litetable 宏包 — 多彩的课程表*

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1 介绍

litetable 宏包提供了一个多彩的课程表设计，基于 TikZ 由 expl3 开发. 支持 pdfLaTeX，XeLaTeX，ApLaTeX 和 LuaLaTeX 等多种编译方式. 点击跳转 [English] [繁体粵語] 手册.

2 用户接口

要加载此宏包，只需写下

```
\usepackage{litetable}
```

litetable (*env.*) 环境 `litetable` 可生成空白课程表，需在命令 `\timelist` 和 `\weeklist` 后执行

```
\begin{litetable} [⟨keys⟩] {⟨title⟩} [⟨keys⟩] ... \end{litetable}
```

强制参数用于设定课程表标题，可选参数接受以下键

scale = ⟨*float*⟩ 可设置课程表的缩放比例（默认值: 1.0）.

color = ⟨*color*⟩ 可设置课程表框架的背景色（默认值：gray），键名可省略.

sem = ⟨*string*⟩ 可设置页面右上角的学期信息.

hline = ⟨*string*⟩ 可设置水平线的样式（默认值：solid）.

`\weeklist` `\weeklist [⟨keys⟩] {⟨list⟩} [⟨keys⟩]`

强制参数接收数组，用于设置课程表顶部的工作日列表和列宽. 可选参数接受以下键

format = ⟨*format commands*⟩ 可设置工作日列表格式（默认值：`\bfseries`）.

sep = ⟨*string*⟩ 可设置工作日列表的分隔符.

```
\weeklist [ format = \bfseries \scshape, sep = \textbar ]
  { Mon -> 1.05, Tue -> 1.05, Wed -> 1.1, Thu -> 1.1, Fri -> .9 }
```

*https://github.com/myhsia/litetable, https://ctan.org/pkg/litetable

†郭李军开发了解析 ⟨*left*⟩ -> ⟨*right*⟩ 型数据结构的接口.

\timelist `\timelist [⟨keys⟩] {⟨list⟩} [⟨keys⟩]`

强制参数均接收数组，用于设置课程表的左侧的时间列表. 可选参数接受以下键

numformat = ⟨*format*⟩ 可设置时间列表的序号字体（默认值：`\ttfamily \bfseries`）.

timeformat = ⟨*format*⟩ 可设置时间列表的时间字体（默认值：`\ttfamily`）.

hidetime = ⟨*true*|**false**⟩用于隐藏时间列表中的时间，只保留序号.（初始值：`false`）.

```
\timelist [ numformat = \bfseries, timeformat = \ttfamily ]
  { 08:30 -> 10:00, 10:30 -> 12:00, 13:00 -> 14:30, 15:00 -> 16:30 }
```

\course `\course [⟨keys⟩] {⟨start⟩} [⟨keys⟩] {⟨end⟩} [⟨keys⟩]`

用于在当前工作日添加课程盒子，需在 `litetable` 环境中执行. 两个强制参数分别用于设置课程的开始和结束序号. 可选参数接收下列键

color = ⟨*color*⟩ 用于设置课程盒子的颜色（默认值：`teal`）. 键名可省略.

subject = ⟨*string*⟩ 用于设置课程名称.

location = ⟨*string*⟩ 用于设置课程地点.

lecture = ⟨*string*⟩ 用于设置授课教师.

comment = ⟨*string*⟩ 用于给课程添加脚注.

TEXhackers note:

- 若 ⟨*start*⟩ = ⟨*end*⟩（课程盒子的高度为 1），则 **location** 和 **lecture** 将输出在同一行，并且 **comment** 将隐藏.
- 即使误将 ⟨*start*⟩ 和 ⟨*end*⟩ 写反，模板也会自动纠正.
- 若 **location** 和 **lecture** 均未使用，则 **subject** 将输出在课程盒子的竖直方向中心.
- 超出课程表范围的课程盒子将不显示，并会返回警告. 输入用例见 Appendix 3.

\newday `\newday [⟨integral value⟩]`

使其后面添加的课程盒子后移 ⟨*intergal value*⟩ 个工作日. 可选参数的默认值为 1.

\more `\more {⟨comment⟩}`

在课程表的右下角添加备注.

