

The rub-kunstgeschichte class*

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Contents

| | |
|---------------------------------------|----------|
| 1 Introduction | 2 |
| 2 Usage | 2 |
| 2.1 Caveats | 2 |
| 2.2 Class options | 3 |
| A Implementation | 4 |
| A.1 Class options | 4 |
| A.2 Base class | 5 |
| A.3 Loading packages | 5 |
| A.3.1 Bibliography | 5 |
| A.3.2 Document format | 6 |
| A.3.3 Other useful packages | 7 |
| B Example | 8 |

*This document corresponds to rub-kunstgeschichte v0.2.0, dated 2024-09-06.

[†]Released under the LaTeX Project Public License v1.3c or later.

See <https://www.latex-project.org/lppl.txt>

1 Introduction

This L^AT_EX class aims to implement the guidelines on scientific writing of the art history institute (Kunstgeschichtliches Institut - short: KGI) at Ruhr University Bochum.¹

Note, that at this point this is not an official class made by anyone at the institute but rather a free-time hobby project of me, Joran, who knows L^AT_EX from studying Electrical Engineering and just wants to help out some friends studying art history.

You can find the latest releases and the development of this project at GitHub: <https://github.com/rub-kgi/rub-kunstgeschichte-latex>

2 Usage

To use this class, simply specify it as the document class.²

```
\documentclass{rub-kunstgeschichte}
```

2.1 Caveats

When using this class, some packages are loaded automatically with options (see also [subsection A.3](#)). That means that you can't reload the same package with different options without risking an option clash error. The relevant packages offer other ways to change their options in the preamble:

biblatex (*Pkg*) Customize citations and bibliography.

`\ExecuteBibliographyOptions` [*entrytype*] {*options*} can be used to set most options, but some can only be set at the time of loading the **biblatex** package. Those can be set in the class options using the **biblatex** key (see also [subsection 2.2](#)).

hyperref (*Pkg*) Customize behavior of clickable elements and pdf meta-data.

`\hypersetup` {*options*} should be used for nearly all options. The few options that can only be given at load time of the package have to be passed along using the **hyperref** class option (see also [subsection 2.2](#)).

setspace (*Pkg*) Overwrite the 1.5 line-spacing setting.

Either `\singlespacing`, `\doublespacing` or for custom spacing factors also `\setstretch` {*baselinestretch*}.

geometry (*Pkg*) Overwrite geometry options such as the page margin settings.

¹Guidelines version July 2023 https://kgi.ruhr-uni-bochum.de/wp-content/uploads/2023/04/Anleitung-zum-Erstellen-von-Hausarbeiten-im-Fach-Kunstgeschichte_Fassung-Juli-2023.pdf

²You can also find a complete example usage of this class in [Appendix B](#).

```
\geometry{\options}
```

2.2 Class options

You can pass several *\options* to the class by using

```
\documentclass[\options]{rub-kunstgeschichte}
```

The *\options* are key/value pairs that sometimes defer to a default value when only the key is given.

- biblatex** (*Opt*) Pass along options to the biblatex package. They overwrite default options set by this class.
- hyperref** (*Opt*) Pass along options to the biblatex package. They do **not** overwrite default options set by this class as they are set after loading the package using the `\hypersetup` command. To overwrite them, use `\hypersetup{\options}` in the preamble.
- parskip** (*Opt*) Specify whether to load the parskip package to remove indentation at the start of paragraphs.
Default: **true**
- noparskip** (*Opt*) The complementary option to the parskip option.
Default: **true**
- If neither `parskip` nor `noparskip` are given, the `parskip` package is automatically loaded by default.

A Implementation

A.1 Class options

The class options are defined as keyval options for great flexibility. They toggle some of the class features or customize their behavior.

`biblatex` (*Opt*) The `biblatex` option stores its content in a macro until it is later passed along to the `biblatex` package after specifying the default options (see [subsection A.3.1](#)). Therefore, options provided with this key overwrite the ones set per default by this class.

```
1 \DeclareKeys[rubkgi]{
2   biblatex.store = \@rubkgi@biblatexOptions,
3   biblatex.usage = load
4 }
```

`hyperref` (*Opt*) The `hyperref` option passes its content along immediately, to be used as options when the `hyperref` package is loaded. This will **not** overwrite default options set by this class as they are set after loading the package using `\hypersetup{<options>}` (see also [subsection A.3.3](#)).

```
5 \DeclareKeys[rubkgi]{
6   hyperref.code = \PassOptionsToPackage{#1}{hyperref},
7   hyperref.usage = load
8 }
```

