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TÍTULO DO TRABALHO

CIDADE – UF
2025

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Orientador: Prof. Dr. Nome do orientador

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A dedicatória é um elemento OPCIONAL em que o autor presta homenagem ou dedica seu trabalho.

AGRADECIMENTOS

É um elemento OPCIONAL em que o autor faz agradecimentos aos que contribuíram de maneira relevante à elaboração do trabalho.

Epígrafe é um elemento OPCIONAL
Demonstração: Evidente
Elon Lages Lima ([Lima](#), 1976, p. 154).

RESUMO

Elemento OBRIGATÓRIO, deve apresentar os pontos relevantes do texto, de forma concisa e que permita uma visão rápida e clara do conteúdo e das conclusões do trabalho. Indica-se que o resumo tenha no máximo 500 palavras e deve ser elaborado de acordo com ABNT NBR 6028/2003. Deve ser escrito em um único parágrafo, sem subdivisões e sem recuo de parágrafo. Abaixo do resumo devem ser colocadas as palavras-chave. A indicação Palavra-chave deve ser em negrito seguida de dois pontos e espaço. Cada palavra deve ser separada uma da outra por ponto final.

Palavras-chave: Chave 1. Chave 2. Chave 3.

ABSTRACT

Version of the abstract in another language for international dissemination. Prepare the abstract in a foreign language accordingly with ABNT NBR 6028/2003. Below the abstract the keywords must be placed. The indication **Keywords** must be in bold followed by a colon and space. Each word must be separated from each other by a period.

Keywords: Key 1. Key 2. Key 3.

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LISTA DE SIGLAS

BNCC Base Nacional Comum Curricular

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1 INTRODUÇÃO

Por exemplo, utilizando o acrônimo Base Nacional Comum Curricular (**BNCC**) pela primeira vez no seu documento. A partir desse momento, sempre teremos **BNCC** no documento.

2 DESENVOLVIMENTO

3 CONSIDERAÇÕES FINAIS

“Demonstração: Evidente” (Lima, 1976, p. 154).

Para a citação como sujeito da frase: [Morais Filho \(2018\)](#) faz diversas considerações sobre a boa redação matemática.

REFERÊNCIAS

LIMA, Elon Lages. **Curso de Análise - Volume 1**. 4. ed. Rio de Janeiro: Instituto de Matemática Pura e Aplicada, 1976. (Projeto Euclides). Citado nas pp. [5](#), [15](#).

MORAIS FILHO, Daniel Cordeiro de. **Manual de Redação Matemática**. 2. ed. Rio de Janeiro: SBM, 2018. (Coleção do Professor de Matemática). Citado na p. [15](#).

APÊNDICE A – TÍTULO DO APÊNDICE

A.1 SEÇÕES DO APÊNDICE

\LaTeX 2 ϵ Cheat Sheet

Document classes

book Default is two-sided.
report No `\part` divisions.
article No `\part` or `\chapter` divisions.
letter Letter (?).
slides Large sans-serif font.
 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.
ansysize Set margins: `\marginsize{l}{r}{t}{b}`.
multicol Use n columns: `\begin{multicols}{n}`.
latsym Use \LaTeX 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.
`\tableofcontents` Add a table of contents here.

Document structure

`\part{title}` `\subsubsection{title}`
`\chapter{title}` `\paragraph{title}`
`\section{title}` `\subparagraph{title}`
`\subsection{title}`
 Use `\setcounter{secnumdepth}{ x }` suppresses heading
 numbers of depth $> x$, where `chapter` has depth 0. Use a $*$, as
 in `\section*{title}`, to not number a particular item—these
 items will also not appear in the table of contents.

Text environments

`\begin{comment}` Comment (not printed). Requires `verbatim`
 package.
`\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`,
`b=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{<i>text</i>}</code>	<code>\rmfamily <i>text</i></code>	Roman family
<code>\textsf{<i>text</i>}</code>	<code>\sffamily <i>text</i></code>	Sans serif family
<code>\texttt{<i>text</i>}</code>	<code>\ttfamily <i>text</i></code>	Typewriter family
<code>\textmd{<i>text</i>}</code>	<code>\mdseries <i>text</i></code>	Medium series
<code>\textbf{<i>text</i>}</code>	<code>\bfseries <i>text</i></code>	Bold series
<code>\textup{<i>text</i>}</code>	<code>\upshape <i>text</i></code>	Upright shape
<code>\textit{<i>text</i>}</code>	<code>\itshape <i>text</i></code>	<i>Italic shape</i>
<code>\textsl{<i>text</i>}</code>	<code>\slshape <i>text</i></code>	<i>Slanted shape</i>
<code>\textsc{<i>text</i>}</code>	<code>\scshape <i>text</i></code>	SMALL CAPS SHAPE
<code>\emph{<i>text</i>}</code>	<code>\em <i>text</i></code>	<i>Emphasized</i>
<code>\textnormal{<i>text</i>}</code>	<code>\normalfont <i>text</i></code>	Document font
<code>\underline{<i>text</i>}</code>		<u>Underline</u>

The command `\texttt` form handles spacing better than the
 declaration `\texttt` form.

