

# elsevierbook.cls class

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## 1 Introduction

`elsevierbook.cls` is designed for preparation  $\text{\LaTeX}$  books to be published by Elsevier. The document class is built on `book.cls` and require following packages:

- `etoolbox`
- `calc`
- `afterpackage`
- `numname`
- `xcolor`
- `colortbl` for table with colored rows, columns;
- `fontenc`
- `textcomp`
- `amsmath` for math typesetting;
- `amsmath`, `amssymb`, `amsfonts`
- `amsthm` for theorem and alike;
- `caption` for table, figure caption control;
- `titlesec` for sectioning control;
- `enumitem` for lists control;
- `mdframed` for boxed text elements;
- `footmisc` for footnote control;
- `natbib` for bibliography;
- `minitoc` for producing chapter's minitoc;
- `multicol`

## 2 Installation

The package is available at TeX Support page on github (<https://github.com/vtex-soft/texsupport.elsevier-book>) It can also be found on CTAN (Comprehensive TeX Archive Network) (<http://www.ctan.org/tex-archive/macros/latex/contrib/elsevierbook/>) Please download the `elsevierbook.dtx`

which is a class source file and `elsevierbook.ins` which is a driver file for extraction the class file. To produce `elsevier.cls` file, run LaTeX on the `elsarticle.ins`. The class file may be moved to a place, usually, ( $\$$ TEXMF/tex/latex/elsevierbook/), or a folder that TeX can read from. The TeX file database needs to be regenerated after moving the class file. Usually, we use commands like `mktexlsr` or `texhash` depending upon the distribution and operating system.

However, the installation is optional and you can skip this phase. The bundle is self-contained and after unzipping you have everything you need for book preparation. (see ??)

### 3 Book structure

Organising book can be challenging. Here we describe two possible ways of book organisation. The first one is pretty simple with flat folder structure that can suit for short books, the other is more complex that can serve for more complex books.

#### 3.1 Option 1 - simple structure

<pre>book.tex chapter01.tex chapter02.tex dedication.tex preface.tex bibliography.tex [...] img/   ch01-figure01.eps   ch02-figure02.eps sty/   elsevierbook.cls</pre>	<pre>book.tex: \documentclass{elsevierbook.cls} \begin{document} \Frontmatter   \include{titlepage}   \include{dedication}   \tableofcontents   \include{preface}   \include{acknowledgement}   [...] \Mainmatter   \include{chapter01}   \include{chapter02}   [...] \Backmatter   \include{appendix01}   [...]   \include{bibliography}   \printindex \end{document}</pre>
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## 3.2 Option 2 - more complex structure

For more complex projects this can be more suitable

book.tex	book.tex:
dediction.tex	
preface.tex	\documentclass{elsevierbook.cls}
bibliography.tex	\begin{document}
[...]	\Frontmatter
chapter01/	\include{titlepage}
chapter01.tex	\include{dedication}
img/	\tableofcontents
ch01-figure01.eps	\include{preface}
ch02-figure02.eps	\include{acknowledgement}
[...]	[...]
chapter02/	\Mainmatter
chapter02.tex	\include{chapter01}
img/	\include{chapter02}
ch02-figure01.eps	[...]
ch02-figure02.eps	\Backmatter
[...]	\include{appendix01}
[...]	[...]
appendix01/	\include{bibliography}
appendix01.tex	\printindex
img/	\end{document}
appendix01-figure01.eps	
appendix01-figure02.eps	
bibliography.tex	
sty/	
elsevierbook.cls	

## 4 Usage

The class should be loaded with the following command:

```
\documentclass[<options>]{elsevierbook}
```

where the options can be following:

a02	sets a02 book model settings
a08a	sets a08a book model settings
p05	sets p05 book model settings
authoryear	for natbib package.

## 5 Frontmatter

- chapter - author - address - footnotes - dispquotes - chapter points - minitoc - abstract - keywords

## 6 Tables, Figures

Figures may be included using the command `\includegraphics`. Please check `graphicx` package for available options. Please use EPS format for figures working with LaTeX, and PDF, PNG, MPS formats for pdfLaTeX. Do not use file extensions and path in order to load file. If you need LaTeX to find your graphics files in other folder than in setup, set the path into `input@path`.

```
\begin{figure}
\includegraphics{file-name}% no path, no extension
\caption%
  {Figure caption %
   \source{Cortesy of [...]}}%
}
\end{figure}
```

Table environment may be enhanced depending on model chosen.

```
\begin{table}
\begin{tableframe}
\caption{Table caption text [...] }%
\begin{tabularx}{\textwidth}{X|X}
\Hline
\tch{Item A} & \tch{Item B}\tabnoteref{tn1}\\\hline
\tchi{Item A2} & \tchi{Item B2}\tabnoteref{tn1}\\\hline
\rowcolor{thd}
\multicolumn{2}{l}{\textbf{Item}} \\
Item A & Item B\\\hline
Item C & Item D\tabnoteref{tn2}\\\Hline
\end{tabularx}
\begin{tabnotes}
\tabnotetext[*]{tn1}{Table footnote}
\tabnotetext[a]{tn2}{Table footnote}
\legend{EL=empirical likelihood.}
\source{foo}
\end{tabnotes}
```

```
\end{tableframe}  
\end{table}
```

tableframe - environment

source - source

Hline - heavy line

tch - table column head

rowcolorthd for colored rows

tabnoteref table footnote reference

tabnotetext table footnote text. Must be on tabnotes environment

legend table legend. Must be inside tabnotes environment.

## 7 Boxed text

Boxed text environments uses mdframed package as its basic. There are two types defined: Box Type A (BtypeA) and Box Type B (BtypeB)

Unnumbered text boxes

```
\begin{textbox}[style=BtypeA,frametitle={Box type A}]  
  Some text [...]  
\end{textbox}  
[...]  
\begin{textbox}[style=BtypeB,frametitle={Box type B}]  
  Some text [...]  
\end{textbox}
```

Numbered text boxes are defined pretty much the same as theorem like environments.

```
\mdtheorem[style=BtypeA]{example}{Example}[chapter]  
\mdtheorem[style=BtypeB]{boxb}{Box}  
\begin{example}[Numbered Box type A ]  
  Some text [...]  
\end{example}  
[...]  
\begin{boxb}[NUmbered Box type B]  
  Some text [...]  
\end{boxb}
```

You can use other options from mdframed package to fine tune the textbox environment.

## 8 Theorems and friends

The class loads `amsthm` package to make it easier to define theorem environments and the alike.

```
\newtheorem{theorem}{Theorem}
\theoremstyle{definition}
\newtheorem{definition}{Definition}
\theoremstyle{remark}
\newtheorem{remark}{Remark}
```

Please refer to `amsthm` package documentation for details.

## 9 Lists

We use `enumitem` package for `enumerate`, `itemize` and other lists environments. It is possible to supply optional arguments to fine control the appearance of list.

```
\begin{enumerate}[<options>]
\item [...]
\end{enumerate}
```

Please check `enumitem` documentation for details.

## 10 Display mathematics

The package `amsmath` is loaded by the class file. You can use all environments from `amsmath` package. Please do not use faulty `'eqnarray'` environment, but `eqnalign` or `..` instead.

## 11 Program Lists

not available yet.