

# Camera-Ready using LaTeX guide

This guide covers submitting fully formatted PDF and LaTeX files.

Everything in this document supersedes the main <u>T&F Author Publishing Guidelines</u> (for Word file submission), though other sections may remain applicable and will be referred to where still relevant.

This document is primarily aimed at CRC Press titles, but the general points are also applicable to Routledge author typeset.

The examples included with our style files (to be provided by your Editorial team) demonstrate many aspects of how the files should be presented and complement the below guidance.

It is assumed the author will have some familiarity with LaTeX. Authors can contact our LaTeX helpdesk: <a href="mailto:texhelp@taylorandfrancis.com">texhelp@taylorandfrancis.com</a>

# Submission and production process

# 1. Author-formatted, Vendor-assisted (xml-first) – CRC Press only

- Our preferred and default process is for authors to format and submit using one of our style files in the correct trim size
- A vendor will commission a proofread, share results, implement corrections, and prepare final files – saving you work at no extra cost
- This allows us to apply xml tagging earlier in the process from the app files, promoting earlier discoverability on online platforms

### 2. Author-formatted

- If not using our style files, or if working on a Routledge book, the above route is not possible
- In this case, the author is responsible for making corrections from the Proofreader
- Ebook files are then created later by the publisher

# Key considerations

The submitted files must conform to the following requirements to allow them to be sent to press:

• Fully formatted to the correct, agreed trim size – ask your Editorial contact if in doubt



- Running heads present
- Artwork in place and of suitable quality
- Fonts embedded
  - LaTeX should embed fonts by default (though not text within graphics)
  - Double check they are embedded in the PDF note that a PDF could include substitute fonts, which may look fine initially, but may affect spacing and layout, or not correctly produce some symbols
- Correct color mode confirm with your Editor if the book will be printed in black and white or color
  - Black and white must be in greyscale, not RGB with the appearance of black and white
  - o Color must be in CMYK, not RBG
- Within 10% of the agreed number of pages discuss with your Editorial contact if this becomes an issue
- Index if the author is responsible for supplying it as outlined in the publishing agreement

See below for further detail on some of these points.

# **Permissions**

You need permission from the rightsholder(s) of any third-party material to use it in your book if the original source is under copyright. See our <u>Permissions guide</u> for more information.

Note that facts and data cannot be copyrighted, only their specific expression, for example in a table. Therefore, while a table itself cannot simply be copied, the data in it can be reused in a new one.

# Editorial style and conventions

You will need to determine certain stylistic approaches to take in your book, for example US or UK spelling, whether to use serial commas, and so on.

We do not have a specific 'house style', but your Commissioning Editor may suggest or request a specific style depending on your subject area, audience and/or primary market (i.e. predominantly US or UK readership).

The most important consideration is ensuring consistency of style throughout the manuscript, regardless of the conventions used. This applies to aspects such as spelling, serial commas, acronyms, and referencing style.



For a full list of stylistic considerations, see the <u>Notes for the Copyeditor</u> form. Consider these style choices while writing, rather than filling in the form before submission only to realise they are not consistent.

Once the most appropriate style for your manuscript has been selected, many authoritative resources are available to consult, for example *The Chicago Manual of Style,* 17th edition (2017).

# Referencing

Please check with your Commissioning Editor whether a specific style is expected.

If there is no specific expectation, any suitable referencing style can be used, so long as it is applied consistently throughout the manuscript, including in edited collections.

Some styles have multiple options (for example, Chicago has both author-date in-text references and notes/bibliography). Please select one and apply it consistently.

# Numbering and captions

# Numbering

Anything in the script which is not purely text should be referred to clearly and consistently. This includes:

- Figures (artwork, photos, diagrams, graphs, etc.)
- Maps
- Tables
- Boxes
- Equations
- (Chemical) structures

Name according to chapter and position in chapter, for example: Figure 1.1, Figure 1.2, Figure 2.1. Figure 2.2, Figure 2.3 etc.:

- Do not number consecutively throughout the entire book
- Do not use 3-digit numbering schemes to reflect any section numbers
- Depending on the style file used and page layout, some elements such as
  equations may not be numbered. Please refer to the style file example provided

### **Captions**

Images and tables require a caption briefly describing the content.



