The litetable Package — Colorful Timetable*

Mingyu Xia <xiamingyu@westlake.edu.cn>†

Released 2025-09-23 v3.8A

1 Introduction

The litetable package provides a colorful design of timetable, developed by expl3 based on Ti*k*Z. It supports various compilation methods, such as pdfLaTeX, XeLaTeX, ApLaTeX, LuaLaTeX, etc. Click to jump to the manual's [Chinese Version] [Cantonese Version].

2 Usage

To load this package, write the line

```
\usepackage{litetable}
```

`litetable` (*env.*) The `litetable` environment can create a blank timetable frame, and it should be executed after commands `\timelist` and `\weeklist`.

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

The mandatory argument can set the title of the timetable, and the optional argument accepts the following keys

scale = ⟨*float*⟩ can set the scale of the timetable (Default: `1.0`).

color = ⟨*string*⟩ can set the background color (Default: `gray`), this key's name could be omitted.

sem = ⟨*string*⟩ can set the semester information at the northeast corner of the page.

hline = ⟨*string*⟩ can set style of the horizontal lines (Default: `solid`).

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

The mandatory argument accepts an array to set a list of working days and the width of each column at the top of the timetable. The optional argument accepts the following keys

format = ⟨*format commands*⟩ can set the font for the list of working days (Default: `\bfseries`).

sep = ⟨*dim*⟩ can set the separator of the list of working days.

```
\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

†Lijun Guo developed an interface to parse ⟨*left*⟩ -> ⟨*right*⟩ data structures.

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

The mandatory argument accepts an array to set the time list on the left side of the timetable. The optional argument accepts the following keys

numformat = ⟨*format commands*⟩ can set the font for the sequence number of the time list (Default: `\ttfamily \bfseries`).

timeformat = ⟨*format commands*⟩ can set the font for the time of the time list. (Default: `\ttfamily`).

hidetime = ⟨*true* | **false**⟩ hide the time in the time list and only retain the sequence number. The initial value is `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⟩]`

It's used to add course boxes on the current workday, and needs to be executed within the `litetable` environment. The two mandatory arguments can set the start and ends of the course respectively, the optional argument accepts the following keys

color = ⟨*string*⟩ can set the color of the course box (Default: `teal`), this key's name could be omitted.

subject = ⟨*string*⟩ can set the name of the course.

location = ⟨*string*⟩ can set the location of the course.

lecture = ⟨*string*⟩ can set the lecture of the course.

comment = ⟨*string*⟩ can add footnote to the course.

TEXhackers note:

- If ⟨*start*⟩ = ⟨*end*⟩ (the height of the course box is 1 unit), then **location** and **lecture** will be outputted in the same line and **comment** will be hidden.
- The template will correct automatically if ⟨*start*⟩ and ⟨*end*⟩ were misplaced.
- If neither **location** nor **lecture** is assigned value, then **subject** will be outputted in the vertical center of the course box.
- Course boxes that exceed the range of the timetable won't display and it will return a warning. The input example refers to Appendix 3.

`\newday` `\newday [⟨integral value⟩]`

It can move the next course boxes right ⟨*integral value*⟩ working days. The default value of the optional argument is 1.

`\more` `\more {⟨comment⟩}`

It can add a comment at the southwest corner of the timetable.

3 Working Example

```
\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	interface3 The LaTeX Project			
5	11:40 12:25	TeX Live 2025			
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				

Programme Duration: 09 / 2021 – 07 / 2025

A The Source Code

```
⟨*package⟩
⟨@@=ltbl⟩
\ProvidesExplPackage {litetable} {2025-09-23} {v3.8A}
  {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 }
```