3 工作示例

```
\documentclass[svgnames, a4paper]{article}

\usepackage{litetable, twemojis}
\usepackage[osf, mono = false]{libertine}
\usepackage[T1]{fontenc}

\begin{document}

\weeklist [ format = \bfseries \scshape, sep = \textbar ]
  {
    \texttwemoji{1f312} Mon -> 1.05, \texttwemoji{1f525} Tue -> 1.05,
    \texttwemoji{1f30a} Wed -> 1.1,  \texttwemoji{1f332} Thu -> .9,
    \texttwemoji{1fa99} Fri -> .9
  }
\timelist [ numformat = \ttfamily \bfseries, timeformat = \ttfamily ]
  {
    08:05 -> 08:50, 08:55 -> 09:40, 10:00 -> 10:45, 10:50 -> 11:35,
    11:40 -> 12:25, 13:30 -> 14:15, 14:20 -> 15:05, 15:15 -> 16:00,
    16:05 -> 16:50, 18:30 -> 19:15, 19:20 -> 20:05, 20:10 -> 20:55
  }
\begin{litetable} [ DarkBlue, sem = SEM 7, hline = dashed ]
  {Course Schedule}
  \course [ subject = interface3, comment = \TeX~Live 2025,
            lecture = The \LaTeX\ Project, DarkBlue ] {4} {5}
  \newday
  \course [ subject = expl3, lecture = The \LaTeX\ Project ] {8} {8}
  \newday
  \course [ subject = Keep on \TeX ing, lecture = Donald E. Knuth,
            location = Stanford University, Purple ] {10} {11}
  \newday
  \course [ subject = Ti\textit k\/Z, lecture = \textsc{pgf},
            Crimson, comment = Version 3.1.10 ] {3} {5}
  \more {Programme Duration: 09 / 2021 -- 07 / 2025}
\end{litetable}

\end{document}
```

Course Schedule

SEM 7

	Mon	Tue	Wed	Thu	Fri
1	08:05 08:50				
2	08:55 09:40				
3	10:00 10:45			TikZ PGF Version 3.1.10	
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	expl3 The LaTeX Project			
9	16:05 16:50				
10	18:30 19:15		Keep on TeXing Stanford University Donald E. Knuth		
11	19:20 20:05				
12	20:10 20:55				

interface3
The LaTeX Project
TeX Live 2025

Programme Duration: 09 / 2021 – 07 / 2025

A The Source Code

```
⟨*package⟩
⟨@@=ltbl⟩
\ProvidesExplPackage {litetable} {2025-11-12} {v3.8B}
  {A Colorful Timetable Design}
\RequirePackage{tikz}
```

Warning Broadcast

```
\cs_new_protected:Npn \__ltbl_msg_new:nn #1#2
  { \msg_new:nnn { litetable } {#1} {#2} }
\cs_new_protected:Npn \__ltbl_msg_warning:n #1
  { \msg_warning:nn { litetable } {#1} }
\__ltbl_msg_new:nn { course }
  { \exp_not:N \course ~ box(s) ~ exceed ~ workdays ~ were ~ ignored }
```

__ltbl_get_left:nN
__ltbl_get_left:eN
__ltbl_get_right:nN
__ltbl_get_right:eN

Handle ⟨*left*⟩ -> ⟨*right*⟩ data structures (by Lijun Guo)

```
\cs_new_protected_nopar:Npn \__ltbl_get_left:nN #1#2
  {
    \group_begin: \seq_set_split:Nnn \l__ltbl_tmpa_seq { -> } {#1}
    \exp_args:NNNe \group_end:
    \tl_set:Nn #2 { \seq_item:Nn \l__ltbl_tmpa_seq { 1 } }
  }
\cs_new_protected_nopar:Npn \__ltbl_get_right:nN #1#2
  {
    \group_begin: \seq_set_split:Nnn \l__ltbl_tmpa_seq { -> } {#1}
    \exp_args:NNNe \group_end:
    \tl_set:Nn #2 { \seq_item:Nn \l__ltbl_tmpa_seq { 2 } }
  }
\cs_generate_variant:Nn \__ltbl_get_left:nN  { eN }
\cs_generate_variant:Nn \__ltbl_get_right:nN { eN }
```

(*End of definition for* `\__ltbl_get_left:nN` *and* `\__ltbl_get_right:nN`.)

A.1 User's Interface

\weeklist

Set a list of working days and the width of each column at the top of the timetable.

```
\NewDocumentCommand \weeklist { O{} m O{} }
  {
    \keys_set:nn { litetable / weeklist } { #1, #3 }
    \__ltbl_weeklist:n {#2}
  }
```

Key–value definitions for the `\weeklist` command.

