

Teaching plan on LaTeX:

Lecture 1: Fundamental Document System

Goals: Learn to start a new document Using Overleaf, text-alignment, text-styling, paragraphs, sectional documentation.

Homework: Self introduction with centered name, left-aligned paragraphs, right-aligned date at the end of the document, use subsections to create different sections such as introduction, talents, information, hobbies, etc.

Lecture 2: Packages and document styling

Goals: Learn to search and insert packages, adding styling such as header and footer, learn to add math equation manually.

Homework: Use suitable packages to write on one of the following topics for about 2 pages long with font size 12 pt, of dimension a4paper 7in 9in :

1. The relation between mathematics and physics with important examples
2. A proof of the Vieta's formula
3. The mathematical knowledge you think that should be mastered before entering secondary school.
4. Any topics you think is interesting that can demonstrate skills learned this lesson.

Lecture 3: Math editor

Goals: Learn to align, tabular, and set up new environment, renew environment, new command, renew command.

Homework: Complete a stylish article about one of the following topics with at least 2000 english words or 3000 chinese characters, punctuations excluded:

1. One-variable Differentiation: The first principle, rules and a solution of a challenging problem. [Reference book: Thomas calculus, From calculus to analysis]
2. An introduction to analysis: The principle of mathematical induction and its variation of applications. [Reference book: Introduction to real analysis]

Lecture 4: Graph plotting

Goals: Learn pgfplots.