LaTeX FAQ

June 2002 from Springer Electronic Technologies Department

[NOTE: This is universal for LaTeX, but not plainTeX.]

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1.  HOW TO CREATE THE RUNNING HEADS IN THE PREFACE

\chapter*{Preface}
\markboth{Preface}{Preface}
\addcontentsline{toc}{chapter}{Preface}


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2.  HOW TO CENTER THE DEDICATION PAGE

\chapter*{}
\centerline{{\large Dedication}}


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3. HOW TO BALANCE COLUMNS IN THE INDEX:

Run TeX, run MakeIndex, run TeX. Observe the last page of the
index, and pick an approximate halfway point to split the index.
At this point insert the command

\vfill\eject

in the book.ind file.  Run TeX once more, and the columns should be
even.

Try to avoid breaking at a place where there will be a lone entry
at either the bottom or top of the page. You may need to move the
command a few times to get the break just right. Keep in mind that
if you run MakeIndex again, you will need to reinsert the

\vfill\eject command.


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4. RUNNINGHEAD TRICKS:

```
\chapter[Long Chapter Title for the TOC]{ Long Chapter Title with
  Linebreaks\\ for the Chapter Title Page}
\chaptermark{ Short Chapter Title Used in the Runninghead}
```

The same formula works for sections as well.

If your section is starting on a odd page, the short runninghead will not take effect until the next odd page. To force the short runninghead onto the opening odd page, code the \sectionmark command both immediately before and after the \section command, as follows:

```
\penalty-9999
\sectionmark{ short mark}
\section{ long title}
\sectionmark{ short mark}
```

_____OR_____

If \\ doesn't work in your case you can use \hfill\break. To eliminate the typing burden, place before \begin{ document} :

```
\newcommand\nl{ \hfill\break}
```

If this triggers an "already defined error," please change \nl to something else that's easy to remember.

Next, use \nl as shown:

```
\chapter[Long Chapter Title for the TOC]{ Long Chapter Title
   with Linebreaks\nl for the Chapter Title Page}
\chaptermark{ Short Chapter Title Used in the Runninghead}
```

TABLE OF CONTENTS TRICKS:


```
\chapter[Chapter Title for the ToC\nl with Break in ToC Only]
{ Chapter Title for Chapter Title Page Without Break}
```

If you need to break the chapter title on the chapter title page (should we use chapter opening page instead everywhere?), check remarks under "Runninghead tricks."


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5. HELP WITH MAKEINDEX:

Here are some instructions about the LaTeX utility, MakeIndex.
It was probably included in your LaTeX system installation, but if not,
you can get Makeindex, index style (.ist) files, and other useful files at
www.ctan.org.  You should also purchase, if you haven't already, the
book
"The LaTeX Companion" by Michael Goossens, Frank Mittelbach, and
Alexander Samarin, which has a solid 35 pages devoted to Makeindex.
Also, the Springer Author Guidelines contains specific help for authors
preparing books in TeX. Go to www.springer-ny.com, click on
"Author Guidelines", then "Preparing the Manuscript", then
"TeX Macros". If you do not already know how to use Makeindex,
here is a basic summary:

In your preamble, type:

\usepackage{makeidx}

and

\makeindex

Insert the command:
\printindex
where you want the index to appear (usually at the end of your book).

Insert an \index{topic name} command where an index topic is
discussed in your manuscript. Make sure to insert your \index mark-
ups
immediately following
the term you want to index. Never list them at the beginning or end
of a paragraph as you don't know where a page break may occur.
For instance, if you decided to list all \index mark-ups at the end of
a paragraph, any index term proceeding the page break will show
the wrong page number.

Do NOT leave a blank line before the \index command: this is a place
where TeX might break a page, thus writing the wrong page number
for the index entry. After inserting all your \index{topic} commands,
the next step is to run LaTeX, which will create an .idx file containing
all your \index commands and the page number on which they
appeared. You then run "makeindex" (if you use a DOS machine the
command is "makeindx"), MakeIndex will sort your .idx file into an

alphebetized .ind file, writing log information to the .ilg log file.  If you then run LaTeX once more, LaTeX will input the .ind file where you have included your \printindex command.

There are some tricky things to remember when using Makeindex. You should consult  "The LaTeX Companion" for a complete treatment; here are some basics:

Sub-entries should be typed in as

\index{food!apples}

so in the index it will appear as :

food
    apples, 44
    pears, 56

etc.

You can use up to three levels of subentries. You can instruct the reader to look to a different entry by typing:

\index{apples|see{food}}

and the line

apples, see food

will appear in the index.

If a topic is covered in depth over several pages, start a page range by typing

\index{flower|(}

and when you are done discussing flowers, include the following:

\index{flower|)}

MakeIndex will write out the full page range between the two entries.

It is important to note that unless instructed otherwise, MakeIndex treats every character as it appears. Therefore, you must be careful

to \index{France} the same way every time, because \index{france} and \index{ France} will all give separate entries. Also, if you want special formatting to appear in the index, use the following construction:

\index{food@\emph{food}}

and the word "food" will appear in italics in the index. Everything before the @ symbol is used for alphabetizing, everything after the @ is written to the .ind file to be interpreted by LaTeX. So if you want to index the Greek character lower-case tao for torque, you should type the following:

\index{tao@$\tao$ (torque)}

Special characters get alphabetized before letters, so you must remember to use this construction for all words that contain special characters. For example, Maedchen must be \index'ed as:

\index{Maedchen@M\"adchen}


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6. HELP MAKING MULTIPLE INDEXES:

Here are the instructions for creating an author and subject index:

Code you index entries as follows:

\index{author}{Albert Einstein}
\index{subject}{relativity}

"author" and "subject" can be shortened to "a" and "s", or any other abbreviations if you like. Include the following in your preamble:

\makeindex{author}
\makeindex{subject}

This will create two separate .idx files: author.idx and subject.idx. Run makeindx twice, inputting "makeindex author" and "makeindx subject". Then edit the resulting .ind files to read

\begin{theauthorindex}
...

...
\end{theauthorindex}

and likewise for the subject index. You must remember to do this
each time you run makeindx.

At the end of the book.tex file, where you want your indexes to
appear,
include the following:

\input author.ind
\input subject.ind

The two indexes should be included in the toc file, and should have
the correct chapter title and runningheads "Author Index" and
"Subject Index".

**NOTE: NEEDS MULTIND.STY**
\usepackage{multind}


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7. COPYEDITOR MARKS TeX CODE

1/N   -- (no word spaces before and after)
1/M   -- (with one word space each before and after)


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8. SETTING PAGE NUMBERS:

First page in your book is page v (roman 5) not counting your
title page you might add. Place

\setcounter{page}{5}

to set the page number correctly. Page v could be a dedication
page or the start of your preface.

Place \pagenumbering{arabic} where the main text starts (i.e.
Chapter 1).
The \pagenumbering command resets the page counter automatically
so that the first chapter starts with page 1.

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9. ADDING RUNNING HEADS AND TOC ENTRIES FOR
UNNUMBERED CHAPTERS:

Make sure unnumbered chapters, such as your preface
(but not the index), follow this example:

```
\chapter*{Preface}
\markbothsame{Preface}
\addcontentsline{toc}{chapter}{Preface}
```