Paragraph indentation First we define a TeX switch which is later used (see [subsection A.3](#)) to check whether to load the `parskip` package to remove the indentation at the start of paragraphs.

```
9 \newif\if@rubkgi@parskip
```

By default we set the switch to true, so the `parskip` package is normally loaded when using this class.

```
10 \@rubkgi@parskiptrue
```

`parskip` (*Opt*) Then we declare the key so the switch can be turned on and off by the user in the class options.

```
11 \DeclareKeys[rubkgi]{
12   parskip.if = @rubkgi@parskip,
13   parskip.usage = load,
```

`noparskip` (*Opt*) Finally we define the complementary key for easier disabling of the `parskip` feature.

```

14     noparskip.ifnot = @rubkgi@parskip,
15     noparskip.usage = load
16 }

```

Process options After defining the class options it is necessary to process them too in order to actually make use of them.

```

17 \ProcessKeyOptions[rubkgi]

```

A.2 Base class

article (*Cls*) The rub-kunstgeschichte class is based on the `article` class. When loading the class we specify `12pt` as the base font size, as required by the guidelines.

```

18 \LoadClass[12pt]{article}

```

A.3 Loading packages

A.3.1 Bibliography

biblatex (*Pkg*) To support bibliography facilities out of the box, the `biblatex` package is loaded. To customize the behavior, a few options are passed to the package.

```

19 \PassOptionsToPackage{

```

backend (*Opt*) [`biblatex`] Defines the backend program. To use all features of `biblatex`, the *biber* backend must be used.

```

20     backend=biber,

```

singletitle (*Opt*) [`biblatex`] Prints the title of a cited work in short citations only if there is more than one work of the same author.

```

21     singletitle=true,

```

autocite (*Opt*) [`biblatex`] Defines the behavior of the `\autocite` command, which in this case will behave like the `\footcite` command and will print citations in the footnotes instead of directly in the text.

```

22     autocite=footnote,

```

autopunct (*Opt*) [`biblatex`] Controls whether the citation commands scan ahead for punctuation marks.

```

23     autopunct=false
24 }\biblatex}

```

biblatex-dw (*Pkg*) Further approximation of the suggested bibliography and citation styles in the

guidelines is achieved by using the `biblatex-dw` package. To use it, a few more options are passed to `biblatex`:

```
25 \PassOptionsToPackage{
```

`style` (*Opt*) [biblatex] The `authortitle-dw` provided by the `biblatex-dw` package is probably the closest style to the one suggested in the guidelines.

```
26     style=authortitle-dw,
```

The following options are provided by the `biblatex-dw` package:

`firstfull` (*Opt*) [biblatex] Delivers a full citation for the first occurrence of an entry.

```
27     firstfull=true,
```

`addyear` (*Opt*) [biblatex] Adds the year of the publication after the title.

```
28     addyear=true
29 }{biblatex}
```

After specifying the default options, we pass along the ones that might have been set in the class options.

```
30 \PassOptionsToPackage{\@rubkgi@biblatexOptions}{biblatex}
```

And finally the `biblatex` package is loaded.

```
31 \RequirePackage{biblatex}
```

A.3.2 Document format

`setspace` (*Pkg*) To achieve 1.5 times line spacing as required by the guidelines, we simply load the package `setspace` with the `onehalfspacing` option.

```
32 \RequirePackage[onehalfspacing]{setspace}
```

`geometry` (*Pkg*) Used to set page size and margins. The guidelines require 2cm top, left and bottom margins as well as a 4cm correction margin on the right side. Furthermore A4 paper is the standard page size here.

```
33 \RequirePackage[
34     a4paper,
35     top=2cm,left=2cm,bottom=2cm,right=4cm
36 ]{geometry}
```

`parskip` (*Pkg*) To avoid indentation at the start of paragraphs, the `parskip` package is loaded if the corresponding switch is set to true. See also [subsection A.1](#).

```
37 \if@rubkgi@parskip
38     \RequirePackage{parskip}
39 \fi
```

A.3.3 Other useful packages

`hyperref` (*Pkg*) Makes links and references clickable.

```
40 \RequirePackage{hyperref}
```

By default, we configure it to not highlight clickable elements.

```
41 \hypersetup{hidelinks=true}
```

