# A customised LATEX article class

## Andy Holt

December 29, 2014

The aim of the adharticle LATEX class is to provide a simple and clean way to set up the document as I like it. This could easily be achieved through the LATEX document header, but giving by combining these settings into a class:

- 1. The need to duplicate options and settings in each document is avoided,
- 2. If the settings are changed, they need only be modified in one location and all documents using this class may be recompiled without modification.

This class will be used primarily for longform writing, producing A4 documents with a layout aimed at reading longer text. It will give a good typesetting for reading and will include all necessary packages for typesetting maths, tables, Greek/Hebrew text and source code.

## 1 Compilation

The adharticle class is designed for use with IATEX and XEIATEX, usually producing PDF files. The option --shell-escape must be provided to the compiler as the minted package calls external commands.

# 2 Class Options

The following options are available to the adharticle document class:

fullpage If fullpage option is present, use the fullpage package<sup>1</sup>. This reduces the margin sizes on all sizes to 1 in.

paper/electronic If paper is set, the document is intended for printing on paper. If electronic is set, the document is intended for viewing electronically (probably PDF). The default settings reflect the medium of intended use. A script should be written to produce both if necessary to avoide 2 versions of the files floating around. Default to electronic behaviour.

## 3 Included Packages and Settings

This section details the packages used in the adharticle class and their settings.

<sup>&</sup>lt;sup>1</sup>http://www.ctan.org/pkg/fullpage

### 3.1 inputenc

The inputenc package<sup>2</sup> allows use of different file encodings for the LaTeX file. This is set by:

```
\RequirePackage[utf8]{inputenc}
```

Using the utf8 encoding allows unicode characters to be easily inputted, especially useful for including Greek text or other non-western characters.

#### 3.2 babel

The babel package<sup>3</sup> provides support for language specific hyphenation patterns and also culturally and linguistically determined typographical rules. Babel is configured by:

```
\RequirePackage[greek,english]{babel}
```

Babel is configured to provide support for Greek and for English, with English as the default. Use:

```
\selectlanguage{Greek}
```

to change to Greek (or other languages as appropriate), and similarly back to English.

#### 3.3 color

The color package<sup>4</sup> provides colour management. Standard colour set is provided, new colours may be defined using:

```
\definecolor{name}{model (e.g. rgb)}{colour specification}
```

Colours may then be applied to text or other elements. Especially useful when drawing pictures with Tikz/pgf.

### 3.4 graphicx

The graphicx package<sup>5</sup> allows inclusion of graphics in the document. A graphic may be included by giving the command:

### 3.5 placeins

The placeins package defines the command \FloatBarrier which stops floats from moving past.

#### 3.6 amssymb, amsmath

The packages amssymb and amsmath provide support for additional symbols and mathematical notation.

<sup>&</sup>lt;sup>2</sup>http://ctan.org/pkg/inputenc

<sup>&</sup>lt;sup>3</sup>http://ctan.org/pkg/babel

 $<sup>^4</sup>$ http://ctan.org/pkg/color

<sup>&</sup>lt;sup>5</sup>http://ctan.org/pkg/graphicx

## 3.7 ctable

ctable is a powerful table package which uses booktabs to make a nice looking table and also provides footnotes for the table. Default values for options of ctable are set in the class file.