

This ReadMe file includes stepwise instruction to create pages with LaTeX using krantz class file for CRC/T&F.

Class File Uses

1. Three different page style / trim size is available with this krantz class file.
 - Command `\documentclass[]{\krantz}` in preamble area will generate pages having `textheight 43\baselineskip` and `textwidth 26pc`; Trim size 6 x 9.
 - Command `\documentclass[krantz 1]{krantz}` in preamble area will generate pages of `textheight 45\baselineskip` and `textwidth 28pc`; Trim size 6 1/8 x 9 1/4.
 - Command `\documentclass[krantz 2]{krantz}` in preamble area will create pages with `textheight 51\baselineskip` and `textwidth 33pc`; Trim size 7 x 10.

Use suitable header command as per instruction from acquiring editor.

2. Front matter may comprise :

Half title

Title

Copyright page

Dedication

Foreword

About the Author

Contributors

Preface

Table of Contents

List of Figures

List of Tables

Above listed front matter materials be included as per the editor's suggestions.

Foreword, Preface, About the Author etc can be coded as `\chapter*{Preface}`. Illustration of this is shown in attached sample.tex file

3. Front matter will have roman page numbering (i, ii, iii etc.)
4. Chapter should start from page 1 (arabic number).

- For “single author” book, following command format will be used to code chapter title.

```
\chapter{Chapter title}
```

- In “multi author” book, chapter comprises chapter author name. Use following command for chapter title along with author name and affiliation.

```
\chapterauthor{Author name}{Affiliation here}
```

```
\chapter{Chapter title}
```

- In “multi author” book, chapter comprises chapter toc. This can be achieved by using ChapterTOCs parameter in \documentclass option as below

```
\documentclass[ChapterTOCs]{krantz}
```

Author name will appear in “Table of Contents” in front matter. See attached output PDF. For Single author book, \chapterauthor{ }{} command will be empty

5. Running head for chapter will be in the following format by default.

Recto page will have "Chapter title" center and folio number at right hand side.

Verso page will have "Book title" centered and folio number at left side.

Refer to output PDF.

6. Figures/Tables need to be coded as per sample.tex file.

Figures in **.eps** and **.ps** format can be used with latex.

if pdflatex is used to compile the book, the figures should be in PDF format (**.pdf**).

Ensure that all fonts are embedded in figures so that it should not have any font problem in final book/chapter pdf.

Packages

Another way to change the look of your document is to use a predefined package. A package is a style file, which should have the suffix **.sty**. We have already used style files for some of the math symbols by typing

```
\usepackage{epsfig, amsmath}
\usepackage{theorem}
```

This command tells LaTeX to look in the files amsmath.sty for further instructions. The \usepackage commands must be in the preamble and traditionally are listed first thing, right after the \documentclass declaration.

All commands and packages to be used in chapters can be defined in preamble.tex file. A sample of this is available in chapter 1 folder. This tex file is included in preamble area of sample.tex as below:

```
\include{Chapters/chapter1/preamble}
```

this is desired when every chapter has distinct style file used in chapters. Otherwise, all can be used in preamble area of sample.tex.

Please refer to tex file for reference.

Theorem package is used to redefine environment for Exercise, Proof, Example etc. Other environment of same style can be defined using the following command in preamble area.

```
\newtheorem{example}{Example}
```

Refer to tex file (sample.tex) for coding.

Page Styles

Page style refers to the look of the head, body, and foot, including any running headers along the top of each page and the numbering system for the pages. Following are the commands that can be used in a document to get the page number in a desired format

```
\pagenumbering{arabic}  Default used
\pagenumbering{roman}   Used to get roman numbering in front matter like i, ii, iii
\pagenumbering{Roman}   Used to get roman numbering in front matter like I, II, III
\pagenumbering{alph}    Used to get roman numbering in front matter like a, b, c
\pagenumbering{Alph}    Used to get roman numbering in front matter like A, B, C
```

Bibliography Generation

For Bibliography at the end of Book/Chapter style:

In sample tex file, bibliography is generated using Bibtex

Steps to use Bibtex tool:

1. Create .bib file for all relevant information.
2. Use the following two commands to provide information to LaTeX to use bib file and generate bibliography.

```
\bibliographystyle{plain}
```

In the above command, bibliography will be generated using plain.bst. Other bibliography styles (.bst like natbib, acm, apalike) can be used depending on the bibliography formatting required.

