### LooChao Emacs Cheat Sheet

### **Keyboard Shortcuts**

M-f1: M-f2: g:	search in firefox. search in w3m. google.
g:	google symbol at point.
C -:	zoom out.
C =:	zoom in.
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:	bmk list.
f6 f6:	
f7 f7:	dict search.
f9 f9:	hl symbol
f10 f10:	
f11 f11:	
f12 f12:	emms playlist
	F-11, 111
M-1:	start shell inside emacs.
M-g:	goto char.
<u> </u>	
f5-f5:	bmk list.
C-f5:	jump to bmk.
S-f5:	set bmk.
C-f11:	menu bar toggle.
S-f11:	toolbar toggle.
M-f11:	line num toggle.
C-M-f11:	tabbar toggle.
C-S-f11:	ruler toggle.
f2 s:	spell-mode toggle.
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.
J	<b>3</b> •
w3m-mode d:	kill curren page.
hjkl:	vim traditional move.
H:	history.
	•

### Modes

artist-mode	· Used at the very beginning of a document
rainbow-mode	. Osed at the very beginning of a document
\documentclass	{class}. Use \begin{document} to start
contents and \e	nd{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

twoside Set margins for two-sided.

landscape Landscape orientation. Must use dvips

-t landscape.

#### **Packages**

fullpage Use 1 inch margins.

anysize Set margins:  $\mbox{\mbox{Marginsize}\{l\}\{r\}\{t\}\{b\}.}$  multicol Use n columns:  $\mbox{\mbox{\mbox{begin}\{multicols}\{n\}.}$ 

latexsym Use LATEX symbol font.

 $\verb|graphicx Show image: \verb|\cludegraphics[width=$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.

 $\forall text$  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 numbers

#### Document structure

\subsection{title}

Section commands can be followed with an \*, like

 $\ensuremath{\mbox{\sc title}}\xspace, to supress heading numbers.$ 

\setcounter{secnumdepth} $\{x\}$  supresses heading numbers of depth > x, where chapter has depth 0.

#### Text environments

 $\label{lock} $$ \begin{array}{ll} \begin{comment} & \begin{comment} block (not printed). \\ \begin{comment} & \begin{comment} block (not printed). \\ \end{comment} \end{array}$ 

\begin{quotation} Like quote with indented paragraphs.

\begin{verse} Quotation block for verse.

#### Lists

 $\begin{tabular}{ll} $\operatorname{Numbered list.}$ \\ \begin{tabular}{ll} &\operatorname{Bulleted list.} \\ \begin{tabular}{ll} &\operatorname{Bulleted list.} \\ \begin{tabular}{ll} &\operatorname{Const.} &\operatorname{Const.} \\ \begin{tabular}{ll} &\operatorname{Const$ 

 $\forall tem[x] text$  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]

\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.

Add numbered table.

### Text properties

#### Font face

Command	Declaration	Effect		
text	${\tt \{rmfamily}\ text\}$	Roman family		
$\text{textsf}\{text\}$	$\{\sffamily\ text\}$	Sans serif family		
$\text{texttt}{text}$	$\{ \forall ttfamily \ text \}$	Typewriter family		
$\texttt{textmd}\{text\}$	${\tt \{\mbox{\it mdseries}\ \it text\}}$	Medium series		
$\text{textbf}\{text\}$	$\{\bfseries\ text\}$	Bold series		
$\text{textup}\{text\}$	$\{\upshape text\}$	Upright shape		
$\text{textit}\{text\}$	$\{\t tshape text\}$	$Italic\ shape$		
$\text{textsl}\{text\}$	$\{\sline text\}$	Slanted shape		
$\text{\textsc}\{text\}$	$\{\scannormalless$	SMALL CAPS SHAPE		
$\ensuremath{\verb lemph } text$	$\{ \text{\ } text \}$	Emphasized		
\textnormal{text}{\normalfont text}Document font				
$\underline{text}$		$\underline{\text{Underline}}$		
The command (tttt) form handles spacing better than the				

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

#### Font size

\tiny	tiny	\Large Large
\scriptsize	scriptsize	\LARGE $\operatorname{LARGE}$
\footnotesize	footnotesize	LARGE ET TICOLE
\small	small	\huge huge
\normalsize	onumber normalsize	TT
\large	large	\Huge 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
\begin{center}	\centering
\begin{flushleft}	\raggedright
\begin{flushright}	$\rack raggedleft$

