

The `vgrid` package

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1 Introduction

The `vgrid` package overlays a grid intended to help the author enforce vertical rhythm on each page. The spacing of the grid is taken from `\baselineskip`, with the first line at the top of the text area.

Note that `vgrid` itself does not change any spacing – other packages (or careful font settings) must be used to achieve vertical rhythm. This document, for example, can be clearly seen to not have vertical rhythm.

2 Usage

To add a grid to each page, just place `\usepackage{vgrid}` in your document's preamble. As of this version, there is no fine-grained control to allow grids to be excluded from certain pages. The grid will use `\baselineskip` as the line height.

3 Implementation

```
1 \RequirePackage{everypage}
2 \RequirePackage{tikz}
3 \RequirePackage{ifoddpages}
4 \newlength{vgrid@l} \setlength{vgrid@l}{\baselineskip}
5 \newlength{vgrid@y}
6 \AddEveryPageHook{
```

For every page, we need to re-calculate the coordinates of the grid.

```
7 \def\@csm{\ifoddpages\oddsidemargin\else\evensidemargin\fi}
8 \def\@left{\hoffset+\@csm}
9 \def\@right{\@left+\textwidth}
10 \def\@top{-\voffset-\topmargin-\headheight-\headsep}
11 \def\@gridline{\draw [thin, gray]}
12 \begin{tikzpicture}[overlay]
13 \def\y{\@top-\vgrid@y}
14 \@gridline (\@left, \@top) -- (\@left, \@top-\textheight);
15 \@gridline (\@right, \@top) -- (\@right, \@top-\textheight);
```

```
16 \setlength\vgrid@y{Opt}
17 \@whiledim\vgrid@y<\textheight\do{
18 \@gridline (\@left, \y) -- (\@right, \y);
19 \addtolength{\vgrid@y}{\vgrid@l}
20 }
21 \@gridline (\@left, \y) -- (\@right, \y);
22 \end{tikzpicture}
23 }
```