\l__ltbl_weeklist_format_tl
\l__ltbl_weeklist_sep_tl

```
\keys_define:nn { litetable / weeklist }
  {
    format   .tl_set:N  = \l__ltbl_weeklist_format_tl,
      format .initial:n = \bfseries,
    sep      .tl_set:N  = \l__ltbl_weeklist_sep_tl
  }
```

(*End of definition for* `\weeklist`, `\l__ltbl_weeklist_format_tl`, *and* `\l__ltbl_weeklist_sep_tl`. *This function is documented on page* 1.)

\timelist Set the time list on the left side of the timetable.

```
\NewDocumentCommand \timelist { O{} m O{} }
  {
    \keys_set:nn { litetable / timelist } { #1, #3 }
    \__ltbl_timelist:n {#2}
  }
```

Key–value definitions for the `\timelist` command.

\l__ltbl_timelist_numformat_tl
\l__ltbl_timelist_timeformat_tl
\l__ltbl_timelist_hidetime_bool

```
\keys_define:nn { litetable / timelist }
  {
    numformat    .tl_set:N   = \l__ltbl_timelist_numformat_tl,
      numformat  .initial:n  = \ttfamily \bfseries,
    timeformat   .tl_set:N   = \l__ltbl_timelist_timeformat_tl,
      timeformat .initial:n  = \ttfamily,
    hidetime     .bool_set:N = \l__ltbl_timelist_hidetime_bool,
      hidetime   .initial:n  = false,
      hidetime   .default:n  = true
  }
```

(*End of definition for* `\timelist` *and others. This function is documented on page* 2.)

\l__ltbl_textwidth_dim
\l__ltbl_textheight_dim

Dimensions for the physical width and height of the timetable, controlled by `\l_@@_scale_fp`.

```
\dim_new:N \l__ltbl_textwidth_dim
\dim_new:N \l__ltbl_textheight_dim
```

(*End of definition for* `\l__ltbl_textwidth_dim` *and* `\l__ltbl_textheight_dim`.)

`litetable` (*env.*) Create a blank timetable frame.

```
\NewDocumentEnvironment { litetable } { O{} m O{} }
  {
    \clearpage \thispagestyle{empty}
    \group_begin:
    \dim_gset:Nn \l__ltbl_textwidth_dim
      { \fp_eval:n { \l__ltbl_scale_fp } \paperwidth }
    \dim_gset:Nn \l__ltbl_textheight_dim
      { \fp_eval:n { \l__ltbl_scale_fp } \paperheight }
    \keys_set:nn { litetable / frame } { #1, #3 }
    \tikzpicture [ remember~picture, overlay ]
      \__ltbl_maketable:n {#2}
  } { \endtikzpicture \group_end: \clearpage }
```

Key–value definitions for the `litetable` command.

\l__ltbl_scale_fp
\l__ltbl_bg_color_tl
\l__ltbl_hline_type_tl
\l__ltbl_bg_sem_tl

```
\keys_define:nn { litetable / frame }
  {
    scale   .fp_set:N  = \l__ltbl_scale_fp,
      scale .initial:n = 1.0,
    color   .tl_set:N  = \l__ltbl_bg_color_tl,
      color .initial:n = gray,
    hline   .tl_set:N  = \l__ltbl_hline_type_tl,
      hline .initial:n = solid,
    sem     .tl_set:N  = \l__ltbl_bg_sem_tl,
    unknown .code:n    = \tl_if_novalue:nF {#1}
      { \tl_set_eq:NN \l__ltbl_bg_color_tl \l_keys_key_tl }
  }
```

(*End of definition for* `\l__ltbl_scale_fp` *and others.*)

`\course` Add course boxes on the current workday

```
\NewDocumentCommand \course { O{} m O{} m O{} }
  {
    \group_begin:
    \bool_lazy_any:nTF
      {
        {
          \int_compare_p:nNn { \l__ltbl_weekday_int } >
            { \clist_count:N \l__ltbl_week_clist }
        }
        { \int_compare_p:nNn {#2} > { \clist_count:N \l__ltbl_time_clist } }
        { \int_compare_p:nNn {#4} > { \clist_count:N \l__ltbl_time_clist } }
      } { \__ltbl_msg_warning:n { course } }
      {
        \keys_set:nn { litetable / course } { #1, #3, #5 }
        \int_compare:nNnTF {#2} < {#4}
          { \__ltbl_course_box_aux:nn {#2} {#4} }
          { \__ltbl_course_box_aux:nn {#4} {#2} }
      }
    \group_end:
  }
```

Key–value definitions for the `\course` command.

