The fhjpaper class*

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Abstract

This class is used to format papers in the FH Joanneum style. It is based on the scrartcl class and provides a set of commands to define the title, author, and other information. It is mainly used to create the expose for a master thesis.

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1 Configuration and styling

This class is based on the scrartcl class and we support forwarding options to the base class (except the hardcoded options from below).

```
\newcommand{\FHJ@ClassName}{fhjpaper}
\DeclareOption*{\PassOptionsToClass{\CurrentOption}{scrartcl}}
\ProcessOptions\relax
```

We load the scrartcl class with the following options:

- `a4paper`: We want to use A4 paper size
- `twocolumn`: The document should be typeset in two columns
- `fontsize=9pt`: The font size should be 9pt to increase density for shorter papers and abstracts

*This document corresponds to fhjpaper v4.3e, dated 2026-11-19.

- `DIV=16`: The DIV parameter should be set to 16 to ensure a good balance between text width and height

```
\LoadClass[a4paper,twocolumn,fontsize=9pt,DIV=16]{scrartcl}
```

1.1 Used packages

For the styling of the document we use the following packages and therefore they are preloaded and you might not load them again in your document:

```
\RequirePackage{fhjcommon}
\RequirePackage{etoolbox}
\PassOptionsToPackage{pagestyleset=standard}{scrlayer-scrpage}
\RequirePackage{scrlayer-scrpage}
\PassOptionsToPackage{hidelinks}{hyperref}
\RequirePackage{hyperref}
```

1.2 Multilingual support

This class supports multilingual documents and therefore we recommend to load the `babel` package and set one of two supported languages – either `ngerman` or `english`. A possible boilerplate for the preamble could look like this:

```
\usepackage[T1]{fontenc}
\usepackage[⟨language⟩]{babel}
```

2 Preamble

To support typeset of title, abstract and header/footer we provide a set of macros. To have the correct name for the study program typeset on the document, you need to define it with the macro from `fhjcommon` package (see the according documentation):

```
\FHJProgram{DAT-25}
```

`\title` This command defines the title of your document and is placed on top of the first page on the according position. It is supported to use line breaks in the title, so you can have multiple lines but we clearly recommend to limit it to three lines maximum.

```
\renewcommand*{\title}[1]{\renewcommand*{\@title}{{#1}}}
```

`\shorttitle` This optional command defines the short title of your document which is used in the footer. This supports the reader if multiple documents are printed together in a single collection. If it is omitted, the footer stays empty.

```
\newcommand{\FHJ@ShortTitle}{}
\newcommand{\shorttitle}[1]{\renewcommand{\FHJ@ShortTitle}{{#1}}}
```

Remark: Most of above macros are safeguarded and you will get according warnings if macro definitions are missing and replacement text is set.

2.1 Authors and Affiliations

This code is based on APA 7th edition style guide without including the deprecated commands.

`\authorsnames`

- `\authorsnames [`⟨*comma separated list of superscripts*⟩`] {`⟨*comma separated list of authors name(s)*⟩`}`: Authors names

Where `{`⟨*authors names*⟩`}` is a comma separated list of authors in display order and `[`⟨*superscripts*⟩`]` is an optional comma separated list of affiliation superscripts. If there are multiple superscripts for one author, put the set of superscripts within `{ }`.

`\authorsaffiliations`

- `\authorsaffiliations{`⟨*comma separated list of affiliation(s)*⟩`}`: Author affiliation(s). Put each affiliation within `{ }` and separate each affiliation with a comma.

Examples:

One author, one affiliation

```
\authorsnames{Maggie C. Leonard}
\authorsaffiliations{{Department of Psychology,%
    George Mason University}}
```

One author, two affiliations

```
\authorsnames{Andrew K. Jones-Willoughby}
\authorsaffiliations{{School of Psychology,%
    University of Sydney},
    {Center for Behavioral Neuroscience, American University}}
```

Two authors, shared affiliation

```
\authorsnames{Mackenzie J. Clement,Talia R. Cummings}
\authorsaffiliations{{College of Nursing,%
    Michigan State University}}
```

Two authors, different affiliations

```
\authorsnames[1,2]{Wilhelm T. Webber,Latasha P. Jackson}
\authorsaffiliations{%
    {Max Planck Institute for Human Development, Berlin, Germany},%
    {College of Education, University of Georgia}}
```

Three or more authors, different affiliations

```
\authorsnames[1,{2,3},1]{%
    Savannah C. St. John,%
    Fen-Lei Chang,%
    Carlos O. Vásquez III}
\authorsaffiliations{%
    {Education Testing Service, Princeton, New Jersey, ...},
    {MRC Cognition and Brain Science Unit, Cambridge, England},
    {Department of Psychology, University of Cambridge}}
```

2.2 Page style

The footer contains the short title of the document and the header contains the long title of the study program. The section counter is limited to two levels (`subsection` maximum).

```
\ofoot{\FHJ@ShortTitle}
\ifoot{\FHJProgramLong}
\setcounter{secnumdepth}{2}
```

3 Document

`\maketitle` The title block – title, author names and their affiliations (APA 7th style) – is produced by the standard LaTeX `\maketitle`. This class customises it by redefining the internal hook `\@maketitle` (which also runs the safeguards for title, authors and affiliations); you only ever call `\maketitle` yourself. With the preamble macros above in place, the document body is minimal:

```
\begin{document}
    \maketitle
    ...
\end{document}
```

4 Acknowledgements

The original work for creating a base class for the study program "Data Science and Artificial Intelligence" was done by **Klaus Lichtenegger**. All appreciation goes to him for creating the first version of this class.

Change History

v4.0
General: Initial package version . . 1

v4.3d
General: Make `\shorttitle` optional (empty footer); fix the title safeguard, which broke compilation when `\shorttitle` was missing 1

v4.3e
General: Fix the author/affiliation safeguard: its warning executed `\authorsnames/\authorsaffiliations` and broke compilation when either was missing, and missing false branches printed internal macro names 1