

# LooChao Emacs Cheat Sheet

## Keyboard Shortcuts

M-f1:	search in firefox.
M-f2:	search in w3m.
g:	google.
g:	google symbol at point.
<hr/>	
C -:	zoom out.
C =:	zoom in.
<hr/>	
f1 f1:	start shell inside emacs.
f1 f2:	start terminal. (mac)
f2 f2:	go to last change
f3 f3:	w3m browse url.
f3 f2:	switch to existing w3m.
f4 f4:	open finder. (mac)
f5 f5:	bm k list.
f6 f6:	bm toggle.
f7 f6:	dict search (dict.el).
f7 f7:	dict search symbol (w3m icba).
f9 f9:	hl symbol
f10 f10:	
f11 f11:	
f12 f12:	emms playlist
<hr/>	
M-1:	start shell inside emacs.
M-g:	goto char.
M-k M-k:	kill this buffer.
<hr/>	
f5-f5:	bm k list.
C-f5:	jump to bm k.
S-f5:	set bm k.
<hr/>	
C-f11:	menu bar toggle.
S-f11:	toolbar toggle.
M-f11:	line num toggle.
C-M-f11:	tabbar toggle.
C-S-f11:	ruler toggle.
<hr/>	
f2 s:	spell-mode toggle.
f11 c:	lang env gb18030.
f11 u:	lang env utf8.
<hr/>	
C-x f:	find file at point.
C-x C-f:	open file.
C-c f:	run find in dir.
C-x g:	goto char.
C-c g:	run grep in dir.
<hr/>	
w3m-mode	
d:	kill curren page.
hjkl:	vim traditional move.
H:	history.
we:	history back/forward.
[]:	history back/forward.
np:	next/prev buffer.

## Modes

artist-mode	.
rainbow-mode	.
whitespace-mode	.
el-doc	display help for elisp func.

## M-x

list-colors-display	list colors.
re-builder	helper to build reg exp.
describe-text-properties	Find which faces are used at point.

## Elegant Colors

slateblue .

## Miscellaneous

C-h v features	list all the packages loaded.
leisure read	C-. C-, C-'
<hr/>	
narrow-to-region	C-x n n (show region only)
widen	C-x n w

copy-to-register C-x r s, (prompt you to insert register name)  
insert-from-register C-x r i  
zap-to-char delete all the chars until next one.  
Used at the very beginning of a document:  
\documentclass{class}. Use \begin{document} to start  
contents and \end{document} to end the document.

## Common documentclass options

10pt/11pt/12pt	Font size.
letterpaper/a4paper	Paper size.
twocolumn	Use two columns.
twoside	Set margins for two-sided.
landscape	Landscape orientation. Must use dvips -t landscape.
draft	Double-space lines.
Usage: \documentclass[opt,opt]{class}.	

## Packages

fullpage Use 1 inch margins.  
any size Set margins: \margin size{l}{r}{t}{b}.  
multicol Use n columns: \begin{multicols}{n}.  
latexsym Use L<sup>A</sup>T<sub>E</sub>X symbol font.  
graphicx Show image: \includegraphics[width=x]{file}.  
url Insert URL: \url{http://...}.  
Use before \begin{document}. Usage: \usepackage{package}

## Title

\author{text} Author of document.  
\title{text} Title of document.  
\date{text} Date.  
These commands go before \begin{document}. The  
declaration \maketitle goes at the top of the document.

## Miscellaneous

\pagestyle{empty} Empty header, footer and no page num-  
bers.

# Document structure

`\part{title}`                    `\subsubsection{title}`  
`\chapter{title}`                `\paragraph{title}`  
`\section{title}`                `\subparagraph{title}`  
`\subsection{title}`  
Section commands can be followed with an `*`, like `\section*{title}`, to supress heading numbers.  
`\setcounter{secnumdepth}{x}` supresses heading numbers of depth  $> x$ , where `chapter` has depth 0.

## Text environments

`\begin{comment}`    Comment block (not printed).  
`\begin{quote}`       Indented quotation block.  
`\begin{quotation}` Like `quote` with indented paragraphs.  
`\begin{verse}`       Quotation block for verse.