B Example

To further exemplify the use of this class, we create an example `.tex` file. The full `rub-kunstgeschichte-example.tex` and the corresponding PDF are available on GitHub.³

First, the `rub-kunstgeschichte` class is loaded

```
42 \documentclass{rub-kunstgeschichte}
```

followed by the information that is needed to typeset a title:

```
43 \title{Example usage of the \textsf{rub-kunstgeschichte} class}
44 \author{Joran Schneyer}
```

For citations, the bibtex entries are usually written to a separate `.bib` file. For the sake of this example we keep everything in one `.tex` file and use the `filecontents` environment instead.

```
45 \begin{filecontents}{rub-kunstgeschichte-example.bib}
46 @article{exampleArticle,
47   author = {Maxi Mustermann},
48   title  = {A very interesting article},
49   year   = {2001},
50   journal = {Important example journal}
51 }
52 @book{exampleBook,
53   author = {John Smith},
54   title  = {A long example book},
55   year   = {2024}
56 }
57 @online{exampleWebsite,
58   author = {{Example consortium}},
59   title  = {The truth about example documents},
60   year   = {2020},
61   note   = {Internet forum article},
62   url    = {https://example.com},
63   urldate = {2100-04-01}
64 }
65 @manual{biblatexDocs,
66   author = {Philip Kime and Moritz Wemheuer and Philipp Lehman},
67   title  = {The biblatex Package},
68   subtitle = {Programmable Bibliographies and Citations},
69   year   = {2024},
70   url    = {https://ctan.org/pkg/biblatex},
71   urldate = {2024-06-25}
72 }
73 @online{biblatexCheatsheet,
74   title  = {Biblatex Cheat Sheet},
75   author = {Clea F. Rees},
76   year   = {2017},
```

³<https://github.com/rub-kgi/rub-kunstgeschichte-latex/releases>


```

77     url      = {https://ctan.org/pkg/biblatex-cheatsheet},
78     urldate = {2024-06-25}
79 }
80 \end{filecontents}

```

After that, we need to load the bibliography to use it with biblatex.

```

81 \addbibresource{rub-kunstgeschichte-example.bib}

```

Having finished the preamble, we begin the document, typeset the title and include a table of contents.

```

82 \begin{document}
83     \maketitle
84     \tableofcontents

```

Next we add different sections that explain common usage and some features of this class.

```

85     \section{Introduction}
86     The \textsf{rub-kunstgeschichte} class aims to implement
87     the guidelines on scientific writing of the art history institute
88     ‘KGI’ (\textit{Kunstgeschichtliches Institut})
89     at Ruhr University Bochum.
90
91     This example document showcases a typical use
92     of the \textsf{rub-kunstgeschichte} class.
93     Just by using the class, the page is already formatted
94     so that the typeset text has 12pt font size,
95     there is a 1.5 times line-spacing present
96     and the page size is A4 with 2cm margins at top, left and bottom,
97     as well as a 4cm margin on the right.
98
99     Also, paragraphs don’t have an indentation
100    in the first line by default,
101    contrary to typical \LaTeX{} documents.
102    Furthermore the \texttt{hyperref} package
103    is automatically loaded to enable clickable
104    links and references.
105
106    \section{How to cite sources}
107    This class automatically loads the \texttt{biblatex} package
108    for sophisticated bibliography and citations.
109    The class also sets some options by default
110    that make \texttt{biblatex} behave closer to the
111    suggested citation style in the guidelines of the institute.
112
113    You can cite sources using the \verb|\autocite| command,
114    which is configured by this class to use footnotes
115    \autocite{exampleArticle}.
116    Page numbers can be added in the optional argument
117    \autocite[394]{exampleBook}
118    and citation signals in a second one
119    that comes before the one for page numbers

```

```
120 \autocite[see] []{exampleWebsite}.
121 You can even cite multiple sources at once
122 using the \verb|\autocites| command
123 \autocites[111]{exampleBook}[see also][13]{exampleArticle}.
124
125 For more information refer to the documentation
126 of the \texttt{biblatex} package
127 \autocite{biblatexDocs}
128 or the biblatex cheatsheet
129 \autocite{biblatexCheatsheet}.
130
131 At the end of the document we can include a bibliography
132 containing all cited sources with \verb|\printbibliography|.
```

As suggested in the example document itself, we include the bibliography.

```
133 \printbibliography
```