`\l__ltbl_course_color_tl` `\l__ltbl_course_subject_tl` `\l__ltbl_course_lecture_tl` `\l__ltbl_course_location_tl` `\l__ltbl_course_comment_tl`

```
\keys_define:nn { litetable / course }
  {
    color    .tl_set:N  = \l__ltbl_course_color_tl,
      color  .initial:n = black,
    subject  .tl_set:N  = \l__ltbl_course_subject_tl,
    lecture  .tl_set:N  = \l__ltbl_course_lecture_tl,
    location .tl_set:N  = \l__ltbl_course_location_tl,
    comment  .tl_set:N  = \l__ltbl_course_comment_tl,
    unknown  .code:n    = \tl_if_novalue:nF {#1}
      { \tl_set_eq:NN \l__ltbl_course_color_tl \l_keys_key_tl }
  }
```

(*End of definition for* `\course` *and others. This function is documented on page* 2.)

`\more` Add a comment at the southwest corner of the timetable.

```
\NewDocumentCommand \more { m }
  {
    \node [ yshift = .5\l__ltbl_time_vunit_dim, left = 1ex,
            darkgray, font = \small \bfseries
          ] at (current~page.south~east) {#1};
  }
```

(*End of definition for* `\more`*. This function is documented on page* 2.)

`\newday` Move the next course boxes right ⟨*integral value*⟩ working days.

```
\NewDocumentCommand \newday { O{1} } { \int_add:Nn \l__ltbl_weekday_int {#1} }
\int_new:N \l__ltbl_weekday_int
\int_set:Nn \l__ltbl_weekday_int { 1 }
```

(*End of definition for* `\newday`*. This function is documented on page* 2.)

A.2 Internal Auxiliary

\l__ltbl_week_ratio_clist
\l__ltbl_week_accum_clist
\l__ltbl_week_num_fp
\l__ltbl_week_hunit_dim

The ratios of every working days, the accumulation of the ratios of every working days, the sequence number of every working days, the horizontal width unit of the timetable.

```
\clist_new:N \l__ltbl_week_ratio_clist
\clist_new:N \l__ltbl_week_accum_clist
\fp_new:N \l__ltbl_week_num_fp
\dim_new:N \l__ltbl_week_hunit_dim
```

(*End of definition for* `\l__ltbl_week_ratio_clist` *and others.*)

__ltbl_weeklist:n

Define the auxiliary command of `\weeklist`.

```
\cs_new_protected_nopar:Npn \__ltbl_weeklist:n #1
  {
    \clist_set:Nn \l__ltbl_week_clist {#1}
    \exp_args:NNf \clist_map_inline:Nn \l__ltbl_week_clist
      {
        \__ltbl_get_right:eN {##1} \l__ltbl_tmpb_tl
        \clist_put_right:Ne \l__ltbl_week_ratio_clist { \l__ltbl_tmpb_tl }
      }
    \int_step_inline:nn { \clist_count:N \l__ltbl_week_clist }
      {
        \clist_clear:N \l__ltbl_week_accumtmp_clist
        \int_step_inline:nn {##1}
          {
            \clist_put_right:Ne \l__ltbl_week_accumtmp_clist
              { \clist_item:Nn \l__ltbl_week_ratio_clist {####1} }
          }
        \clist_put_right:Ne \l__ltbl_week_accum_clist
          { \fp_eval:n { \clist_use:Nn \l__ltbl_week_accumtmp_clist { + } } }
      }
    \fp_set:Nn \l__ltbl_week_num_fp
      {
        \clist_item:Nn \l__ltbl_week_accum_clist
          { \clist_count:N \l__ltbl_week_clist }
      }
    \dim_set:Nn \l__ltbl_week_hunit_dim
      { \fp_eval:n { 14/\l__ltbl_week_num_fp/15 } \paperwidth }
  }
```

(*End of definition for* `\__ltbl_weeklist:n`.)

\l__ltbl_time_num_int
\l__ltbl_time_vunit_dim

The sequence number of the time list, and the vertical gap between the start and end time.

```
\int_new:N \l__ltbl_time_num_int
\dim_new:N \l__ltbl_time_vunit_dim
```

(*End of definition for* `\l__ltbl_time_num_int` *and* `\l__ltbl_time_vunit_dim`.)