## Lists

`\begin{enumerate}`    Numbered list.  
`\begin{itemize}`       Bulleted list.  
`\begin{description}` Description list.  
`\item text`           Add an item.  
`\item[x] text`        Use  $x$  instead of normal bullet or number.  
                      Required for descriptions.

## References

`\label{marker}`       Set a marker for cross-reference, often of the form `\label{sec:item}`.  
`\ref{marker}`          Give section/body number of marker.  
`\pageref{marker}`    Give page number of marker.  
`\footnote{text}`      Print footnote at bottom of page.

## Floating bodies

`\begin{table}[place]`    Add numbered table.  
`\begin{figure}[place]`    Add numbered figure.  
`\begin{equation}[place]` Add numbered equation.  
`\caption{text}`           Caption for the body.  
The *place* is a list valid placements for the body. `t=top`, `h=here`, `b=bottom`, `p=separate page`, `!=place even if ugly`.  
Captions and label markers should be within the environment.

# Text properties

## Font face

Command	Declaration	Effect
<code>\textrm{text}</code>	<code>\rmfamily text</code>	Roman family
<code>\textsf{text}</code>	<code>\sffamily text</code>	Sans serif family
<code>\texttt{text}</code>	<code>\ttfamily text</code>	Typewriter family
<code>\textmd{text}</code>	<code>\mdseries text</code>	Medium series
<code>\textbf{text}</code>	<code>\bfseries text</code>	<b>Bold series</b>
<code>\textup{text}</code>	<code>\upshape text</code>	Upright shape
<code>\textit{text}</code>	<code>\itshape text</code>	<i>Italic shape</i>
<code>\textsl{text}</code>	<code>\slshape text</code>	<i>Slanted shape</i>
<code>\textsc{text}</code>	<code>\scshape text</code>	SMALL CAPS SHAPE
<code>\emph{text}</code>	<code>\em text</code>	<i>Emphasized</i>
<code>\textnormal{text}</code>	<code>\normalfont text</code>	Document font
<code>\underline{text}</code>		<u>Underline</u>

The command (`tttt`) form handles spacing better than the declaration (`tttt`) form.

## Font size

<code>\tiny</code>	<code>tiny</code>	<code>\Large</code>	Large
<code>\scriptsize</code>	<code>scriptsize</code>	<code>\LARGE</code>	LARGE
<code>\footnotesize</code>	<code>footnotesize</code>		huge
<code>\small</code>	<code>small</code>	<code>\huge</code>	huge
<code>\normalsize</code>	<code>normalsize</code>		Huge
<code>\large</code>	<code>large</code>	<code>\Huge</code>	Huge

These are declarations and should be used in the form `\small ...`, or without braces to affect the entire document.

## Verbatim text

`\begin{verbatim}`    Verbatim environment.  
`\begin{verbatim*}`    Spaces are shown as `_`.  
`\verb!text!`        Text between the delimiting characters (in this case ‘!’) is verbatim.

## Justification

Environment	Declaration
<code>\begin{center}</code>	<code>\centering</code>
<code>\begin{flushleft}</code>	<code>\raggedright</code>
<code>\begin{flushright}</code>	<code>\raggedleft</code>

## Miscellaneous

`\linespread{x}` changes the line spacing by the multiplier  $x$ .

# Text-mode symbols

## Symbols

<code>&amp;</code>	<code>\&amp;</code>	<code>-</code>	<code>\_</code>	<code>...</code>	<code>\ldots</code>	<code>•</code>	<code>\textbullet</code>
<code>\$</code>	<code>\\$</code>	<code>^</code>	<code>\^{}{}</code>	<code> </code>	<code>\textbar</code>	<code>\</code>	<code>\textbackslash</code>
<code>%</code>	<code>\%</code>	<code>~</code>	<code>\~{}{}</code>	<code>#</code>	<code>\#</code>	<code>§</code>	<code>\S</code>