Captions may also include any necessary source information such as who took a photograph, who provided some artwork, or where some data is from. Providers of this material may require a specific credit line as part of the permission to use that content, which can be included in the caption (or wherever the provider has requested).

Here is an example caption:

Figure 2.3. A dog running along a beach. Photograph by the author.

- For tables, including a caption after this above each table
- For figures, include a caption after this below each figure
- See the style file examples for how this appears in practice
- The caption should be followed by a source line in either case, though for tables this appears below the table
- Additionally, if an illustration required third party permission, that may require further acknowledgement, including any specific wording requested by the provider of the image

### Alt text

Illustrations require alt text to make eBooks as accessible. This should be supplied as a separate file, labelled to match the figures in the main file. For further guidance, see our <u>Alt text guide</u>.

# Abstracts, keywords and ORCID

Abstracts, keywords and ORCID iDs are essential components of a modern publication and are key to discoverability. For further information on the importance of abstracts, keywords and ORCID, please see our guide to <u>Making your work discoverable</u>.

These elements are not usually included visibly in the book but are embedded in the XML. Please confirm with your Editorial Assistant for your book.

### **Abstracts**

Every chapter, including the introduction and conclusion, requires an abstract. The abstract is a selling pitch for the chapter, focusing on what it is about and what the reader can expect to gain from reading it. Please provide all abstracts in a separate file in the order the chapters appear.

Each chapter abstract should be:



- 100-200 words
- Written in the third person e.g. 'this chapter discusses', rather than 'I discuss'
- Self-contained, without abbreviations, footnotes, or incomplete references

### **ORCID**

ORCID is an effective way for each author to make themselves and their work discoverable to others, to ensure they are always appropriately credited and to promote their publications. For further information, including how to obtain an ORCID iD, please see the ORCID section in our guide to <a href="Making your work discoverable">Making your work discoverable</a>.

Supply an ORCID iD for every author of every chapter as well as book editors, repeating as necessary. Please send a list of all contributing authors and their ORCHIDs to your editorial contact when you submit the final manuscript.

Double-check ORCID iD(s) for accuracy before submission (test by confirming they return the right profile!).

### Research data

T&F Books encourages you to share any research data associated with your book (or chapter). This may take the form of videos, transcripts, and questionnaires as well as data files and spreadsheets. Please see our <u>Data Sharing Policy</u> for more information.

Shared data should be cited in line with your chosen referencing style and a data availability statement should be included in the preliminary material for your book. Templates are available <a href="https://example.com/here">here</a>.

### Front matter

Do not number front matter. If LaTeX numbers it, use Roman numerals. The first page of the first standalone chapter or part should be page 1 of the book.

For details of Front matter elements and what to include, see <u>Manuscript preparation</u> guide.

### Color blindness

If using color (as agreed with your Editor), the following color combinations should be avoided (avoiding green solves most problems):

green/red



green/brown

green/blue

green/grey

green/blacklight

green/yellow

blue/grey

blue/purple

This <u>color blindness simulator</u> allows you to drag/drop an image to learn what a color blind person would see. The R package <u>colorblindr</u> also does this.

## Further LaTeX Guidance

### Parts of a book

This document will help guide you in constructing your book using LaTeX. Ultimately, you will have to produce a pdf file that can be used by a printing press. It is expected that you have some experience with LaTeX and know the basics. it's best to worry first about structuring the content, using the correct high-level commands. If this is done well, then the formatting can be changed at the end without having to go in and tweak the source code in many places.

The template/example included with your style file illustrates how to properly organize the contents of your book. We explain a few features, but you may prefer just to examine the file itself and pick up what to do directly from there.

A book is divided into three parts: the frontmatter, mainmatter, and backmatter. This division is implemented by the corresponding LaTeX commands:

\frontmatter, \mainmatter and \backmatter.

The format for each part is as follows:

**frontmatter** This contains everything before the first chapter begins. Pages are indicated by lower case **Roman numerals**. We typeset pp. i-iv. Your first page is p. v, the dedication if there is one and the contents if there is not.

**mainmatter** This contains the chapters and appendices. Pages are indicated by **Arabic numerals** and start at page "1."