Finally we end the document environment

```
134 \end{document}
```

Change History

| | | | |
|---|---|---|---|
| v0.1.0 | | biblatex-dw package. | 5 |
| General: Initial version | 1 | Use hyperref for clickable links and references. | 7 |
| v0.2.0 | | Use parskip to avoid paragraph indentation | 6 |
| General: Use biblatex with authortitle-dw style from | | | |

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.

| | | |
|---|---|---|
| Symbols | C | autocite |
| <code>\@rubkgi@biblatexOptions</code> | Classes: | [<code>biblatex</code>] |
| <i>2, 30</i> | <i>article</i> | <code>autopunct</code> |
| <code>\@rubkgi@parskiptrue</code> <i>10</i> | | [<code>biblatex</code>] |
| | D | <code>backend</code> [<code>biblatex</code>] <i>5</i> |
| A | <code>\DeclareKeys</code> . . . <i>1, 5, 11</i> | <code>biblatex</code> <i>1, 3</i> |
| <code>\addbibresource</code> . . . <i>81</i> | <code>\documentclass</code> <i>42</i> | <code>firstfull</code> |
| <code>addyear</code> (option) | | [<code>biblatex</code>] <i>6</i> |
| [<code>biblatex</code>] <i>6</i> | F | <code>hyperref</code> <i>3, 5</i> |
| <code>article</code> (class) <i>5</i> | <code>firstfull</code> (option) | <code>noparskip</code> <i>3, 14</i> |
| <code>\autocite</code> . <i>113, 115,</i> | [<code>biblatex</code>] <i>6</i> | <code>parskip</code> <i>3, 11</i> |
| <i>117, 120, 127, 129</i> | G | <code>singletitle</code> |
| <code>autocite</code> (option) | <code>geometry</code> (package) . <i>2, 6</i> | [<code>biblatex</code>] <i>5</i> |
| [<code>biblatex</code>] <i>5</i> | | <code>style</code> [<code>biblatex</code>] . . <i>6</i> |
| <code>\autocites</code> . . . <i>122, 123</i> | H | |
| <code>autopunct</code> (option) | <code>hyperref</code> (option) . . <i>3, 5</i> | P |
| [<code>biblatex</code>] <i>5</i> | <code>hyperref</code> (package) . <i>2, 7</i> | Packages: |
| | <code>\hypersetup</code> <i>41</i> | <i>biblatex</i> <i>2, 5</i> |
| B | | <i>biblatex-dw</i> <i>5</i> |
| <code>backend</code> (option) | I | <i>geometry</i> <i>2, 6</i> |
| [<code>biblatex</code>] <i>5</i> | <code>\if@rubkgi@parskip</code> <i>9, 37</i> | <i>hyperref</i> <i>2, 7</i> |
| [<code>biblatex</code>]: | | <i>parskip</i> <i>6</i> |
| <i>addyear</i> (option) . . <i>6</i> | L | <i>setspace</i> <i>2, 6</i> |
| <i>autocite</i> (option) . <i>5</i> | <code>\LoadClass</code> <i>18</i> | <code>parskip</code> (option) . . . <i>3, 11</i> |
| <i>autopunct</i> (option) <i>5</i> | | <code>parskip</code> (package) . . . <i>6</i> |
| <i>backend</i> (option) . . <i>5</i> | M | <code>\PassOptionsToPackage</code> |
| <i>firstfull</i> (option) <i>6</i> | <code>\maketitle</code> <i>83</i> | <i>6, 19, 25, 30</i> |
| <i>singletitle</i> | N | <code>\printbibliography</code> . |
| (option) <i>5</i> | <code>\newif</code> <i>9</i> | <i>132, 133</i> |
| <i>style</i> (option) <i>6</i> | <code>noparskip</code> (option) . <i>3, 14</i> | <code>\ProcessKeyOptions</code> . <i>17</i> |
| <code>biblatex</code> (option) . . <i>1, 3</i> | | |
| <code>biblatex</code> (package) . <i>2, 5</i> | O | R |
| <code>biblatex-dw</code> (package) <i>5</i> | Options: | <code>\RequirePackage</code> . . . |
| | <i>addyear</i> [<code>biblatex</code>] <i>6</i> | . <i>31, 32, 33, 38, 40</i> |

| S | | style | (option) | T | |
|----------------------|-------------------|------------|----------|----------|--------------------|
| setspace (package) | . 2, 6 | [biblatex] | 6 | \textit | 88 |
| singletitle (option) | | | | \textsf | 43, 86, 92 |
| | [biblatex] 5 | | | \texttt | 102, 107, 110, 126 |