__ltbl_timelist:n

Define the auxiliary command of `\timelist`.

```
\cs_new_protected_nopar:Npn \__ltbl_timelist:n #1
  {
    \clist_set:Nn \l__ltbl_time_clist {#1}
    \int_set:Nn \l__ltbl_time_num_int { \clist_count:N \l__ltbl_time_clist }
    \dim_set:Nn \l__ltbl_time_vunit_dim
      { \fp_eval:n { 1/(2\l__ltbl_time_num_int + 3.5) } \paperheight }
  }
```

(*End of definition for* `\__ltbl_timelist:n`.)

`\l__ltbl_timelist_shift_dim` Store the vertical shift of the sequence number of the time list.

```
\dim_new:N \l__ltbl_timelist_shift_dim
```

(*End of definition for* `\l__ltbl_timelist_shift_dim`.)

`\__ltbl_maketable:n` Define the auxiliary command of the `litetable` environment.

```
\cs_new_protected_nopar:Npn \__ltbl_maketable:n #1
  {
    \fill [ \l__ltbl_bg_color_tl!5 ]
      (current~page.north~west) rectangle +
      (\paperwidth, -1.5\l__ltbl_time_vunit_dim)
     node [ midway, black, font = \huge \bfseries ] {#1};
    \tl_if_empty:NF \l__ltbl_bg_sem_tl
      {
        \node [ shift = {(-.02\paperwidth, -.75\l__ltbl_time_vunit_dim)},
                left, rectangle, fill = DarkBlue!10, text = DarkBlue!60,
                inner~sep = 2ex, rounded~corners = 8pt, font = \large
              ] at (current~page.north~east) { \l__ltbl_bg_sem_tl };
      }
    \int_step_inline:nnnn { 0 } { 2 } { \l__ltbl_time_num_int }
      {
        \filldraw [ fill = \l__ltbl_bg_color_tl!5, thick,
                    draw = gray, \l__ltbl_hline_type_tl ]
          ([shift =
            {(-.4pt, \fp_eval:n { -2 * ##1 - 2.5 } \l__ltbl_time_vunit_dim)}
           ]current~page.north~west
          ) rectangle + (\paperwidth + .8pt, -2\l__ltbl_time_vunit_dim);
      }
    \bool_if:NTF \l__ltbl_timelist_hidetime_bool
      {
        \dim_set:Nn \l__ltbl_timelist_shift_dim
          { -1.5\l__ltbl_time_vunit_dim }
      }
      {
        \dim_set:Nn \l__ltbl_timelist_shift_dim
          { -\l__ltbl_time_vunit_dim }
      }
    \int_step_inline:nn { \l__ltbl_time_num_int }
      {
        \node [ darkgray!80, shift =
                {(
                  \paperwidth/30,
                  -2 * ##1 \l__ltbl_time_vunit_dim +
                  \l__ltbl_timelist_shift_dim
                )}, font = \large \l__ltbl_timelist_numformat_tl
              ] at (current~page.north~west) {##1};
      }
    \bool_if:NF \l__ltbl_timelist_hidetime_bool
      {
        \int_step_inline:nn { \clist_count:N \l__ltbl_time_clist }
          {
            \__ltbl_get_left:eN  { \clist_item:Nn \l__ltbl_time_clist {##1} }
```

```
              \l__ltbl_tmpa_tl
            \__ltbl_get_right:eN { \clist_item:Nn \l__ltbl_time_clist {##1} }
              \l__ltbl_tmpb_tl
            \node [ gray, align = center, shift =
                    {(
                      \paperwidth/30,
                      \fp_eval:n { -1.85 - 2 * ##1 } \l__ltbl_time_vunit_dim
                    )}, font = \l__ltbl_timelist_timeformat_tl
                  ] at (current~page.north~west)
              { \l__ltbl_tmpa_tl\\ \l__ltbl_tmpb_tl };
          }
      }
    \int_step_inline:nn { \clist_count:N \l__ltbl_week_clist }
      {
        \int_compare:nNnF {##1} = { \clist_count:N \l__ltbl_week_clist }
          {
            \node [ shift =
                    {(\fp_eval:n
                        {
                          14 * \clist_item:Nn \l__ltbl_week_accum_clist {##1}/
                          \l__ltbl_week_num_fp/15 + 1/15
                        } \paperwidth, -2\l__ltbl_time_vunit_dim
                    )}, darkgray, font = \ttfamily
                  ] at (current~page.north~west) { \l__ltbl_weeklist_sep_tl };
          }
        \__ltbl_get_left:eN { \clist_item:Nn \l__ltbl_week_clist {##1} }
          \l__ltbl_tmpa_tl
        \node [ shift =
                {(\fp_eval:n
                    {
                      14(
                        \clist_item:Nn \l__ltbl_week_accum_clist {##1} -
                        \clist_item:Nn \l__ltbl_week_ratio_clist {##1}/2
                        )/\l__ltbl_week_num_fp/15 + 1/15
                    } \paperwidth, -2\l__ltbl_time_vunit_dim
                )}, font = \large \l__ltbl_weeklist_format_tl
              ] at (current~page.north~west) { \l__ltbl_tmpa_tl };
      }
  }
```

