

# The LiteTable Template: Colorful Timetable

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## Abstract

This is the document for LiteTable template, which provides a beautiful design of class schedule with colorful course blocks.

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\*<https://github.com/xiamyphys/litetable>

# 1 Introduction

## 1.1 The purpose of this template

This template provides a beautiful design of class schedule with colorful course blocks.

If you meet bugs when using this template, or you have better suggestions or ideas, or you want to participate in the development of the template or other templates by me, welcome to contact via email [xiamyphys@gmail.com](mailto:xiamyphys@gmail.com).

Also, you can join my  $\text{\LaTeX}$  Template Discussion [QQ Group: 760570712](#) to communicate with me and get the insider preview edition of the template.

## 1.2 Packages required

This template is based on the template [standalone](#). And it requires [tikz](#) package to plot some graphics, [kvoptions](#) and [etoolbox](#) packages to provide global options, [expl3](#)<sup>1</sup> package to support [timelist](#) array, [xeCJK](#) package to support the **Chinese, Simplified** language and [fontawesome5](#) package to provide a set of beautiful icons.

## 1.3 Installing [LiteTable](#) and loading it

For portable version, simply download latest `litetable.cls` file from [GitHub](#) or [CTAN](#) and save it under your working directory. This way of installation is simple and convenient, but you have to manually update `.cls` now and then.

However, I strongly suggest that you should use terminal/cmd to implement the commands to update all the packages (and install this package) to the latest version or switch to portable version instead

```
sudo tlmgr update --self
sudo tlmgr update --all
```

If you are in some areas with awful Internet environment (such as GFW), you can choose proper mirror source or use other means<sup>2</sup>. To learn more, please refer to [How do I update my  \$\text{\LaTeX}\$  distribution?](#)

The template provides two options, [direction](#) and [font](#). Just add the modes of the options you want separately in the square bracket of the command `\documentclass[ ]{litetable}` in your `.tex` file.

## 1.4 Compatibility

The test environments are macOS + Mac $\text{\TeX}$  2023 / Overleaf and they all work fine for  $\text{\LaTeX}$  compiler, Windows, Linux and Unix platforms compatibility unknown.

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<sup>1</sup>Please use the [expl3](#) version after 2023/10/10 to support the e-type variants for expand: `\clist_count:e`.

<sup>2</sup>Please comply with local network regulations.

## 2 Global Options of LiteTable

```
\documentclass[options]{litetable}
```

### 2.1 The **direction** option

This option has two modes, **portrait** and **landscape**, which can make the timetable displayed portrait or horizontally.

### 2.2 The **font** option

This option has two modes, **times** and **libertinus**, which can make the font to be “Times New Roman” or “Libertinus”, and the default mode is “Times New Roman”.<sup>3</sup>

## 3 Commands of LiteTable

### 3.1 The **makeframe** command

```
\makeframe{Timetable -- Semester 5}
```

This command can create an empty class schedule with the title “Timetable – Semester 5”.

### 3.2 The **weeklist** command

```
\weeklist{
  \bfseries\textcolor{W1}{\faIcon{moon}~Monday},
  \bfseries\textcolor{W2}{\faIcon{fire}~Tuesday},
  \bfseries\textcolor{W3}{\faIcon{water}~Wednesday},
  \bfseries\textcolor{W4}{\faIcon{tree}~Thursday},
  \bfseries\textcolor{W5}{\faIcon{coins}~Friday};
  0,.17,.34,.56,.78,1
}
```

This command can add workdays to the top side of the timetable, you can also adjust the format that you like, such as name, color and even the icon<sup>4</sup> before it.

You can also custom every width of the columns in the timetable, just like the Figure above.

The timetable can automatically generate the corresponding number of columns based on the number of workdays you enter. For example, the code above has 5 workdays, a 5-column timetable will be generated.

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<sup>3</sup>Please ensure that your computer has been already installed the font “Libertinus” when using this option.

<sup>4</sup>Supports by the **fontawesome5** package.



