

A versatile and simple book class

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Abstract

This class is intended to be an interpretation of the *mwbk* class from Marcin Woliński's *mwcls* classes. The *mwcls* classes are simple, yet powerful and customizable classes that allow the end-user to customize the layout of headers, headings etc. They also have the benefit of being more economic in space than the most common LaTeX classes, while keeping a clear appearance and a smooth flow.

The reasons for this class

Although many usual LaTeX packages offer a wide array of solutions for text block and margin specifications, and although some of them, notably Koma-Script (Kohm 2015) allow and facilitate the application of "classical" canons of page construction (Bringhurst 2013; Tschichold 1975), one may have several reasons to avoid this aesthetical solution. One reason is that these page construction methods were intended, obviously, for handwritten or printed material. Even assuming the material is to be printed, one reason to find an alternative is economic and environmental: the more paper you print, the more it will cost—both in terms of money and environmental impact. But the user also wishes to avoid a sloppy solution, squeezing as much content as possible onto the page just to save space. The compromise solution would be somewhat closer to what most commercial books look like—without jeopardizing legibility. In fact, it is rare to find a book that looks like it has been laid out according to the "canons". That is one motive why I find the mwcls classes (Woliński 2009) useful. Besides, mwcls alternatives for basic classes (mwart for articles, *mwrep* for reports and *mwbk* for books) allow the user to easily modify headings, being somewhat more flexible and providing a simpler interface than some alternative classes. All I did was to provide a more user-friendly syntax for some common tweaks and more alternatives to some rather unusual page (numbering)

styles available by default in *mwbk* and *mwrep*. As for the *mwart* class, I did not find anything to be changed—although the user might adapt some of the options presented in the *ycbook* class.

1. Options for chapter and section

To add a rule below chapter and section titles, use *«chapterrule»* and *«section-rule»*. Other sectional headings may be changed likewise:

chapterrule sectionrule

\SetSectionFormatting{section}
{24pt plus5pt minus2pt} %space before
{\large\textbf{\ifHeadingNumbered}
\HeadingNumber.\enspace\fi
\HeadingText}\\\rule[10pt]{\hsize}{0.4pt}}
{10pt plus3pt}%space after

Options «chaptercentered», «chapterleft», and «chapterright» control chapter align- chapterleft ment.

Options *«nochaptercentered»*, *«nochapterleft»*, and *«nochapterright»* control chapter alignment and exclude the name "Chapter" from the entry. The default, as in the *mwcls* classes, is *«chapterleft»*.

chaptercentered chapterleft chapterright

nochaptercentered nochapterleft nochapterright

headings headings=beforeplain myheadings myheadings=beforeplain

2. Options for headings

mwbk has empty pagestyles for chapters, and for the last page in every chapter, and also the usual blank (empty) page so that a chapter always starts with an odd (*recto*) page. Page numbering with headers has been added the last page of every chapter; chapter opening pages have been changed to the *plain* style, and the options to the left have been added for ease of use. Options *«headings=beforeplain»* and *«myheadings=beforeplain»* have been added, in which an even page finishing a chapter takes the *«plain»* style. The default option is *«headings»*.

\pagestyle{uheadings} and \pagestyle{myuheadings} may be used instead, defaulting to more usual parameters, and in which the header is separated by a thin line.

This class is compatible with the scrlayer-scrpage (formerly scrpage2) for headers and footers, so you can do fun things like this to color your header line:

\usepackage[headsepline]{scrlayer-scrpage}
\addtokomafont{headsepline}{\color{JungleGreen}}
\usepackage[dvipsnames,svgnames,x11names]{xcolor}
\pagestyle{scrheadings}

And of course simpler things such as:

\usepackage{scrlayer-scrpage} \clearpairofpagestyles \pagestyle{scrheadings} \ofoot{\pagemark} \chead{A centered heading}

For additional information, see chapters 5 and 18 of the Koma-Script manual.

3. Table of contents styles

The *«toc»* option uses the Koma-Script-bundle for table of contents styles, so you can, for example, define \usetocstyle{nopagecolumn} for another style.

toc

4. Margin paragraphs and footnotes

sansserifnotes

The option «sansserifnotes» changes all footnotes to sans serif.

Marginpars were redefined, so that they only appear on the right side of the page, either on an odd or an even page. You can choose to turn all footnotes into margin notes with the *footmisc* package:

\usepackage[side,ragged,flushmargin]{footmisc}

5. Other options

All other options from the *mwcls* classes are available, e.g.:

- floatssmall;
- floatsnormalsize;
- sfheadings;
- authortitle (default);
- titleauthor;
- \renewcommand{\sectsettings}{};
- SetTOCIndents,
- indentfirst and noindentfirst,
- wide, for shorter margins, and
- font size and paper specifications (12pt, a5paper, etc.).

6. Figures spreading over two pages

Thanks to Martin Scharrer,¹ we also have \twopagepicture (for numbered pictures) and \twopagepicturen (for unnumbered pictures) to automatically split a picture on a spread (left and right pages).

It works thus: \twopagepicture{image place regarding the caption} {text width or page width}{image}{caption}:

- \twopagepicture{b}{l}{image}{Test}: image below caption ("b"), same width as text ("l");
- \twopagepicture{t}{l}{image}{Test}: image above caption ("t"), same width as text ("l");
- \twopagepicture{b}{p}{image}{Test}: image below caption ("b"), same width as page ("p"), and
- \twopagepicture{t}{p}{image}{Test}: image above caption ("t"), same width as page ("p"),

¹ http://tex.stackexchange.com/a/23865/9424

References

- Bringhurst, Robert (2013). *The Elements of Typographic Style: Version 4.0: 20th Anniversary Edition.* Fourth Edition. Hartley and Marks Publishers.
- Kohm, Marcus (2015). *The Koma-script guide*. URL: http://mirrors.ctan.org/macros/latex/contrib/koma-script/doc/scrguien.pdf.
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