Font size

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

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>&</code>	<code>\&</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>ô \’o</code>	<code>ó \’o</code>	<code>ô \’o</code>	<code>õ \’o</code>	<code>ö \’o</code>
<code>ô \’o</code>	<code>ö \’o</code>	<code>q \’c o</code>	<code>ö \’v o</code>	<code>ö \’H o</code>
<code>ç \’c c</code>	<code>q \’d o</code>	<code>q \’b o</code>	<code>ö \’t oo</code>	<code>œ \’oe</code>
<code>Æ \’OE</code>	<code>æ \’ae</code>	<code>Æ \’AE</code>	<code>ä \’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 \’ı</code>	<code>ı \’ı</code>	<code>ı \’ı</code>	<code>ı \’ı</code>

Delimiters

<code>‘</code>	<code>“</code>	<code>‘</code>	<code>{ \</code>	<code>[</code>	<code>(</code>	<code><</code>	<code>\textless</code>
<code>’</code>	<code>”</code>	<code>’</code>	<code>} \</code>	<code>]</code>	<code>)</code>	<code>></code>	<code>\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` March 28, 2017.
`\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

For inline math, use $\backslash(. . . \backslash)$ or \backslash. . . $$. For displayed math, use $\backslash[. . . \backslash]$ or $\backslashbegin{equation}$.

Superscript x $\backslash^{\{x\}}$ Subscript x $\backslash_{\{x\}}$
 $\frac{x}{y}$ $\backslashfrac{\{x\}\{y\}}$ $\sum_{k=1}^n$ $\backslashsum_{\{k=1\}}^n$
 $\sqrt[n]{x}$ $\backslashsqrt[n]{\{x\}}$ $\prod_{k=1}^n$ $\backslashprod_{\{k=1\}}^n$

Math-mode symbols

\leq \backslashleq \geq \backslashgeq \neq \backslashneq \approx \backslashapprox
 \times \backslashtimes \div \backslashdiv \pm \backslashpm \cdot \backslashcdot
 \circ \backslashcirc \circ \backslashcirc \prime \backslashprime \cdots \backslashcdots
 ∞ \backslashinfty \neg \backslashneg \wedge \backslashwedge \vee \backslashvee
 \supset \backslashsupset \forall \backslashforall \in \backslashin \rightarrow \backslashrightarrow
 \subset \backslashsubset \exists \backslashexists \notin \backslashnotin \Rightarrow \backslashRightarrow
 \cup \backslashcup \cap \backslashcap $|$ \backslashmid \Leftrightarrow \backslashLeftrightarrow
 \dot{a} \backslashdot{a} \hat{a} \backslashhat{a} \bar{a} \backslashbar{a} \tilde{a} \backslashtilde{a}
 α \backslashalpha β \backslashbeta γ \backslashgamma δ \backslashdelta
 ϵ \backslashepsilon ζ \backslashzeta η \backslasheta ε \backslashvarepsilon
 θ \backslashtheta ι \backslashiota κ \backslashkappa ϑ \backslashvartheta
 λ \backslashlambda μ \backslashmu ν \backslashnu ξ \backslashxi
 π \backslashpi ρ \backslashrho σ \backslashsigma τ \backslashtau
 υ \backslashupsilon ϕ \backslashphi χ \backslashchi ψ \backslashpsi
 ω \backslashomega Γ \backslashGamma Δ \backslashDelta Θ \backslashTheta
 Λ \backslashLambda Ξ \backslashXi Π \backslashPi Σ \backslashSigma
 Υ \backslashUpsilon Φ \backslashPhi Ψ \backslashPsi Ω \backslashOmega

Bibliography and citations

When using BibTeX, 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)
\shortcite{key} Abbreviated author list and year. ?
\shortciteA{key} Abbreviated author list. ?
\shortciteN{key} Abbreviated author list and year. ?
\citeyear{key} Cite year only. (1953)
All the above have an NP variant without parentheses; Ex.
\citeNP.
```

BibTeX entry types

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

BibTeX fields

```
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 Edition of a book.
editor Names of editors.
institution Sponsoring institution of tech. report.
journal Journal name.
key Used for cross ref. when no author.
month Month published. Use 3-letter abbreviation.
note Any additional information.
number Number of journal or magazine.
organization Organization that sponsors a conference.
pages Page range (2,6,9--12).
publisher Publisher's name.
school Name of school (for thesis).
series Name of series of books.
title Title of work.
type Type of tech. report, ex. "Research Note".
volume Volume of a journal or book.
year Year of publication.
```

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

Common BibTeX style files

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

The L^AT_EX document should have the following two lines just before $\backslashend{\document}$, 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\~{t}ure}}
@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 L^AT_EX 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 $\backslashref{ex:table}$.
 $\backslashend{\document}$

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<http://wch.github.io/latexsheet/>

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Classe \LaTeX para documentos científicos segundo as normas ABNT
desenvolvido por Wladimir Seixas.