][Research question]%
137       {\kue@item\emph{##1}\nopagebreak\par}%
138   }%
139   {\end{enumerate}}%

```

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

```

140 \newenvironment{contributions}%
141   {\begin{enumerate}%
142     \let\kue@item\item%
143     \renewcommand\item[1][%
144       \textcolor{red}{\emph{write your contribution between brackets
145         as optional argument of \texttt{\string\item}.}}}%
146     {\kue@item\emph{##1}\xspace}%
147   }%
148   {\end{enumerate}}%
149 </environments>

```

## 2.6 The kauparts package

```

150 <*parts>
151 \RequirePackage{xkeyval}
152
153 \define@cmdkeys[kup]{pkg}[kup@]{vshift,vstep}
154 \setkeys[kup]{pkg}{vshift=2,vstep=0.8}
155
156 \ProcessOptionsX[kup]<pkg>
157
158 \RequirePackage{calc}
159 \RequirePackage{ifthen}
160 \RequirePackage{suffix}
161 \RequirePackage{tikz}
162 \usetikzlibrary{positioning}
163
164 \define@cmdkeys[kup]{part}[kup@]{body,label}
165 \define@boolkeys[kup]{part}[kup@]{tocentry}
166
167 \newcounter{kup@part}
168 \newcounter{kup@vertical}
169 \setcounter{kup@vertical}{0}
170
171 \newcommand\kup@partheadline[2]{%
172   \path[node distance=1ex] (current page.north east) +(3pt,\kup@vshift+\kup@vstep*\arabic{kup@part})
173   node%
174     [ anchor=north east%
175       , minimum width=2cm+3pt%
176       %, minimum height=7mm%
177       %, draw=black%

```



```

178     %, fill=black%
179     , left color=white%
180     , right color=black%
181     , text=white%
182     , font=\LARGE\bfseries%
183     ] (bar) {#1}%
184     node[base left=of bar,font=\LARGE\bfseries] {#2};%
185 }

\kaupart
186 \newcommand\kaupart[2] [] {%
187   \cleardoublepage%
188   \thispagestyle{plain}%
189   \stepcounter{kup@part}%
190   \setkeys[kup]{part}{body=\relax,label=,tocentry=true,#1}%
191   \ifkup@tocentry%
192   \addcontentsline{toc}{part}{\numberline{\Roman{kup@part}}\textsc{#2}}%
193   \fi%
194   \renewcommand\@currentlabel{\Roman{kup@part}}%
195   \ifthenelse{\equal{\kup@label}{}}{\label{\kup@label}}%
196   \begin{tikzpicture}[remember picture,overlay,yscale=-1]%
197     \kup@partheadline{\Roman{kup@part}}{#2}%
198   \end{tikzpicture}%
199   \kup@body
200   \stepcounter{kup@vertical}%
201   \cleardoublepage%
202 }

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

```

## 2.7 The kaupaper package

```

218 <*paper>
219 \RequirePackage{xkeyval}
220
221 \define@cmdkeys[kua]{paper}[kua@]{author,title,subtitle,reference,email,refstr,vanity,subdelin
222 \setkeys[kua]{paper}{refstr=\reprintedname}
223
224 \ProcessOptionsX[kua]<paper>

```