The second line of array in the `weeklist` command corresponds to the axis coordinates.

### 3.3 The `timelist` command

```
\timelist [13] {%
    8:05,8:55,10:00,10:50,11:40,13:30,14:20,15:15,16:05,18:30,19:20,20:10;
    8:50,9:40,10:45,11:35,12:25,14:15,15:05,16:00,16:50,19:15,20:05,20:55
}
\timelist [13] {}
```

The command `timelist` has two variables while the second one `{#2}` can add time to the left side of the timetable, and the first line of the content is the start time of the classes while the second line of the content is the end time of the classes, each time separates with a comma (,), the first line and the second line separates with a semicolon (;).

The timetable can automatically generate the corresponding number of rows based on the number of time groups you enter. For example, the code above has 12 groups of times, a 12-row timetable will be generated.

The first optional variable `[#1]` can directly assign the number of rows on the timetable you want without adding time to the left side of the timetable, and there will only be a series of numbers that *aligned vertically to the center of every line*.

TABLE 1. Usage of the two variables.

[ <code>#1</code> ] / <code>{#2}</code>	To use	Not to use
	To use	Not to use
To use	The effect is the description of <code>{#2}</code> , but number of rows assign by <code>[#1]</code>	The effect is the description of <code>[#1]</code>
Not to use	The effect is the description of <code>{#2}</code>	The effect is the description of <code>[#1]</code> before with <i>default format of 12 lines</i>

If you want to use the first variable `[#1]` only, not to add anything in the second variable.

- Assume that `{#2}` has 12 groups of times, and `[#1]` passed a value of 14, then the left side of the timetable will have only 1 – 12 rows with time while the last two rows without time the label of them is still upward, not vertically aligned in the center.
- Assume that `{#2}` has 14 sets of times, and `[#1]` passes a value of 12, then only 12 rows of timetables will be generated with time on the left side of each row, that is, the last two sets of data in `{#2}` will be invalid.

### 3.4 The **weeks** command

```
\weeks{Week 1 -- 16}
```

This command can assign the default value of the 7th variable of the command **course**.

### 3.5 The **course** command

```
\course[H1]{8}{9}{Group Theory}{Building 6 · 211}{Li Ge}[Week 1 -- 16]
```

There are 7 variables in this command.

- The 1st one is the color of the class that you want, from “H1” to “H9”, it’s optional and the default value is “H1”.
- The 2nd – 6th ones is the starting number and ending number, name, address, teacher(s) of the class.
- The last one is the start week and end week of the timetable, it’s optional and the default value is the value that you’ve adjusted in the command **weeks** or it will be “Week 1 – 12”.

### 3.6 The **corner** command

```
\corner{6 pt}
```

This command determines the corner radius of the course block.

### 3.7 The **newday** command

This command can switch the current weekday to the next day, then the course will move right one grid.

### 3.8 The **more** command

```
\more{ · School Start: 04 / 03 / 2024 · Summer Vacation: 05 / 07 / 2024}
```

This command can add remark at the end of the class schedule.

### 3.9 The **sticker** command

```
\sticker{favicon}
```

There will be a sticker on the southeast of the page after you add, otherwise it won’t.

## 4 Version History

The design of this course schedule originated from the student course schedule web page (only teachers and students of this school can access) of the [HDUHelp](#) in [Hangzhou Dianzi University](#). The layout is very beautiful and then I used  $\LaTeX$  to imitate that style and made a class schedule template to share with everyone.

**Version 1.0** was finished on 2023/09/01 and released on  [\$\LaTeX\$  Studio](#) (Hangzhou), where has won the favor of many people.

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**2023/11/01** Update: Version 2.0a

- Supports the course block's corners be round or sharp.
- Supports multiply class schedules in one .tex file.

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**2023/11/05** Update: Version 2.1a

- Supports the libertine font.

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**2024/01/31** Update: Version 2.2a

- Fixed the bug of resolution exceeded.
- Changed paper type to US letter.
- Support custom course start time and end time.
- Support add sticker as you like at the southeast of the page.
- Provide simplified Chinese documentation.