## Accents

<code>ò \’o</code>	<code>ó \’o</code>	<code>ô \’o</code>	<code>õ \’o</code>	<code>ö \=o</code>
<code>ó \.o</code>	<code>ö \.o</code>	<code>q \c o</code>	<code>õ \v o</code>	<code>ô \H o</code>
<code>ç \c c</code>	<code>ç \d o</code>	<code>q \b o</code>	<code>öo \t oo</code>	<code>œ \oe</code>
<code>Œ \OE</code>	<code>æ \ae</code>	<code>Æ \AE</code>	<code>å \aa</code>	<code>Å \AA</code>
<code>ø \o</code>	<code>Ø \O</code>	<code>ı \l</code>	<code>Ł \L</code>	<code>ı \i</code>
<code>ı \j</code>	<code>ı \’</code>	<code>ı ?’</code>		

## Delimiters

<code>‘ ‘ ‘ ‘</code>	<code>{ \{</code>	<code>[ [ ( (</code>	<code>&lt; \textless</code>
<code>’ ’ ’ ’</code>	<code>} \}</code>	<code>] ] ) )</code>	<code>&gt; \textgreater</code>

## Dashes

Name	Source	Example	Usage
hyphen	-	X-ray	In words.
en-dash	--	1–5	Between numbers.
em-dash	---	Yes—or no?	Punctuation.

## Line and page breaks

`\`            Begin new line without new paragraph.  
`\*`           Prohibit pagebreak after linebreak.  
`\kill`       Don’t print current line.  
`\pagebreak` Start new page.  
`\noindent`   Do not indent current line.

## Miscellaneous

`\today`        August 19, 2011.  
`\sim$`          Prints `~` instead of `\~{}`, which makes `~`.  
`~`               Space, disallow linebreak (`W.J.~Clinton`).  
`\.`              Indicate that the `.` ends a sentence when following an uppercase letter.  
`\hspace{l}`      Horizontal space of length  $l$  (Ex:  $l = 20\text{pt}$ ).  
`\vspace{l}`      Vertical space of length  $l$ .  
`\rule{w}{h}`     Line of width  $w$  and height  $h$ .

# Tabular environments

## tabbing environment

`\=`    Set tab stop.                    `\>`    Go to tab stop.

Tab stops can be set on “invisible” lines with `\kill` at the end of the line. Normally `\` is used to separate lines.

## tabular environment

`\begin{array}[pos]{cols}`  
`\begin{tabular}[pos]{cols}`  
`\begin{tabular*}{width}[pos]{cols}`

## tabular column specification

`l`            Left-justified column.  
`c`            Centered column.  
`r`            Right-justified column.  
`p{width}`    Same as `\parbox[t]{width}`.  
`@{decl}`     Insert *decl* instead of inter-column space.  
`|`            Inserts a vertical line between columns.

## tabular elements

`\hline`       Horizontal line between rows.  
`\cline{x-y}`   Horizontal line across columns  $x$  through  $y$ .  
`\multicolumn{n}{cols}{text}`  
                 A cell that spans  $n$  columns, with *cols* column specification.

# Math mode

To use math mode, surround text with `$` or use `\begin{equation}`.

Superscript $x$	<code>^{\text{x}}</code>	Subscript $x$	<code>_{\text{x}}</code>
$\frac{x}{y}$	<code>\frac{x}{y}</code>	$\sum_{k=1}^n$	<code>\sum_{k=1}^n</code>
$\sqrt[n]{x}$	<code>\sqrt[n]{x}</code>	$\prod_{k=1}^n$	<code>\prod_{k=1}^n</code>

### Math-mode symbols

$\leq$	$\geq$	$\neq$	$\approx$
$\times$	$\div$	$\pm$	$\cdot$
$\circ$	$\circ$	$\prime$	$\cdots$
$\infty$	$\neg$	$\wedge$	$\vee$
$\supset$	$\forall$	$\in$	$\rightarrow$
$\subset$	$\exists$	$\notin$	$\Rightarrow$
$\cup$	$\cap$	$ $	$\Leftrightarrow$
$\dot{a}$	$\hat{a}$	$\bar{a}$	$\tilde{a}$
$\alpha$	$\beta$	$\gamma$	$\delta$
$\epsilon$	$\zeta$	$\eta$	$\varepsilon$
$\theta$	$\iota$	$\kappa$	$\vartheta$
$\lambda$	$\mu$	$\nu$	$\xi$
$\pi$	$\rho$	$\sigma$	$\tau$
$\upsilon$	$\phi$	$\chi$	$\psi$
$\omega$	$\Gamma$	$\Delta$	$\Theta$
$\Lambda$	$\Xi$	$\Pi$	$\Sigma$
$\Upsilon$	$\Phi$	$\Psi$	$\Omega$

### Bibliography and citations

When using BibTeX, you need to run latex, bibtex, and latex twice more to resolve dependencies.

