

# packages and classes container

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november 2020

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*Figures*

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Part One

*classes*



Chapter One

*aesthetic*

1.1 QUICK FACTS

**file** `aesthetic.cls`

**description** a memoir based class for providing the quick style i prefer

**dependencies** none, can be fragile regarding styling/fonts/etc

**requires** ALEGREYA optional — see section 1.2 on the following page

ATBEGSHI allows for appendix command — see section 1.4 on page 3

ARRAY needed for the M column type<sup>1</sup>

MICROTYPE no current way to pass options, and i don't intend on adding one. the point is to make documents look nice as painlessly as possible

PIFONT needed for fancy breaks

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<sup>1</sup>i believe this is called by memoir anyway, but i have no interesting breaking things/any dependencies

**loads** MEMOIR — options cannot be overridden and are

**openany** only has a super noticable effect if pagebreaks or partpages is called (section 1.2)

**twoside** this is designed for book like classes, and the headings will break if you call oneside

**fullptlayout** just helps typesetting, especially since we call MICROTYPE<sup>2</sup>

**extrafontsizes** so you can call all of the large text sizes you want

[**user options**] whatever you want. twocolumn is disabled (will break the page layout, and two column documents are plenty compact. this is to help with the tightness of one column documents, because presumably you want decent readability without using too much paper.)

**example** this file (using lowerhead, 12pt)

**last updated** november 23 , 2020

## 1.2 CLASS OPTIONS

**lowerhead** formats head in small caps/lowercase, vs all caps. not recommended for part headings.<sup>3</sup>

**numberedhead** adds numbers to headings<sup>3</sup>

**otherfont** allows a font other than Alegreya to be called. if you call this, Alegreya just isn't loaded, so if you want to use Alegreya for headers/what have you, call the font and change it manually.

**pagebreaks** adds pagebreaks/supresses the commands which condense the document. this does *not* reformat part parges

**partheadings** changes headings from being labeled as chapter & section to part & chapter<sup>3</sup>

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<sup>2</sup>i'm honestly not 100% sure this makes a difference, but i'm not turning it off

<sup>3</sup>there is currently no way to change this within the document. i have no plans of changing this.

**partpages** allows parts to be formatted on their own page, while maintaining the fancy breaks. if enabled with pagebreaks, will provide the package partpage formatting

**shortnames** turns off the automatic full part/chapter names in the header. unless numberedhead is called, this has no effect.

### 1.3 RELATED/RECOMMENDED

**AFTERPAGE** helps with float and table typesetting

**BOOKTABS** the aesthetics of this make heavy use of horizontal rules, so you'll probably want to have the nicer looking tables anyway

**CSQUOTES** i think either **BABEL** or **MEMOIR** calls this, and it'll make your life a bit easier

**XCOLOR** colors are nice, they jive well, and if you want to mess with some of the **MEMOIR** options, now you can.

**XTAB** helps with longer tables. you can use **LONGTABLE** if that's your preference, but if i ever write up some of my other common commands as classes/packages, i'll write them for **XTAB**

### 1.4 MACROS

**\contents** calls the standard set of contents (short contents, full contents, list of figures, list of tables). adds a part for contents, but does not enter or exist **\frontmatter** so you can add contents under. not very flexible.

**M{<width>}** a horizontally/vertically centered column.

**\makeappendix** prints out a formatted appendix. see the end of this document.

**\makebackmatter** [] prints out the command to enter backmatter without forcing a page break. optional argument typesets a file/text between the switch command and the transition spacer.

## 1.5 KNOWN ISSUES

**afterpage breaking** yeah this isn't really a class problem *however* i bring it up here because it does happen, where you get fucked over because AFTERPAGE doesn't know what it's doing. just make sure you've added lots of text.

**calling footnotes in sections** something about the formatting commands for the sections breaks footnotes<sup>4</sup>. you can't use `\protect\footnote{}` because it will incorrectly format the font of the footnote. instead, use `\protect\footnotemark\footnotetext{}`. this does not happen for chapters.

**failure to break pages** you may have used `\let\par\russianpar`. bad idea. it will mess with the commands used to control chapters. this doesn't always cause problems (especially if you have longer chapters), but i don't recommend messing with it.

**weird looking tables** explained in section 1.7. basically, you should not call flexible width tables in this, and instead, use M

## 1.6 POSSIBLE ADDITIONS/PLANS

**footnote toggles** turning where footnotes are numbered into an option, as well as adding easier per page symbolic footnotes.

**upper/lower options** so that for the ~aesthetic~ all lowercase documents can also have easy tables of contents, etc.

## 1.7 CLASS INFORMATION<sup>5</sup>

**class options** pretty much all of the class options just create conditionals in the form `\@option<boolean>` which can be used with `\makeatletter` and `\makeatother`<sup>6</sup>.

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<sup>4</sup>because of the commands that format them, sections are actually pretty fragile. there isn't a consistent and easy workaround.

<sup>5</sup>not recommended, but i am a completionist in all things

<sup>6</sup>i'm not sure if this would actually work, however, because none of the class options have anything to do with the document once you've started the document, they're all called on start up. i guess this could change in the future?



**headings** we use a modified version of the ruled style which gives us some flexibility in the marks. this bit of the file is more verbose than needed, but if you want to mess with the headings, you can mess with the ruled style

**parts and chapters** basically just heavy use of `\renewcommand{\}{}` over breaks, skips, fonts, etc., to get it all consistent.

**tabcolsep** set to 0pt, so make sure you consider that. this is, as far as i'm concerned, a positive for typesetting tables because it lets you actually use textwidth based ratios for setting tables.

**footnotes** numbered consecutively though the whole document. could easily be changed in the preamble, but i don't recommend doing that unless you're using pagebreaks, because it can create weirdness like two footnotes of the same number on the same page in edge cases.

**contents** just calls the contents in the predictable/defined way.

**appendix** calls a few commands to add everything to the table of contents without being a pain

**backmatter** uses `ATBEGSHI` to turn `\@mainmatterfalse` on after the page finishes<sup>7</sup>, and then after the optional argument, adds a page separator

## Chapter Two

# *notes*

### 2.1 QUICK FACTS

**file** `notes.cls`

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<sup>7</sup>for grouping reasons, `\afterpage` doesn't work here, and the work around basically becomes just using what `ATBEGSHI` does.

## NOTES

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**description** an extension of `AESTHETIC.CLS` which provides a variety of tools for notes

**dependencies** `AESTHETIC` class is required

**requires general** `XCOLOR` required to manage the themes, etc.

`TCOLORBOX` used in effectively every course type to provide functionality

`FLOAT` provides a variety of useful features

`CAPTION` allows for more flexible caption positioning/placement, necessary for various functions

`TIKZ` commonly used in notes, included here for ease. also, it's required in a variety of places, so requiring it early prevents dependency issues.

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# *Appendices*

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