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**2024/02/02** Update: Version 2.3a

- Supports automatically generate the corresponding number of rows based on the number of time groups you enter.
- Timetable can be displayed portrait or horizontally as you like.

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**2024/02/03** Update: Version 2.3b

- Optimized coordinate calculation and improved compilation speed.

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**2024/02/24** Update: Version 2.4a


- Supports custom workday display style.
- Supports hiding time and only showing course program number vertically aligned.
- Supports setting default first and last week.

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**2024/03/01** Update: Version 2.4b

- Fixed the error of *resolution exceed* in the **landscape** mode and added over 7 workdays.
  - Supports custom every width of the columns in the timetable.
  - Optimized the design of round corners, supports custom the radius of corners.
- Thanks for @egreg's code on  $\TeX$  Exchange for [print number of each rows' elements of an array](#).

Axia's Timetable – Semester 6

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1			Engineering Drawing Building 7 · North 3012 Hc Wang Week 1 – 16	Intercultural Comm. Building 3 · 422 Cl Zuo Week 1 – 16	OE, Display Building 7 · North 3012 Wt Su Week 1 – 16		
8:05							
8:50							
2				Radio Direction Athletic Field Ys Yu Week 1 – 16			
8:55							
9:40							
3							
10:00							
10:45							
4							
10:50							
11:35							
5							
11:40							
12:25							
6				Solid State Physics Building 6 · North 408 Kw Sun Week 1 – 16	Group Meeting Building 6 · Middle Yuan Li Week 1 – 16		
13:30							
14:15							
7	Introduction to Cond. Building 6 · Middle 225 Mn Chen Week 1 – 16						
14:20							
15:05							
8		Group Theory Building 6 · Middle 211 Li Ge Week 1 – 16	Situation & Policy 6 Building 6 · North 302 Xr Qi Double Week 10 – 16				
15:15							
16:00							
9							
16:05							
16:50							
10		Mesoscopic Physics Building 6 · Middle 211 Yuan Li & Mn Chen Week 1 – 16	Operational Simu. Building 4 · 411 – 413 Li Zhang Week 1 – 8				
18:30							
19:15							
11							
19:20							
20:05							
12							

· School Start: 04 / 03 / 2024 · Summer Vacation: 05 / 07 / 2024

Axia's Timetable – Semester 5

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	Badminton Badminton Court Ys Yu Week 1 – 18			Sensing System Building 6 · North 110 Bx Cai Week 1 – 18	Optical Lens Design Building 6 · North 422 Hao Ying Week 1 – 18		
8:05							
8:50							
2							
8:55							
9:40							
3	Lens Design Expt. Building 6 · South 402 Hao Ying Week 5 – 15	Marx's Principles Building 6 · North 320 Yang Wang Week 1 – 18	Laster Principle Building 6 Middle · 301 Hd Mao Week 1 – 18	Quantum Mechanics† Building 6 · Middle 225 Mn Chen & Yuan Li Week 1 – 18	Optoelectronics Building 6 · North 202 Rx Li & Yuan Li Week 1 – 18		
10:00							
10:45							
4							
10:50							
11:35							
5							
11:40							
12:25							
6		OE Detection Tech. Building 6 · North 320 Xf Huang Week 1 – 18	Empl Guide   Situ Policy Build 6 · 301   Build 6 · 208 MJH   QXR Week 5 – 14	Modern Phys Expt. 2 Building 6 · South Xx Chen Week 5 – 16	Innovative Practice 4 Building 6 · South 302 Ql Huang Week 5 – 16		
13:30							
14:15							
7							
14:20							
15:05							
8			Computational Phys Building 6 · Middle 215 Wj Rao Week 1 – 18			Group Meeting Building 6 · Middle Yuan Li Week 1 – 18	
15:15							
16:00							
9							
16:05							
16:50							
10			Essay Writing Building 6 · North 416 Yq Shi Week 1 – 18	OE Info Experiment Building 6 · South 302 Yu Zhou Week 5 – 15			
18:30							
19:15							
11							
19:20							
20:05							
12							
20:10							
20:55							