#### Citation types

<code>\cite{key}</code>	Full author list and year. (Watson and Crick 1953)
<code>\citeA{key}</code>	Full author list. (Watson and Crick)
<code>\citeN{key}</code>	Full author list and year. Watson and Crick (1953)
<code>\shortcite{key}</code>	Abbreviated author list and year. ?
<code>\shortciteA{key}</code>	Abbreviated author list. ?
<code>\shortciteN{key}</code>	Abbreviated author list and year. ?
<code>\citeyear{key}</code>	Cite year only. (1953)

All the above have an NP variant without parentheses; Ex. `\citeNP`.

#### BibTeX entry types

<code>@article</code>	Journal or magazine article.
<code>@book</code>	Book with publisher.
<code>@booklet</code>	Book without publisher.
<code>@conference</code>	Article in conference proceedings.
<code>@inbook</code>	A part of a book and/or range of pages.
<code>@incollection</code>	A part of book with its own title.
<code>@misc</code>	If nothing else fits.
<code>@phdthesis</code>	PhD. thesis.
<code>@proceedings</code>	Proceedings of a conference.
<code>@techreport</code>	Tech report, usually numbered in series.
<code>@unpublished</code>	Unpublished.

### BibTeX fields

<code>address</code>	Address of publisher. Not necessary for major publishers.
<code>author</code>	Names of authors, of format ....
<code>booktitle</code>	Title of book when part of it is cited.
<code>chapter</code>	Chapter or section number.
<code>edition</code>	Edition of a book.
<code>editor</code>	Names of editors.
<code>institution</code>	Sponsoring institution of tech. report.
<code>journal</code>	Journal name.
<code>key</code>	Used for cross ref. when no author.
<code>month</code>	Month published. Use 3-letter abbreviation.
<code>note</code>	Any additional information.
<code>number</code>	Number of journal or magazine.
<code>organization</code>	Organization that sponsors a conference.
<code>pages</code>	Page range (2,6,9--12).
<code>publisher</code>	Publisher's name.
<code>school</code>	Name of school (for thesis).
<code>series</code>	Name of series of books.
<code>title</code>	Title of work.
<code>type</code>	Type of tech. report, ex. "Research Note".
<code>volume</code>	Volume of a journal or book.
<code>year</code>	Year of publication.

Not all fields need to be filled. See example below.

#### Common BibTeX style files

<code>abbrv</code>	Standard	<code>abstract</code>	alpha with abstract
<code>alpha</code>	Standard	<code>apa</code>	APA
<code>plain</code>	Standard	<code>unsrt</code>	Unsorted

The LaTeX document should have the following two lines just before `\end{document}`, where `bibfile.bib` is the name of the BibTeX file.

```
\bibliographystyle{plain}
\bibliography{bibfile}
```

#### BibTeX example

The BibTeX database goes in a file called *file.bib*, which is processed with bibtex file.

```
@String{N = {Na\~{-}ture}}
@Article{WC:1953,
  author = {James Watson and Francis Crick},
  title = {A structure for Deoxyribose Nucleic Acid},
  journal = N,
  volume = {171},
  pages = {737},
```

```
  year = 1953
}
```

### Sample LaTeX document

```
\documentclass[11pt]{article}
\usepackage{fullpage}
\title{Template}
\author{Name}
\begin{document}
\maketitle
```

```
\section{section}
\subsection*{subsection without number}
text \textbf{bold text} text. Some math:  $\$2+2=5\$$ 
\subsection{subsection}
text \emph{emphasized text} text. \cite{WC:1953}
discovered the structure of DNA.
```

A table:

```
\begin{table}[!th]
\begin{tabular}{|l|c|r|}
\hline
first & row & data \\
second & row & data \\
\hline
\end{tabular}
\caption{This is the caption}
\label{ex:table}
\end{table}
```

The table is numbered `\ref{ex:table}`.  
`\end{document}`

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<http://www.stdout.org/~winston/latex/>