```

225
226 \RequirePackage{kauparts}
227 \RequirePackage{ifthen}
228 \RequirePackage{tikz}
229
230 \RequirePackage{ragged2e}
231 \RequirePackage{hyphenat}
232
233 \AtBeginDocument{%
234   \@ifpackageloaded{babel}%
235     {\newcommand*\reprintedname{%
236       \iflanguage{swedish}{Ursprungligen publicertad i}{Reprinted from}}%
237     \newcommand*\appendedpapersname{%
238       \iflanguage{swedish}{Bifogade publiceringar}{List of Appended Papers}}%
239     \newcommand*\participationname{%
240       \iflanguage{swedish}{Kommentarer p\aa{} min medverka}{Comments on my Participation}}%
241     \newcommand*\papername{%
242       \iflanguage{swedish}{Publicering}{Paper}}%
243   }%
244   {\newcommand*\reprintedname{Reprinted from}%
245     \newcommand*\appendedpapersname{List of Appended Papers}%
246     \newcommand*\participationname{Comments on my Participation}%
247     \newcommand*\papername{Paper}%
248   }%
249 }
250
251 \newcounter{kua@section}
252 \newcounter{kua@equation}
253 \newcounter{kua@figure}
254 \newcounter{kua@table}
255
256 \newcounter{kua@paper}
257
258 \providecommand\thepaper{}
259 \providecommand\thepapertitle{}
260
261 \newcommand\kua@warning\relax
262 \newcommand\kua@dowarn{\gdef\kua@warning{\@latex@warning@no@line{List data created from the k
263 \AtEndDocument{\kua@warning}
264
265 \newcommand\kua@listof[4]{%
266   \IfFileExists{\jobname.#1}%
267     {% check whether empty file
268       \newread\reader%
269       \openin\reader\jobname.#1%
270       \read\reader to \readmacro%
271       \ifeof\reader%
272         \textcolor{red}{\ldots} will be available after the next \LaTeX{} run.}%
273       \@starttoc{#1}%
274       %\AtEndDocument{\@latex@warning@no@line{Rerun to get the list of #2 right}}%
275       \kua@dowarn%
276     }% file not empty -> create list
277     #3\@starttoc{#1}#4%
278   \fi%

```

```

279 }%
280 {% file does not exist
281 \textcolor{red}{\ldots{}} will be available after the next \LaTeX{} run.}%
282 \@starttoc{#1}%
283 %\AtEndDocument{\@latex@warning@no@line{Rerun to get the list of #2 right}}%
284 \kua@dowarn%
285 }%
286 }

\listofpapers
287 \newcommand\listofpapers{%
288 \section*{\appendexpapersname}%
289 \addcontentsline{toc}{section}{\appendexpapersname}%
290 \kua@listof{pap}{appendexpapers}{%
291 \begin{enumerate}%
292 \renewcommand\theenumi{\textbf{\Roman{enumi}}}%
293 }\end{enumerate}}%
294 \subsection*{\participationname}
295 \kua@listof{pcp}{participation in appendexpapers}{}%
296 }

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

```

```

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

```

```

385 \renewcommand\maketitle{%
386 \thispagestyle{plain}%
387 \centering%
388 \Large\bfseries%
389 \vspace*{0.15\textheight}%
390 \kua@title\par%
391 \addvspace{1ex}%
392 \ifthenelse{\equal{\kua@subtitle}{}}{\large\kua@subtitle}%
393 \par\addvspace{\baselineskip}%
394 \normalsize%
395 \kua@author\[\[0.25\baselineskip]%
396 \normalfont%
397 \kua@email%
398 \par\addvspace{2\baselineskip}\justifying%
399 }%
400 }{%
401 \setcounter{section}{\value{kua@section}}%
402 \setcounter{equation}{\value{kua@equation}}%
403 \setcounter{figure}{\value{kua@figure}}%
404 \setcounter{table}{\value{kua@table}}%
405 \clearpage%
406 }
407 \end{paper}

```

## 2.8 The kaustudies package

```

408 \documentclass{*studies}
409 \RequirePackage{xkeyval}
410
411 \define@boolkey[kus]{pkg}[kus@]{tinyfontswitch}[true]{}
412
413 \presetkeys[kus]{pkg}{tinyfontswitch}{}
414 \ProcessOptionsX[kus]<pkg>
415
416 \RequirePackage[twoside]{geometry}
417 \RequirePackage[urw-garamond]{mathdesign}
418
419 \geometry
420 { paperwidth=165mm
421 , paperheight=242mm
422 , inner=27mm
423 , outer=27mm
424 , top=24mm
425 , bottom=22mm
426 }
427
428 \ifkus@tinyfontswitch
429 \let\kus@tiny@orig\tiny
430 \renewcommand*\tiny{\sffamily\kus@tiny@orig}
431 \fi
432 \end{studies}

```

## 2.9 The pgfcropmarks package

No options are parsed.