(*End of definition for* `\__ltbl_maketable:n`.)

`\l__ltbl_course_shift_dim` Store the vertical shift of the course subject in course box.

```
\dim_new:N \l__ltbl_course_shift_dim
```

(*End of definition for* `\l__ltbl_course_shift_dim`.)

`\__ltbl_course_box_aux:nn` Define the auxiliary command of `\course`.

```
\cs_new_protected_nopar:Npn \__ltbl_course_box_aux:nn #1#2
  {
    \begin{scope}
      \clip [ preaction = { draw, ultra~thick, \l__ltbl_course_color_tl!60 },
              preaction = { fill, \l__ltbl_course_color_tl!10 },
              rounded~corners = 8pt ]
        ([shift =
```

```
          {(
            \fp_eval:n
              {
                \clist_item:Nn \l__ltbl_week_accum_clist
                  { \l__ltbl_weekday_int } -
                \clist_item:Nn \l__ltbl_week_ratio_clist
                  { \l__ltbl_weekday_int }
              } \l__ltbl_week_hunit_dim + \paperwidth/15 + 1.2pt,
            \fp_eval:n { -.5 - 2 * #1 } \l__ltbl_time_vunit_dim - 1.2pt
        )}]current~page.north~west) rectangle +
        (
          \clist_item:Nn \l__ltbl_week_ratio_clist
            { \l__ltbl_weekday_int } \l__ltbl_week_hunit_dim - 2.4pt,
          \fp_eval:n { 2(#1 - #2 - 1) } \l__ltbl_time_vunit_dim + 2.4pt
        );
      \fill [ \l__ltbl_course_color_tl!60 ]
        ([shift =
          {(
            \fp_eval:n
              {
                \clist_item:Nn \l__ltbl_week_accum_clist
                  { \l__ltbl_weekday_int } -
                \clist_item:Nn \l__ltbl_week_ratio_clist
                  { \l__ltbl_weekday_int }
              } \l__ltbl_week_hunit_dim + \paperwidth/15,
            \fp_eval:n { -.5 - 2 * #1 } \l__ltbl_time_vunit_dim
        )}]current~page.north~west) rectangle +
        (
          \clist_item:Nn \l__ltbl_week_ratio_clist
            { \l__ltbl_weekday_int } \l__ltbl_week_hunit_dim,
          -\l__ltbl_time_vunit_dim/2
        );
    \end{scope}
    \int_compare:nNnTF {#1} = {#2}
      {
        \bool_lazy_and:nnTF
          { \tl_if_empty_p:N \l__ltbl_course_location_tl   }
          { \tl_if_empty_p:N \l__ltbl_course_lecture_tl    }
          { \tl_set:Nn \l__ltbl_course_anchor_tl {       } }
          { \tl_set:Nn \l__ltbl_course_anchor_tl { above } }
        \node
          [ \l__ltbl_course_anchor_tl, \l__ltbl_course_color_tl!60, shift =
            {(
              \fp_eval:n
                {
                  \clist_item:Nn \l__ltbl_week_accum_clist
                    { \l__ltbl_weekday_int } -
                  \clist_item:Nn \l__ltbl_week_ratio_clist
                    { \l__ltbl_weekday_int }/2
                } \l__ltbl_week_hunit_dim + \paperwidth/15,
              \fp_eval:n { -1.75 - #1 - #2 } \l__ltbl_time_vunit_dim
            )}, align = center, font = \bfseries
          ] at (current~page.north~west) { \l__ltbl_course_subject_tl };
        \bool_lazy_or:nnTF
```

```
      { \tl_if_empty_p:N \l__ltbl_course_location_tl }
      { \tl_if_empty_p:N \l__ltbl_course_lecture_tl  }
      { \tl_set:Nn \l__ltbl_s@course_sep_tl {    }   }
      { \tl_set:Nn \l__ltbl_s@course_sep_tl { ,~ }   }