· Hangzhou Asian Games: 23 / 09 / 2023 – 08 / 10 / 2023 · School Starts: 11 / 09 / 2023 · Winter Vacation: 26 / 01 / 2024

# Axia's Timetable – Semester 6

☾ 星期一

🌿 星期二

☎ 星期三

🌲 星期四

🌀 星期五

1  
8:05  
8:50

2  
8:55  
9:40

3  
10:00  
10:45

4  
10:50  
11:35

5  
11:40  
12:25

6  
13:30  
14:15

7  
14:20  
15:05

8  
15:15  
16:00

9  
16:05  
16:50

10  
18:30  
19:15

11  
19:20  
20:05

12

工程制图

第 7 教研楼 · 中 3012  
Hc Wang

Week 1 – 16

跨文化交际

第 3 教研楼 · 422  
Cl Zuo

Week 1 – 16

光电显示技术

第 7 教研楼 · 中 3012  
Wt Su

Week 1 – 16

无线电测向

东边田径场  
Ys Yu

Week 1 – 16

凝聚态物理

第 6 教研楼 · 中 225  
Mn Chen

Week 1 – 16

群论

第 6 教研楼 · 中 211  
Li Ge

Week 1 – 16

形势与政策 6

第 6 教研楼 · 北 302  
Xr Qi

Double Week 10 – 16

固体物理

第 6 教研楼 · 北 408  
Kw Sun

Week 1 – 16

研究生组会

第 6 教研楼 · 中  
Yuan Li

Week 1 – 16

介观物理

第 6 教研楼 · 中 211  
Yuan Li & Mn Chen

Week 1 – 16

高级创业运营仿真

第 4 教研楼 · 411 – 413  
Li Zhang

Week 1 – 8





Axia's Timetable – Semester 5

	🌙 星期一	🔥 星期二	🌊 星期三	🌲 星期四	🌀 星期五	🔺 星期六
1 8:05 8:50	羽毛球 羽毛球场 Ys Yu Week 1 – 18			智能传感系统 第 6 教研楼 · 北 110 Bx Cai Week 1 – 18	光学镜头设计 第 6 教研楼 · 北 422 Hao Ying Week 1 – 18	
2 8:55 9:40						
3 10:00 10:45	光学镜头设计实验 第 6 教研楼 · 南 402 Hao Ying Week 5 – 15	马克思主义原理 第 6 教研楼 · 北 320 Yang Wang Week 1 – 18	激光原理 第 6 教研楼 · 中 301 Hd Mao Week 1 – 18	高等量子力学 第 6 教研楼 · 中 225 Mn Chen & Yuan Li Week 1 – 18	光电子学 第 6 教研楼 · 北 202 Rx Li & Yuan Li Week 1 – 18	
4 10:50 11:35						
5 11:40 12:25						
6 13:30 14:15		光电检测技术 第 6 教研楼 · 北 320 Xf Huang Week 1 – 18	就业 3   形策 5 6 教中 301   6 教北 208 MJH   QXR Week 5 – 14	近代物理实验 2 第 6 教研楼 · 南 Xx Chen Week 5 – 16	光电创新实践 4 第 6 教研楼 · 南 302 Ql Huang Week 5 – 16	
7 14:20 15:05						
8 15:15 16:00			计算物理 第 6 教研楼 · 中 215 Wj Rao Week 1 – 18		研究生组会 第 6 教研楼 · 中 Yuan Li Week 1 – 18	
9 16:05 16:50						
10 18:30 19:15			论文写作指导 第 6 教研楼 · 北 416 Yq Shi Week 1 – 18	光电信息技术实验 第 6 教研楼 · 南 302 Yu Zhou Week 5 – 15		
11 19:20 20:05						
12 20:10 20:55						