**backmatter** This contains the bibliography, index and glossary if it exists. This command is often not even necessary, as the routines for generating the bibliography and index suppress chapter numbering.

The quotes are around "chapters" because LaTeX classifies things like the preface and bibliography as chapters. All new sections/chapters begin on right-hand side pages. The command \cleardoublepage ensures this behavior.

### **Frontmatter**

The \frontmatter command automatically sets the page numbering to lower case Roman numerals. The frontmatter contains the following: half-title page

series information

Library of Congress information

title page

dedication

table of contents foreword preface

acknowledgments

author biography

list of symbols, preferably in that order.

Our production department creates the half-title page, title page, and Library of Congress page. Not all these items are necessary, and it is possible to include other elements.

To set the first page to the appropriate number, use the command \setcounter\page\{the\_page\_number\}.

The following commands automatically generate their corresponding sections: \tableofcontents, \listoffigures, \listoftables. For "chapters" like the preface, use the command:

\chapter\*{Preface}



The \*preventschapternumbering. If the style file doesn't include the Preface in the table of contents, then use the command:

\addcontentsline{toc}{chapter}{Preface}

immediately after the chapter is begun.

### Mainmatter

The \mainmatter command automatically sets the page numbering to Arabic and begins again at "1." The main matter comprises the chapters, which should be kept in separate tex files, preferably in subdirectories. To place them in your document, use

\include{chapters/chapter1/ch1}

\include{chapters/chapter2/ch2}

•••

\include{chapters/appendices/a1}

where chapters/chapter1 is a subdirectory of your current directory, and ch1.tex is the chapter tex file.

### **Backmatter**

The backmatter should include the bibliography and index, and other things such as a glossary. **The appendices are part of the main matter.** 

# **Bibliography**

It is best to use the BibTEX database system for the bibliography, rather than hard-coding the references into the main tex file. No specific format is required. The default plain style is acceptable, but it's possible to use other reasonable styles. For more detailed information, examine the template or consult the free, online <u>LaTeX wikibook</u>.

### Index

Create the index with the makeidx package. Place the command \makeindex in the preamble, and \printindex at the end after the bibliography. As before, for more detailed information, examine the template or consult the free, online <u>LaTeX wikibook</u>.



### General LaTeX matters and advice

Submit your file in .pdf format, not ps or dvi. The standard LaTeX compiler outputs dvi files, which convert to ps and then pdf, or directly to pdf, by auxiliary programs such as dvips, ps2pdf or dvipdfm. Alternatively, the pdfLaTeX engine produces a pdf directly. The provided style files work best with letter sized paper rather than a4.

# Graphics

The standard LaTeX compiler can include only eps (Encapsulated Postscript) figures. PDF LaTeX on its own cannot include eps figures but does include pdf figures as well as jpg and png raster graphics. Figures should be placed inside a figure environment so that they may "float." Each figure should have a caption and should also be referenced elsewhere in the document. Graphics files are one of the biggest hang-ups in production. The two toughest issues involve embedding fonts and color encoding.

### **Tables**

Tables should be placed inside the table environment so they can be floated like figures. Tables should have captions and be referenced from within the manuscript. Usually tables should not have vertical rules. If tables are too wide to fit in the margins, they may be rotated clockwise so that they take up the entire page. If tables are too long to fit on one page, use the longtable package. If tables are too wide, rotate them sideways with the rotating package.

### **Formatting**

Don't use hard-code formatting such as spacing, line breaks or page breaks into your manuscript early on as this is "premature optimization." LaTeX determines line and page breaks on its own using a sophisticated algorithm, that nonetheless can occasionally provide a sub-optimal result. Manually coding in line or page breaks should only be done at the end, since any edits may make those choices inappropriate after the text reflows.

Avoid widows and orphans. There are automated facilities to deal with them, namely \widowpenalty and \clubpenalty.

Check the .log file for errors, warnings and bad boxes—especially overfull boxes that jut into the margin. Enabling the option draft in the class file can be a useful way to detect overfull boxes. Make sure there are no "multiply- defined labels" warnings so that the references are correct.