Use the following command to let LaTeX know about the bib file to be used to extract bibliography information. Here, biblio.bib is used in the following command.

```
\bibliography{biblio}
```

For Bibliography at the end of Chapter / Section style:

To generate chapter bibliographies, follow following steps:

In preamble are add

```
\usepackage[sectionbib]{bibunits}
```

And after `\begin{document}` add

```
\bibliographyunit[\chapter]  
\defaultbibliography{petascale}  
\defaultbibliographystyle{plain}
```

And finally, at the end of each `chapter.tex`, add

```
\putbib
```

Then to compile with latex, run “`pdflatex sample`”, followed by “`bibtex bu1`”, “`bibtex bu2`”, etc., for each chapter, followed again by `pdflatex`.

Index Generation

Index is generated by tagging the word to be used in the index. Index (**.ind**) file can be generated by using Index tool of LaTeX. Below are the steps to follow to generate an index using LaTeX coding.

Step 1:

Please write the below command in your tex file preamble area to generate index.

```
\usepackage{makeidx}  
\makeindex
```

Step 2:

Write the command `\index{ }` in your tex file. This command enter the arguments in the index.

Step 3:

After following the above steps please compile your tex file and you can get .idx file.

Find **makeindex.exe** in your system and place the .idx file with this exe file and run .idx files e.g.:

makeindex sample.idx

After running the **makeindex** you can get a new **sample.ind** file.

Step 4:

Insert the below commands in your tex file and compile the tex file to display index in dvi file.

```
\input printindex
```

For more information please see the sample.tex file.

Multiple index generation

Step 1:

Please write the below command in your tex file preamble area to generate multiple indexes (Author index) and (Subject index).

```
\usepackage{multind}
```

Also please insert the below command in your preamble area to print the index.

```
\renewcommand\printindex[2]{\chapter*{#2}}  
\input{#1.ind}}
```

Step 2:

Please write the below commands in your tex preamble area to generate subjectindex.idx and authorindex.idx files.

```
\makeindex{subjectindex}  
\makeindex{authorindex}
```

Step 3:

Write these command in your tex file

```
\index{subjectindex}{entry} and  
\index{authorindex}{entry},
```

with these commands you can enter arguments in the indexes

Note:-

subjectindex = name of the file where tex store the entries of subject index(subjectindex.idx)

authorindex = name of the file where tex store the entries of author index(authorindex.idx)

entry = index entries.

Step 4:

After following the above steps please compile your tex file and you will get two files subjectindex.idx and authorindex.idx.

Find makeindex.exe in your system and place these subjectindex.idx and authorindex.idx files with this exe file and run makeindex on each of the separate .idx files, for example

```
makeindex subjectindex.idx  
makeindex authorindex.idx
```

After running makeindex on these file you can get two new files subjectindex.ind and authorindex.ind.

Step 5:

Insert the below commands in your tex file and compile the tex file to display indexes in dvi file.

```
\printindex{subjectindex}{Subject Index}  
\printindex{authorindex}{Author Index}
```

For more information please see the sample.tex file.

Font Embedding in PDF:

All fonts used in document should be embedded in pdf.

- To check the fonts embedded in pdf:

Open Acrobat

Choose File --->Document properties--->Font

All fonts available in pdf shall be listed. It will also show the Type of Font (Type 1, True type etc) embedded in pdf.

- Ensure that all fonts available in figure/graphics are embedded in it

If fonts are not embedded in figure,

Open it in Illustrator

Choose “Save-As” and select “Embed Fonts” to get proper font embedded figures