#### Miscellaneous

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

# Text-mode symbols

### Symbols

&	\&	_	\_		\ldots	•	\textbullet
\$	\\$	^	\^{}		\textbar	\	\textbackslash
%	\%	~	\~{}	#	\#	ξ	\S

#### Accents

ò \'o	ó ∖'o	ô <b>\</b> ^o	õ <b>\~o</b>	ō \=o
ό \.ο	ö \"o	g \c o	ŏ \v o	ő \H o
ç \c c			⊙ \t 00	
$\times$ \oe	æ \ae	Æ \AE	å \aa	Å \AA
ø \o	Ø \0	ł \1	Ł \L	1 \i
j ∖j	i ~ '	٤ ?'		

#### **Delimiters**

4	•	""	{ \{	[ [	((	$<$ \textless
,	,	",,	} \}	] ]	) )	$>$ \textgreater

#### **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 10, 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 = 20pt).

 $\vert_{l}$  Vertical space of length l.

 $\mathbf{w}_{h}$  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

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.

 $\mbox{\mbox{multicolumn}} \{cols\} \{text\}$ 

A cell that spans n columns, with cols column specification.

#### Math mode

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

Superscript $^x$	^{x}	$Subscript_x$	_{x}
$\frac{x}{y}$	$frac{x}{y}$	$\sum_{k=1}^{n}$	$\sum_{k=1}^n$
$\sqrt[n]{x}$	$\sqrt[n]{x}$	$\prod_{k=1}^{n}$	\prod_{k=1}^

### Math-mode symbols

```
< \leg
               ≥ \geq
                            ≠ \neq
                                        ≈ \approx
× \times

→ \div
                            \pm \pm
                                            \cdot
   ^{\circ} o \circ
                            / \prime ··· \cdots
                            ∧ \wedge ∨ \vee
\infty \infty
               ¬ \neg
              ∀ \forall ∈ \in
⊃ \supset
                                         \rightarrow \rightarrow
  \subset
              ∃ \exists ∉ \notin ⇒ \Rightarrow
∪ \cup
               ∩ \cap
                               \mid
                                         ⇔ \Leftrightarrow
   \dot a
               \hat{a} \hat a
                            \bar{a} \bar a \tilde{a} \tilde a
  \alpha
               \beta \beta
                            \gamma \gamma \delta
                                            \delta
   \epsilon \zeta \zeta
                            \eta \eta
                                            \varepsilon
                                        \varepsilon
   \theta
               ι \iota
                            \kappa \kappa
                                        \vartheta
                                            \vartheta
  \lambda
              μ \mu
                            \nu \setminus nu
                                        έ
                                            \xi
   \pi
               \rho \rho
                            \sigma \sigma 	au
                                            \tau
   \upsilon \phi \phi
                            \chi \chi
                                         \psi
                                            \psi
ω \omega
              \Gamma \Gamma
                            \Delta \Delta \Theta \Theta
\Lambda \Lambda \Xi \Xi
                            ∏ \Pi
                                         \Sigma \Sigma
\Upsilon \Upsilon \Phi \Phi
                            \Psi \Psi
                                        \Omega \Omega
```

## Bibliography and citations

When using  $BiBT_{\overline{E}}X$ , you need to run latex, bibtex, and latex twice more to resolve dependencies.

### Citation types

\cite{key} Full author list and year. (Watson and Crick 1953)
\citeA{key} Full author list. (Watson and Crick)
\citeN{key} Full author list and year. Watson and Crick (1953)

\shortciteN{key} Abbreviated author list and year. ? \citeyear{key} Cite year only. (1953)

All the above have an NP variant without parentheses; Ex.  $\c$ 

### BibTeX entry types

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

### $BibT_{E}X$ fields

title

type

vear

volume

'n

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

Type of tech. report, ex. "Research Note".

### Common BibT<sub>E</sub>X style files

Title of work.

Year of publication.

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

abbrv Standard abstract alpha with abstract alpha Standard apa APA plain Standard unsrt Unsorted

Volume of a journal or book.

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}

### ${\rm Bib}T_{\!E}\!X \ \mathbf{example}$

The  ${\rm Bib}T_{\rm E}\!X$  database goes in a file called  ${\it file}\,.{\rm bib},$  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}{|1|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}

Copyright © 2010 Winston Chang http://www.stdout.org/~winston/latex/