### Further resources

**The LaTeX Companion:** The best and most complete guide.

LaTeX Wikibook en.wikibooks.org/wiki/LaTeX

**LaTeX FAQ** <u>www.tex.ac.uk/cgi-bin/texfaq2html?introduction=yes</u>

CTAN www.ctan.org

# Typographical rules

These typographic rules go a long way toward making your book look professional.

- Make sure that the chapter, section, subsection, etc. headers are capitalized consistently. LaTeX doesn't automatically do this for you. Preferably, prepositions should be in lower case, with the rest capitalized. The easiest way to check this is by looking at the table of contents.
- Use en-dashes -- to indicate a range of values in the text, e.g. 1--10 for 1-10.
- Em-dash do not have space around them—do it like this.
- Use \dots for ellipsis...not three periods ...
- Angle brackets are given by  $\langle \rho \rangle$  \$\langle\rho\rangle\$, and not  $\langle \rho \rangle$
- \$<\rho>\$.
- For absolute values, it's best to use |-λ| \$\lvert-\lambda\rvert\$,
- rather than the vertical bar  $|-\lambda|$  \$|-\lambda|\$.
- Note the spacing around the minus sign. For convenience you may wish to define a macro
- \newcommand{\abs}[1]{\ensuremath{\lvert#1\rvert}}
- To be used like so,  $|-\lambda| \abs{-\lambda}$ .
- There's also a command for the norm, much like the absolute value. It's given
- by  $|| \lambda||$ \$\|\text{Vert-\lambda\rVert\$, which is better than  $|| \lambda||$
- \$||-\lambda||\$.
- Include a non-breaking space, ~ (tilde,) between words that should not be separated in a line break. For instance, Archimedes~\cite{Arc10}, or Henry~VIII.
- Use SI units. Variables and quantities should be in math mode, but SI units should be set in upright roman type. For example, x nm \$x\$~nm is correct, but x nm \$x~nm\$ is incorrect. The siunitx package provides a nice way to consistently typeset these units <a href="http://ctan.org/pkg/siunitx">http://ctan.org/pkg/siunitx</a>.



### Color

Most manuscripts will not include color and any included graphics should be in the greyscale color mode. Some figures may appear to be in black and white but are encoded in RGB (red, green, and blue.)

If your document includes color, then it should be in CMYK (cyan, magenta, yellow and black) color mode. These are the colors used with the plates for offset printing presses.

The RGB color mode is designed for computer monitors. Colors will appear on your monitor slightly differently than they will in print.

It's possible to convert color modes with various programs, but this can often cause distortions of varying severity. Therefore, it's best to set the color mode correctly when graphics are created.

To use color for text inside LaTeX simply load the xcolor package with the cmyk option \usepackage[cmyk]{xcolor}. Note that this only sets the color mode for colors created with LaTeX; it doesn't necessarily do anything to included graphics. Detailed and complete instructions on how to use the xcolor package can be found here: <a href="http://www.ctan.org/pkg/xcolor">http://www.ctan.org/pkg/xcolor</a>

# Font embedding

All fonts must be embedded in the pdf.

# What is font embedding?

To properly display the fonts that are specified in the pdf file, the pdf viewer must get the font data from somewhere. It can search certain paths on the local computer and if it finds what it needs, it correctly displays the fonts. PDF files also have the capacity to embed fonts by storing the font information in the PDF itself, so that the files can be shared with other computers that might not have the necessary fonts in their system.

# What happens when fonts are not embedded?

If you try to view a pdf that has fonts that are not on your computer, and are also not embedded in the pdf, the pdf viewer automatically and temporarily substitutes fonts that it believes to be similar to the specified font. Therefore, the file won't necessarily look "broken"—you may not even be aware that the fonts are not embedded. Furthermore, the font substitution not only causes the "look" of the characters to change, it may affect the spacing and layout of the page.



# The problem

If fonts are not embedded, then you can't be certain that the file you are viewing looks the same as the file that was originally created. For this reason, printers prefer not to accept such files.

# Checking if fonts are embedded

In Adobe Reader X, go to File→Properties→Fonts, and check if each font is listed as "Embedded" or "Embedded Subset."

