# GSNS LaTeX course

TeXniCie

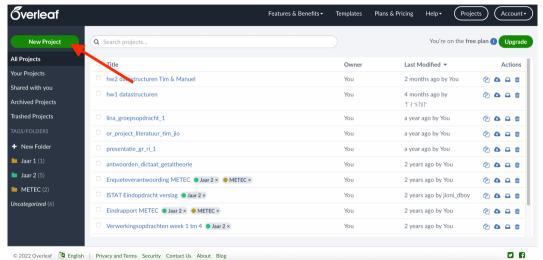8 September 2022

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# Schedule

- ▶ Introduction to LaTeX and Overleaf
- ▶ Text formatting
- ▶ ⟨Exercises!⟩
- ▶ Structure of a document
- ▶ ⟨Exercises!⟩
- ▶ Formulas
- ▶ ⟨Exercises!⟩
- ▶ Images
- ▶ ⟨Exercises!⟩
- ▶ Closing remarks

# Overleaf

# Overleaf

# 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 LaTeX

```
1  \documentclass{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}
```

**body**: content (text and images) goes here

# Simple document in LaTeX

```
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

## LaTeX commnands

LaTeX commands begin by a backslash, followed by letters or special characters. Commands may have **arguments** and **optional arguments**.

**\command**

or

**\command**{argument}

or

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

## LaTeX commnands

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

- ▶ The command **\LaTeX** prints the latex logo and goes in the **body** of the document.

- ▶ **\newpage** starts a new page and is also goes in the **body** of the document.

- ▶ **\textbf**{text} is a command for **bold** text. The command takes 1 argument.

- ▶ **\sqrt**[3]{y} $\sqrt[3]{y}$ the square root command takes 1 argument and 1 optional argument

## LaTeX commnands

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

- ▶ `\title` sets the title of the document.

- ▶ `\usepackage{PACKAGENAME}` loads LaTeX code someone else has written into your document

- ▶ `\usepackage[paper=a5paper, margin=2cm, landscape=true]{geometry}` loads the geometry package with 3 optional arguments

# whitespace

# paragraphs

# sections

# title and author

# special characters

# formatting text

# math

# math

# more math

# more math

# closing remarks