```
433 <*crop>
434 \ProcessOptions\relax
435 \RequirePackage{pgfpages}%
```

No files are created or updated.

```
436 \nofiles%
```

Boolean, true on odd pages.

```
437 \newif\if@kus@isodd%
438 \@kus@isoddtrue%
```

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

```
439 \newlength{\cropmarklen}\setlength{\cropmarklen}{40pt}%
```

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

```
440 \newlength{\cropmarksep}\setlength{\cropmarksep}{15pt}%
```

The cropmark page layout.

```
441 \pgfpagesdeclarelayout{cropmarks}%
442 {%
443 }%
444 {%
445   \pgfpagesphysicalpageoptions%
446   {%
447     logical pages=1,%
448     physical height=297mm,%
449     physical width=210mm%
450   }%
451   \pgfpageslogicalpageoptions{1}%
452   {%
453     border code=%
454     \if@kus@isodd
455       \global\@kus@isoddfalse
456       \pgfsetlinewidth{0.6pt}%
457       \pgfusepath{discard}%
458       \pgfmoveto{\pgfpoint{-\cropmarksep}{0pt}}%
459       \pgflineto{\pgfpoint{-\cropmarklen}{0pt}}%
460       \pgfmoveto{\pgfpoint{0pt}{-\cropmarksep}}%
461       \pgflineto{\pgfpoint{0pt}{-\cropmarklen}}%
462       \pgfmoveto{\pgfpoint{\paperwidth+\cropmarksep}{0pt}}%
463       \pgflineto{\pgfpoint{\paperwidth+\cropmarklen}{0pt}}%
464       \pgfmoveto{\pgfpoint{\paperwidth}{-\cropmarksep}}%
465       \pgflineto{\pgfpoint{\paperwidth}{-\cropmarklen}}%
466       \pgfmoveto{\pgfpoint{-\cropmarksep}{\paperheight}}%
467       \pgflineto{\pgfpoint{-\cropmarklen}{\paperheight}}%
468       \pgfmoveto{\pgfpoint{0pt}{\paperheight+\cropmarksep}}%
469       \pgflineto{\pgfpoint{0pt}{\paperheight+\cropmarklen}}%
470       \pgfmoveto{\pgfpoint{\paperwidth}{\paperheight+\cropmarksep}}%
471       \pgflineto{\pgfpoint{\paperwidth}{\paperheight+\cropmarklen}}%
472       \pgfmoveto{\pgfpoint{\paperwidth+\cropmarksep}{\paperheight}}%
473       \pgflineto{\pgfpoint{\paperwidth+\cropmarklen}{\paperheight}}%
```

```

474     \pgfusepath{stroke}%
475     \else
476     \global\@kus@isoddtrue
477     \fi,%
478     center=\pgfpoint{.5\pgfphysicalwidth}{.5\pgfphysicalheight}%
479 }%
480 }%