### Common problems with other programs

Certain graphics programs do not automatically embed fonts or provide facilities for embedding fonts; or even worse, some specify fonts to be used that do not even exist on the local computer. Ideally, fonts should be embedded by the graphics generating program at the time the figures are created, and not after the fact. However, it's still possible to leave them unembedded in the figure file, and then embed them in the final pdf. This is not the best way to do it; if the pdf is regenerated from LaTeX, the fonts will have to be embedded again.

#### What LaTeX does

LaTeX usually embeds the fonts that it uses by default but it will not necessarily embed the fonts on included graphics. The pdfTEX engine does nothing to embed fonts in graphics that are included with it. The standard LaTeX engine is typically used with Ghostscript or other conversion utilities (often automatically and behind the scenes,) and it may embed fonts on .eps files when the document is converted to pdf if the fonts are present on the system and Ghostscript can find them. Programs such as ps2pdf are a part of Ghostscript.

Rarely, LaTeX generates Type 3 fonts when asked to render certain fonts. Type 3 fonts are usually bitmaps, and a proper font encoding scheme should be used to avoid this situation when possible.

#### Solutions

For fonts to be embedded, in the first place they need to be present and accessible on the local computer. The easiest methods involve the use of premium programs such as Adobe Illustrator. A free program that can be used is Ghostscript, which is usually installed with LaTeX. It can be more difficult to use since it requires some obscure commands on the command line. There is also a GUI that can be used with Ghostscript,



called GSview. A short guide on how to use GSview to embed fonts can be found at this website <a href="http://www.wikihow.com/Create-a-PDF-With-Embedded-Fonts-Using-GSview">http://www.wikihow.com/Create-a-PDF-With-Embedded-Fonts-Using-GSview</a>.

There are a few things to beware of when embedding fonts for a large pdf.

- The program might not be able to embed the fonts if they're not on the computer or accessible to it
- The program might substitute fonts. For instance, if a sans serif font like Arial is
  used but unavailable, the program might substitute Helvetica, a similar font. You
  probably wouldn't notice the difference, but more drastic substitutions can occur
  depending on the font
- Symbols might show up incorrectly if a substitute font is used
- Always double check the pdf to make sure that no errors occurred after embedding the fonts. Something could have changed in the conversion process.
   Therefore, it's best to embed the fonts for each individual figure file, since those can be checked more easily than an entire book

# Frequently asked LaTeX questions

# Hyphens, en dashes, em dashes and minus signs

A hyphen is typeset with the basic dash -, -

An en dash is two dashes --, -

An em dash is three dashes ---, —

Since a minus sign is a mathematical feature, it should be typeset in math mode \$-\$, -

### Running headers on otherwise blank pages

To remove running headers and page numbers on otherwise blank pages, use the emptypage package

\usepackage{emptypage}.

http://www.ctan.org/tex-archive/macros/LaTeX/contrib/emptypage

### Manually changing the page number

To manually change the page number, use \setcounter{page}{7}, to set it to page seven for example. This should probably not be used anywhere other than at the beginning of the document to make room for some front matter. Something has gone wrong if it's being used several times.



# The running head is too long

If the running head is too long, the most direct solution is to shorten the title of the book, chapter or section that's causing the problem. The title can be shortened in LaTeX since the title pages will be made separately anyway.

If it's not possible to shorten the chapter or section title, then use the following commands when beginning the new chapter or section:

\chapter[TOC version]{Header version}

\chaptermark{Running head version}

or

\section[TOC version]{Header version%

\sectionmark{Running head version}}

\sectionmark{Running head version}

# Fixing hyphenation in the table of contents

If undesirable hyphenation is happening in the table of contents, the easiest way to fix it is by inserting a line break before the hyphenated word in the ToC version of the header (see previous question,) using the command \\.

\chapter[Some Very Long \\ Hyphenated Stuff]

{Some Very Long Hyphenated Stuff}

# Adding chapters to the table of contents

To add the "Chapters" like the preface to the Table of Contents, use the command

\chapter\*{Preface}

\addcontentsline{toc}{chapter}{Preface}

when the Preface is started. To add contents that are automatically generated, such as the List of Figures, use the command

\cleardoublepage

\addcontentsline{toc}{chapter}{\listfigurename}

\listoffigures



There's also a package toobibind that can automatically add some of these items to the Table of Contents, although it's been found to sometimes have side effects, such as changing certain page style.

