

L^AT_EX for linguists

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Class 4: Customising page layout

- Headers and footers with fancyhdr
- Margins with geometry
- Section titles with titlesec

1 Customising headers and footers

- (1) Package: fancyhdr (part of most T_EX distributions).

```
\usepackage{fancyhdr}
\pagestyle{fancy}

\fancyhead[L]{Your Name}
\fancyfoot[L]{\roman{page}}
```

- (2) To cancel previous header/footer settings:

```
\fancyhead{}
\fancyhead[L]{Your Name}
\fancyhead[R]{The title of the paper}
\fancyfoot{}
\fancyfoot[L]{\roman{page}}
```

- (3) Different headers and footers on even and odd-numbered pages with the option `twoside`

```
\documentclass[twoside]{article}
\usepackage{fancyhdr}
\pagestyle{fancy}

\fancyhead{}
\fancyhead[OL]{Your Name}
\fancyhead[OR]{The title of the paper}
\fancyhead[EL]{\today}
\fancyhead[ER]{Troms\o{}}
\fancyfoot{}
\fancyfoot[OL]{\roman{page}}
\fancyfoot[ER]{\roman{page}}
```

- (4) Changing the rule in headers/footers:

```
\renewcommand{\headrulewidth}{0pt}
\renewcommand{\footrulewidth}{0.1ex}
```

- (5) Adding vertical rules to headers and footers

```
\fancyfoot{}
\fancyfoot[OL,ER]{\hrulefill\\ This is page \roman{page}%
\\ \vspace{-1ex}\hrulefill}
\fancyfoot[OR,EL]{\hrulefill\\ \LaTeX{} rocks!\\ \vspace{-1ex}\hrulefill}
\renewcommand{\headrulewidth}{0pt}
\renewcommand{\footrulewidth}{0pt}
```

- (6) Alternative ways to define text in headers and footers with `fancyhdr`:

```
\lhead{Left head} \chead{Centre head} \rhead{Right head}
\lfoot{Left foot} \cfoot{Centre foot} \rfoot{Right foot}
```

- (7) If you define the headers and footers in the preamble, the definitions will have scope over the whole document. If you change them in the body of the document, the changes will take effect from the next page onwards.

2 Changing margins

- (8) Package: `geometry`

Make sure you change the margins *before* defining the header and footer! So `\geometry{options}` must precede `\pagestyle{fancy}`, and the rest of the fancy commands. If it doesn't, the header and footer will have different margins than the rest of the text.

- (9) Changing the margins

```
\usepackage{geometry}
\geometry{a4paper,top=3cm,bottom=2cm,left=2cm,right=2cm}
```

(10) alternatively:

```
\usepackage[a4paper,top=3cm,bottom=2cm,left=2cm,right=2cm]{geometry}
```

(11) If all margins are the same:

```
\usepackage[a4paper,margin=1in]{geometry}
```

(12) With the options `includehead` and `includefoot`, the header/footer are included in the total body of the text. So, with `\geometry{a4paper,1in}`, there's 1 inch between the top of the page and the top of the *text body*, but with `\geometry{a4paper,includehead,margin=1in}` the specified distance is between the top of the page and the top of the *header*.

(13) For many more things `geometry` can do, see the documentation.

3 Redefining section titles

(14) Package: `titlesec`

```
\titleformat{command}[shape]{format}{label}{sep}{before}
```

command is the sectioning command to be redefined, e.g. `\section`.

shape sets the paragraph shape. See the package documentation for possible values.

format is the set of commands that are applied to the whole title (the label and the text as well).

label defines the label of the title.

sep is the horizontal space between the label and the text in the title. It must be defined as a length.

before is the code preceding the title body.

(15) An example

```
\usepackage{titlesec}
\titleformat{\section}{\itshape }{\thesection.}{1em}{\bfseries}
```

(16) Changing the title spacing

```
\titlespacing{command}{left}{beforesep}{aftersep}
```

command is the sectioning command to be redefined, e.g. `\section`.

left is horizontal space before the title. If it has a negative value, the section title is shifted to the left.

beforesep is the vertical space before the title.

aftersep is space following the title. The default is vertical space, but it can also be horizontal space depending on the *shape* selected.

```
\usepackage{titlesec}
\titlespacing{\section}{3em}{1em}{1em}
```

Using the starred version of `titlespacing` makes sure the paragraph following the title is not indented.

```
\usepackage{titlesec}
\titlespacing*{\section}{3em}{1em}{1em}
```

(17) Fixed width labels

This might be necessary if a journal's style sheet requires paragraph indentation to be the same as the indentation of the title text.

```
\titleformat{\section}{\itshape }{\makebox[3em]{\thesection.}}{0em}{\bfseries}
\titlespacing{\section}{0em}{1em}{1em}
\setlength{\parindent}{3em}
```

(18) This package can do much, much more – check out the documentation if you're interested.

Homework

Take your sample article (HW 1) and modify it in the following ways.

1. Headers and footers:
 - (a) Odd page header: your name on the right in italics, the page number in capital Roman numbers on the left, slanted
 - (b) Even page header: the title of your article on the left in bold italics, the page number in capital Roman numbers on the right, slanted
 - (c) Odd page footer: the name of the journal on the left
 - (d) Even page footer: the starting and ending page numbers of the article on the right (automatically, not entered manually). The article should start on page 24. (**Hint:** use the commands `\ref` and `\label`.)
 - (e) The header and the footer are separated from the text body by a 1pt wide rule.
2. All margins should be 2.5 cm. The header and footer should be included in the total body of the text (there should be 2.5 cm between the top of the header and the top of the page, as well as the bottom of the footer and the bottom of the page).
3. Section titles
 - (a) Section titles should be slanted and bold, section numbers should be slanted but not bold. Section numbers should be followed by period. The same applies to subsection titles.
 - (b) There should be one empty line between (sub)section titles and preceding text, and no lines between (sub)section titles and the following text. (Assume that a line is 2.5ex.)