Activate the cropmark page layout.
481 \pgfpagesuselayout{cropmarks}%
482 </crop>

```

## Change History

v1.0	General: SBe's licentiate version . . . 1	v1.5	General: Added templates for kau- collection and kaureport . . . . . 1
v1.1	General: Initial public release . . . . 1	v1.6	General: Merged the styles' dtx files . . . . . 1
v1.10	General: Version bump without changes . . . . . 1	v1.7	General: Added macros for supervi- sor and examiner in kaumeta . . . 1
v1.2	General: Support for babel.sty, Documentation added . . . . . 1	v1.8	General: Added macros pretty printing lists in kaulist . . . . . 1
v1.3	General: Merged the classes' dtx files . . . . . 1	v1.9	General: Version bump without changes . . . . . 1
v1.4	General: Fixed babel.sty support . . 1		

## Index

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.

<b>Symbols</b>	<b>\@subject</b> . . . 5, 26, 58, 59	<b>\AtBeginDocument</b> . . . . . 80, 85, 233
<b>\@author</b> . . . . . 43	<b>\@supervisor</b> . . . . 72, 73	<b>\AtEndDocument</b> . . . . . 263, 274, 283
<b>\@currentlabel</b> . . . . 194	<b>\@title</b> . . . . . 50	
<b>\@examiner</b> . . . . . 74, 75	<b>\@</b> . . . . . 375, 377, 395	
<b>\@ifpackageloaded</b> . . . . . 81, 86, 234		
	<b>A</b>	<b>B</b>
<b>\@institute</b> . . . . 5, 60, 63	<b>\aa</b> . . . . . 240	<b>\baselineskip</b> . . . . . 323, 329, 337, 352, 393, 395, 398
<b>\@kus@isoddfalse</b> . . . 455	<b>\addcontentsline</b> . . . . . 192, 208, 289, 374–378, 380, 381	<b>\begin</b> . . . 15, 134, 141, 196, 210, 291, 320
<b>\@kus@isoddtrue</b> 438, 476	<b>\addvspace</b> 391, 393, 398	<b>\bfseries</b> 9, 182, 184, 333, 341, 348, 388
<b>\@latex@warning@no@line</b> . . . . 262, 274, 283	<b>\andname</b> . . . . 85, 99, 101	
<b>\@place</b> . . . . . 5, 70, 71	<b>\appendedpapersname</b> . . . . . 237, 245, 288, 289	<b>C</b>
<b>\@shortinstitute</b> . . . . . 5, 31, 61, 65, 67	<b>\arabic</b> . . . . . 172	<b>\centering</b> . . . . . 387
<b>\@starttoc</b> 273, 277, 282		

<code>\cleardoublepage</code> ..	<code>\iflanguage</code> .. 82, 87,	<code>\kut@titlefont</code> .... 48
.... 121, <u>122</u> ,	236, 238, 240, 242	
187, 201, 204, 215	<code>\ifnum</code> ..... 94, 97, 98	<b>L</b>
<code>\cleardoubpage@orig</code>	<code>\ifthenelse</code> . 64, 195,	<code>\l@limit</code> ..... 310
..... <u>121</u> , 125	327, 373, 379, 392	<code>\l@paper</code> ..... 298
<code>\clearpage</code> 52, 123, 405	<code>\institute</code> ..... <u>60</u>	<code>\l@participation</code> .. 315
<code>\commasign</code> .... <u>80</u> , 101	<code>\item</code> ..... 135, 136,	<code>\l@summary</code> ..... 306
contributions (envi-	142, 143, 145, 299	<code>\label</code> ..... 195
ronment) ... <u>140</u>		<code>\LARGE</code> 182, 184, 333, 348
<code>\cropmarklen</code> <u>439</u> , 459,	<b>J</b>	<code>\Large</code> ..... 388
461, 463, 465,	<code>\jobname</code> ..... 266, 269	<code>\large</code> .... 341, 356, 392
467, 469, 471, 473	<code>\justifying</code> ..... 398	<code>\LaTeX</code> ..... 272, 281
<code>\cropmarksep</code> <u>440</u> , 458,	<b>K</b>	<code>\ldots</code> ..... 272, 281