    \node
      [ shift =
      {(
        \fp_eval:n
          {
            \clist_item:Nn \l__ltbl_week_accum_clist
              { \l__ltbl_weekday_int } -
            \clist_item:Nn \l__ltbl_week_ratio_clist
              { \l__ltbl_weekday_int }/2
          } \l__ltbl_week_hunit_dim + \paperwidth/15,
        \fp_eval:n { -1.75 - #1 - #2 } \l__ltbl_time_vunit_dim
      )}, below, \l__ltbl_course_color_tl!60, align = center
      ] at (current~page.north~west)
      {
        \l__ltbl_course_location_tl
        \l__ltbl_s@course_sep_tl
        \l__ltbl_course_lecture_tl
      };
  }
  {
    \bool_lazy_and:nnTF
      { \tl_if_empty_p:N \l__ltbl_course_location_tl }
      { \tl_if_empty_p:N \l__ltbl_course_lecture_tl }
      {
        \tl_set:Nn \l__ltbl_course_anchor_tl { }
        \dim_set:Nn \l__ltbl_course_shift_dim { 0pt }
      }
      {
        \tl_set:Nn \l__ltbl_course_anchor_tl { above }
        \dim_set:Nn \l__ltbl_course_shift_dim { \l__ltbl_time_vunit_dim/8 }
      }
    \node
      [ \l__ltbl_course_color_tl!60, align = center, shift =
      {(
        \fp_eval:n
          {
            \clist_item:Nn \l__ltbl_week_accum_clist
              { \l__ltbl_weekday_int } -
            \clist_item:Nn \l__ltbl_week_ratio_clist
              { \l__ltbl_weekday_int }/2
          } \l__ltbl_week_hunit_dim + \paperwidth/15,
        \fp_eval:n { -1.5 - #1 - #2 } \l__ltbl_time_vunit_dim +
        \l__ltbl_course_shift_dim
      )}, font = \large \bfseries, \l__ltbl_course_anchor_tl
      ] at (current~page.north~west) { \l__ltbl_course_subject_tl };
    \bool_lazy_or:nnTF
      { \tl_if_empty_p:N \l__ltbl_course_location_tl }
      { \tl_if_empty_p:N \l__ltbl_course_lecture_tl  }
      { \tl_set:Nn \l__ltbl_course_sep_tl {    }     }
      { \tl_set:Nn \l__ltbl_course_sep_tl { \\ }     }
```

```
        \node
          [ shift =
            {(
              \fp_eval:n
                {
                  \clist_item:Nn \l__ltbl_week_accum_clist
                    { \l__ltbl_weekday_int } -
                  \clist_item:Nn \l__ltbl_week_ratio_clist
                    { \l__ltbl_weekday_int }/2
                } \l__ltbl_week_hunit_dim + \paperwidth/15,
              \fp_eval:n { -1.625 - #1 - #2 } \l__ltbl_time_vunit_dim
            )}, below, \l__ltbl_course_color_tl!60, align = center
          ] at (current~page.north~west)
          {
            \l__ltbl_course_location_tl
            \l__ltbl_course_sep_tl
            \l__ltbl_course_lecture_tl
          };
        \node
          [ shift =
            {(
              \clist_item:Nn \l__ltbl_week_accum_clist
                { \l__ltbl_weekday_int } \l__ltbl_week_hunit_dim +
              \paperwidth/15,
              \fp_eval:n { -2.5 - 2 * #2 } \l__ltbl_time_vunit_dim
            )}, above~left, \l__ltbl_course_color_tl!60, outer~sep = .5ex
          ] at (current~page.north~west) { \l__ltbl_course_comment_tl };
      }
  }
```

(*End of definition for* `\__ltbl_course_box_aux:nn`.)

```
\file_input_stop:
```

⟨/package⟩

索引

意大利体的数字表示描述对应索引项的页码；带下划线的数字表示定义对应索引项的代码行号；罗马字体的数字表示使用对应索引项的代码行号.