# Issues with fonts not used in graphics

Sometimes there are font issues unrelated to included graphics, such as blurry or Type 3 fonts. In these cases, use the Type 1 font encoding and the Latin Modern fonts with LaTeX. These fonts are an updated, better version of LaTeX's standard Computer Modern fonts. It may take time for the package manager to install the Imodern package the first time it's used.

\usepackage[T1]{fontenc}

\usepackage{Imodern}

### **Trademarks**

To put a trademark in the text, use the command \textregistered,

To make it a superscript, use \textsuperscript{\textregistered}® The command \textsuperscript is needed since the standard way of writing a superscript in LaTeX^, only works in math mode.

### Footnotes are not working

If the \footnote{} command isn't working correctly for whatever reason, an alternative is to use the command \footnotemark[1] to place the mark, and then use \footnotetext[1]{The footnote text.} to place the footnote text. Note that they might not appear on the same page if the text isn't placed properly, so be careful when using his.

### End of proof boxes are out of place

When using the amsthm package and its proof environment, the end of proof box can end up in the wrong position if the last line of a proof is a displayed equation. To fix this, use the \qedhere command.

\begin{proof} Here's the proof

\begin{equation}  $a^2+b^2=c^2$ 

\qedhere



\end{equation}

\end{proof}

If that doesn't work properly and produces an error message, use\mbox{\qedhere}.

### Figure references are wrong

If the \label{} command comes before the \caption{} command inside the figure environment, then a reference to the label will incorrectly give the section number rather than the figure number.

A correct example:
\begin{figure}
\includegraphics[width=\columnwidth]{filename}
\end{figure}
A poor example:
\begin{figure}
\includegraphics[width=\columnwidth]{filename}
\end{figure}

# Remove visible boxes around hyperlinks made by the hyperref package

Use the hidelinks option

\usepackage[hidelinks]{hyperref

# Style file details

The below uses the Krantz style file as an example.



# Using the style file

The file krantz.cls should be kept in the same directory as your main tex file. At the beginning of your main tex file use the command

\documentclass[option1,option2,etc.]{krantz}

Some of the custom options are described below, but most of the options for the standard book document class are inherited as well.

# Trim size options

There are two options for the trim size:

krantz1: 6  $1/8 \times 9 1/4$  inches (default)

krantz2:  $7 \times 10$  inches

Changing the trim size will affect the number of pages and equations, figures and tables may break into the margins. It's best to set the trim size correctly as soon as possible to avoid having to go back and fix things up later.

You can adjust your trim by changing "krantz1" to "krantz2" in \documentclass parameter.

# Chapter table of contents

If you'd like to have a table of contents for each chapter listed at the beginning of each chapter, use the option

\documentclass[ChapterTOCs]{krantz}

This option is generally not necessary for authored books but is commonly used for edited books where chapters are produced by different contributors.

### Multi-author chapters

To list the different authors who have contributed to a chapter, use the command

\chapterauthor{Author Name}{Author Affiliation}

before the chapter is started with \chapter{Chapter Title}. You will need to have the ChapterTOCs option enabled for this to work.



# Running heads

By default the running heads have the book title on the verso (even) pages and the chapter title on the recto (odd) pages, but it's possible to have the chapter title on the verso page and the section title on the recto page with the command

**\HeadingsChapterSection** 

placed in the preamble of the document. This command should be used carefully. If a section doesn't appear soon enough after a new chapter begins, the running head will be blank on the recto pages. Care must be taken to make sure that parts like the Table of Contents, List of Figures, and so on have the right running heads as well.

### Other options

There are other options available, but you will not likely need them. You can see them in the krantz.cls file if you wish. If no options are specified, the default options are letterpaper,10pt,twoside,onecolumn,final,openright

# Other packages

To reduce or eliminate the font warnings that LaTeX often produces, use the packages

\usepackage[T1]{fontenc}

followed by

\usepackage{Imodern}

The Imodern package is an update of the standard Computer Modern fonts used with LATEX. It might take a while for the Imodern package to install its fonts the first time you use it.

To have chapter bibliographies, use the bibunits package.

To have chapter indices, use the multind package.