460, 462, 464,	<code>\kaupart</code> <u>3</u> , <u>186</u> , 203, 382	<code>\listofpapers</code> ..... <u>287</u>
466, 468, 470, 472	<code>\kaupart*</code> ..... <u>3</u> , <u>203</u>	<code>\listofsummaries</code> .. 302
<b>D</b>	<code>\kua@author</code> 374, 376, 395	<b>M</b>
<code>\define@boolkey</code> ... 411	<code>\kua@dowarn</code> 262, 275, 284	<code>\maketitle</code> <u>2</u> , 12, <u>13</u> , 385
<code>\define@boolkeys</code> .. 165	<code>\kua@email</code> ..... 397	<b>N</b>
<code>\define@cmdkeys</code> ...	<code>\kua@label</code> ..... 382	<code>\newcounter</code> ... 167,
.. 7, 153, 164, 221	<code>\kua@limitations</code> ..	168, 251–254, 256
<b>E</b>	..... 379, 380	<code>\newif</code> ..... 437
<code>\else</code> ..... 96,	<code>\kua@listof</code> ..	<code>\newlength</code> ... 439, 440
100, 103, 276, 475	. 265, 290, 295, 303	<code>\newread</code> ..... 268
<code>\emph</code> ..... 137, 144, 146	<code>\kua@participation</code> . 381	<code>\node</code> . 328, 336, 343, 351
<code>\end</code> ... 51, 139, 148,	<code>\kua@reference</code> ....	<code>\nofiles</code> ..... 436
198, 212, 293, 359	.... 357, 374, 376	<code>\nohyphens</code> .... 50,
environments:	<code>\kua@refstr</code> ..... 326	334, 342, 349, 357
contributions .. <u>140</u>	<code>\kua@subdelimiter</code> .	<code>\nopagebreak</code> ..... 137
researchquestions	..... 376, 377	<code>\normalfont</code> ..... 396
..... <u>133</u>	<code>\kua@subtitle</code> ..	<code>\normalsize</code> ..... 394
<code>\equal</code> ..... 64, 195,	.... 327, 342,	<code>\num</code> ..... 92, 97, 98
327, 373, 379, 392	373, 376, 377, 392	<code>\numberline</code> ..... 192
<code>\examiner</code> ..... <u>74</u>	<code>\kua@summary</code> ..... 378	<b>O</b>
<b>F</b>	<code>\kua@title</code> 334, 349,	<code>\openin</code> ..... 269
<code>\fi</code> 102, 105, 106, 193,	374–378, 384, 390	<b>P</b>
209, 278, 431, 477	<code>\kua@vanity</code> ..... 382	<code>\pagestyle</code> ..... <u>113</u>
<code>\fontfamily</code> ..... 9, 10	<code>\kua@warning</code> .. 261–263	<code>\pagestyle@orig</code> ...
<code>\fontsize</code> ..... 9, 10	<code>\kuc@currentpagestyle</code>	. 113, 116, 119, 124
<code>\foreach</code> ..... 91, 93	.... <u>112</u> , 115, 119	<code>\papercover</code> ... 319, 382
<b>G</b>	<code>\kuc@restorepagestyle</code>	<code>\paperheight</code> .. 466–473
<code>\gdef</code> ..... 262	..... <u>118</u> , 126	<code>\papername</code> ..
<code>\geometry</code> ..... 419	<code>\kue@item</code> ..	. 241, 247, 375,
<code>\global</code> ..... 455, 476	. 135, 137, 142, 146	377, 378, 381–383
<b>I</b>	<code>\kup@body</code> .... 199, 213	<code>\paperwidth</code> ..
<code>\if@kus@isodd</code> . 437, 454	<code>\kup@label</code> ..... 195	. 462–465, 470–473
<code>\ifeof</code> ..... 271	<code>\kup@parheadline</code> .	<code>\par</code> ..... 137,
<code>\IfFileExists</code> ..... 266	.... 171, 197, 211	307, 390, 393, 398
<code>\ifkup@tocentry</code> 191, 207	<code>\kup@vshift</code> ..... 172	<code>\paragraph</code> ... 311, 381
<code>\ifkus@tinyfontswitch</code>	<code>\kup@vstep</code> ..... 172	<code>\participationname</code> .
