

GSNS L^AT_EX course

T_EXniCie

8 September 2022

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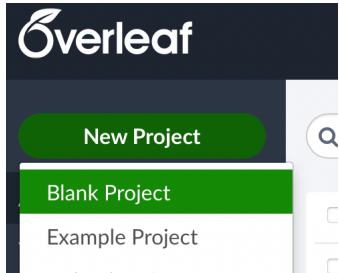
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Create

Simple document in \LaTeX

```
1 \documentclass{article}
2
3
4 \begin{document}
5
6
7
8
9 \end{document}
```

}

preamble: document settings go here

}

body: content (text and images) goes here

Simple document in L^AT_EX

```
1 \documentclass{article}
```

```
4 \begin{document}
```

```
6 The Differential and Integral  
7 Calculus, or, as it was formerly  
8 called in this country,  
9 the Doctrine of Fluxions, has always  
10 been supposed to present remarkable  
11 obstacles to the beginner.
```

```
13 \end{document}
```



body: content (text and images)
goes here

Example text: *Elementary Illustrations of
the Differential and Integral Calculus* by

Simple document in L^AT_EX

```
1 \documentclass[a4paper,11pt]{article}
2
3
4 \begin{document}
5
6 The Differential and Integral
7 Calculus, or, as it was formerly
8 called in this country,
9 the Doctrine of Fluxions, has always
10 been supposed to present remarkable
11 obstacles to the beginner.
12
13 \end{document}
```

}

preamble: document
settings go here

Example text from “Elementary
Illustrations of the Differential and Integral

LaTeX commands

LaTeX commands begin with a backslash, followed by letters or a single special character.

Commands may have **arguments** and **optional arguments**.

1

```
\command
```

or

1

```
\command{argument}
```

or

1

```
\command[optional argument]{argument}
```


LaTeX commands

Some commands go in the **body** of the document

- ▶ The command `\LaTeX` prints the L^AT_EX logo and goes in the **body** of the document.
- ▶ `\newpage` starts a new page and it also goes in the **body** of the document.
- ▶ `\textbf{text}` is a command for **bold** text. The command takes 1 argument.
- ▶ `\sqrt[3]{y}` the square root command takes 1 argument and 1 optional argument

LaTeX commands

Other commands go in the **preamble** of the document

- ▶ `\title` sets the title of the document.
- ▶ `\usepackage{PACKAGENAME}` loads LaTeX code from other authors into your document. This code will often define new commands or tweak existing commands
- ▶ `\usepackage[paper=a5paper, margin=2cm, landscape=true]{geometry}` loads the geometry package with 3 optional arguments

«««< HEAD

Whitespace

- `a\hspace{1cm}b`

a b

Whitespace

- `a\hspace{1cm}b`

a b

- `a\hspace*{1cm}b`

a b

Whitespace

- $a\sqcup\sqcup\sqcup\sqcup b$
- $a\backslash\sqcup\backslash\sqcup\backslash\sqcup\backslash\sqcup b$
- $a\backslash\text{quad}\sqcup b$

a b
a b
a b.

Whitespace

- `a_{}_{}_{}_{}_b`
- `a______b`
- `a\quad{}_b`
- `a\hspace_{2cm}b`

a b

a b

a b.

a b

Whitespace

- `a_ _ _ _ _ b`
- `a\ _ \ _ \ _ \ _ b`
- `a\quad _ b`
- `a\hspace _ {2cm} b`
- `\LaTeX _ is _ cool!`

a b

a b

a b.

a b

\LaTeX is cool!

Whitespace

- `a_____b`
- `a_____b`
- `a\quad_b`
- `a\hspace_{2cm}b`
- `\LaTeX_is_cool!`
- `\LaTeX_{ }_is_cool!`

a b

a b

a b.

a b

LaTeX is cool!

LaTeX is cool!

=====

whitespace

»»»> fb5998507b1bcc8add942f2c1ac01f50cab1bd2f

paragraphs

sections

title, author and date

We will now add a title to the article. We use three commands to set a **title**, **author** and **date**. These commands go in the **preamble**.

The command `\maketitle` goes in the **body** of the document and determines the position of the title.

```
1 \documentclass[a4paper, 12pt]{article}
2 \title{Elementary Illustrations of the Differential and Integral Calculus}
3 \author{Augustus De Morgan}
4 \date{November 11}
5 \begin{document}
6 \maketitle
7 The Differential and Integral Calculus, or, as it was formerly
8     called in this country, the Doctrine of Fluxions, has always
9     been supposed to present remarkable obstacles to the beginner.
10 \end{document}
```

special characters

formatting text

math

math

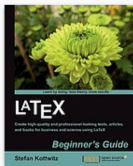
more math

more math

closing remarks

The best book for further learning is **LaTeX Beginner's Guide** by **Stefan Kottwitz**. The first edition is available as an eBook at the UU library.

1



Access Online

[LaTeX beginner's guide](#)

Authors: [Stefan Kottwitz](#)

 eBook ©2011

Birmingham, UK : Packt, ©2011.

Summary: Annotation LaTeX is high-quality Open Source typesetting software that produces professional prints and PDF files. However, as LaTeX is a powerful and complex tool, getting started can be intimidating. There is no official support and certain aspects such as layout modifications can seem rather complicated. It may

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closing remarks

The T_EXniCie organises a **thesis writing workshop** in februari 2023 and various workshops throughout the year. These will be announced on our website at

`a-eskwadraat.nl/LaTeX`

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