..... 428	<code>\kus@tiny@orig</code> 429, 430	.... 239, 246, 294
	<code>\kut@maketitle</code> ... <u>2</u> , <u>12</u>	
	<code>\kut@normalfont</code> ...	
	..... 25, 30, 41	



<code>\path</code> . 16–23, 27, 32, 37, 44, 45, 172, 321	<code>\relax</code> . . . . . 2, 56, 78, 111, 130, 190, 206, 261, 434	<b>T</b> <code>\textbf</code> . . . . . 292 <code>\textcolor</code> . . . . . . 144, 272, 281, 371 <code>\textheight</code> . . . . . 389 <code>\textsc</code> 192, 208, 375, 377 <code>\texttt</code> . . . . . 145, 371 <code>\textwidth</code> . . . 324, 331, 339, 346, 354 <code>\theenumi</code> . . . . . 292 <code>\thepaper</code> . . . . 258, 383 <code>\thepapertitle</code> 259, 384 <code>\thispagestyle</code> . . . . . 14, 188, 205, 386 <code>\tiny</code> . . . . . 429, 430
<code>\pgfimage</code> . . . . . 21, 22	<code>\reprintedname</code> . . . . . . . . . . 222, 235, 244	
<code>\pgflineto</code> . . . . 459, 461, 463, 465, 467, 469, 471, 473	<code>\RequirePackage</code> . . . . . . . 3–6, 79, 131, 132, 151, 158– 161, 219, 226– 228, 230, 231, 409, 416, 417, 435	
<code>\pgfmoveto</code> . . . . 458, 460, 462, 464, 466, 468, 470, 472		
<code>\pgfpagesdeclarelayout</code> . . . . . 441	<code>\ResearchQuestions</code> (environment) <u>133</u>	
<code>\pgfpageslogicalpageoptions</code> . . . . . 451	<code>\Roman</code> . . . . 192, 194, 197, 292, 375, 377, 378, 381, 383	
<code>\pgfpagesphysicalpageoptions</code> . . . . . 445		<b>U</b> <code>\usepackage</code> . . . . . 57 <code>\usetikzlibrary</code> . . . 162
<code>\pgfpagesuselayout</code> . 481	<b>S</b> <code>\section</code> . . . . . 288 <code>\selectfont</code> . . . . . 9, 10 <code>\setcounter</code> 169, 363– 370, 372, 401–404 <code>\setkautitlefont</code> . . <u>2</u> , <u>7</u> <code>\setkeys</code> . 8, 11, 154, 190, 206, 222, 371 <code>\setlength</code> . . . 439, 440 <code>\sffamily</code> . . . . . 430 <code>\stepcounter</code> . . . . . . 189, 200, 214, 372 <code>\string</code> 145, 371, 378, 381 <code>\subject</code> . . . . . <u>58</u> <code>\subsection</code> . . . 294, 378 <code>\supervisor</code> . . . . . <u>72</u>	<b>V</b> <code>\value</code> . . . . . 363– 366, 372, 401–404 <code>\vphantom</code> . . . . . 25, 30, 41, 48, 211 <code>\vspace</code> . . . . . 389
<code>\pgfphysicalheight</code> . 478		<b>W</b> <code>\WithSuffix</code> . . . . . 203
<code>\pgfphysicalwidth</code> . 478		<b>X</b>
<code>\pgfpoint</code> . 458–473, 478		<code>\x</code> 91, 93, 95, 99, 101, 104 <code>\xi</code> . . . . . 91–94, 97 <code>\xspace</code> . . . . . 146
<code>\pgfsetlinewidth</code> . . 456		
<code>\pgfusepath</code> . . . 457, 474		
<code>\place</code> . . . . . <u>70</u>		
<code>\presetkeys</code> . . . . . 413		
<code>\prettylist</code> . . . . . <u>90</u>		
<code>\ProcessOptions</code> . 2, 56, 78, 111, 130, 434		
<code>\ProcessOptionsX</code> . . . . . . . . 156, 224, 414		
<code>\providecommand</code> 258, 259		
<b>R</b> <code>\read</code> . . . . . 270 <code>\reader</code> . . . . . 268–271 <code>\readmacro</code> . . . . . 270		