\l__ltbl_scale_fp
\l__ltbl_bg_color_tl
\l__ltbl_hline_type_tl
\l__ltbl_bg_sem_tl

Key–value definitions for the `litetable` command.

```
\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⟩

Index

The italic numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.

Symbols

\\ 214, 359

B

\begin 247
\bfseries 34, 45, 112, 164, 303, 353
bool commands:
  \bool_if:NTF 181, 200
  \bool_lazy_and:nnTF 287, 330
  \bool_lazy_any:nTF 81
  \bool_lazy_or:nnTF 305, 355

C

\clearpage 56, 65
\clip 248
clist commands:
  \clist_clear:N 132
  \clist_count:N 85, 87, 88, 130, 144, 154, 202, 217, 219
  \clist_item:Nn 136, 143, 204, 206, 224, 230, 236, 237, 255, 257, 263, 272, 274, 280, 297, 299, 315, 317, 346, 348, 365, 367, 381
  \clist_map_inline:Nn 125

\clist_new:N 118, 119
\clist_put_right:Nn 128, 135, 138
\clist_set:Nn 124, 153
\clist_use:Nn 139
\course . . . . . 2, III, VI, 11, 78
cs commands:
\cs_generate_variant:Nn 24, 25
\cs_new_protected:Npn 6, 8
\cs_new_protected_nopar:Npn 12, 18, 122, 151, 159, 245

D

dim commands:
\dim_gset:Nn 58, 60
\dim_new:N 52, 53, 121, 150, 158, 244
\dim_set:Nn . . . 146, 155, 183, 187, 335, 339

E

\end 284
\endtikzpicture 65
environments:
litetable 1, 54
exp commands:
\exp_args:NNf 125
\exp_args:NNNe 15, 21
\exp_not:N 11

F

file commands:
\file_input_stop: 389
\fill 161, 267
\filldraw 174
fp commands:
\fp_eval:n . . 59, 61, 139, 147, 156, 177, 211, 222, 233, 253, 260, 265, 270, 277, 295, 302, 313, 320, 344, 351, 363, 370, 384
\fp_new:N 120
\fp_set:Nn 141

G

group commands:
\group_begin: 14, 20, 57, 80
\group_end: 15, 21, 65, 96

H

\huge 164

I

int commands:
\int_add:Nn 115
\int_compare:nNnTF 92, 219, 285
\int_compare_p:nNn 84, 87, 88
\int_new:N 116, 149
\int_set:Nn 117, 154
\int_step_inline:nn 130, 133, 190, 202, 217
\int_step_inline:nnnn 172

K

keys commands:
\keys_define:nn 31, 42, 66, 98
\l_keys_key_tl 76, 107
\keys_set:nn 28, 39, 62, 91

L

\large 169, 197, 240, 353
litetable (env.) 1, 54
ltbl internal commands:
\l__ltbl_bg_color_tl 66, 161, 174
\l__ltbl_bg_sem_tl 66, 165, 170
\l__ltbl_course_anchor_tl 290, 291, 293, 334, 338, 353
__ltbl_course_box_aux:nn 93, 94, 245, 245
\l__ltbl_course_color_tl 98, 248, 249, 267, 293, 321, 342, 371, 385
\l__ltbl_course_comment_tl . . . 98, 386
\l__ltbl_course_lecture_tl 98, 289, 307, 326, 332, 357, 376
\l__ltbl_course_location_tl 98, 288, 306, 324, 331, 356, 374
\l__ltbl_course_sep_tl . . 358, 359, 375
\l__ltbl_course_shift_dim 244, 335, 339, 352
\l__ltbl_course_subject_tl 98, 304, 354
__ltbl_get_left:nN . 12, 12, 24, 204, 230
__ltbl_get_right:nN 12, 18, 25, 127, 206
\l__ltbl_hline_type_tl 66, 175
__ltbl_maketable:n 64, 159, 159
__ltbl_msg_new:nn 6, 10
__ltbl_msg_warning:n 8, 89
\l__ltbl_s@course_sep_tl 308, 309, 325
\l__ltbl_scale_fp 59, 61, 66
\l__ltbl_textheight_dim 52, 60
\l__ltbl_textwidth_dim 52, 58
\l__ltbl_time_clist 87, 88, 153, 154, 202, 204, 206
\l__ltbl_time_num_int 149, 154, 156, 172, 190
\l__ltbl_time_vunit_dim 111, 149, 155, 163, 167, 177, 179, 184, 188, 195, 211, 226, 239, 260, 265, 277, 282, 302, 320, 339, 351, 370, 384
__ltbl_timelist:n 40, 151, 151
\l__ltbl_timelist_hidetime_bool 42, 181, 200
\l__ltbl_timelist_numformat_tl 42, 197
\l__ltbl_timelist_shift_dim 158, 183, 187, 196

\l__ltbl_timelist_timeformat_tl 42, 212
\l__ltbl_tmpa_seq 14, 16, 20, 22
\l__ltbl_tmpa_tl 205, 214, 231, 241
\l__ltbl_tmpb_tl 127, 128, 207, 214
\l__ltbl_week_accum_clist 118, 138, 143, 224, 236, 255, 272, 297, 315, 346, 365, 381
\l__ltbl_week_accumtmp_clist 132, 135, 139
\l__ltbl_week_clist 85, 124, 125, 130, 144, 217, 219, 230
\l__ltbl_week_hunit_dim . 118, 146, 259, 264, 276, 281, 301, 319, 350, 369, 382
\l__ltbl_week_num_fp 118, 141, 147, 225, 238
\l__ltbl_week_ratio_clist 118, 128, 136, 237, 257, 263, 274, 280, 299, 317, 348, 367
\l__ltbl_weekday_int 84, 115, 116, 117, 256, 258, 264, 273, 275, 281, 298, 300, 316, 318, 347, 349, 366, 368, 382
__ltbl_weeklist:n 29, 122, 122
\l__ltbl_weeklist_format_tl . . 31, 240
\l__ltbl_weeklist_sep_tl 31, 228

M

\more 2, 109
msg commands:
\msg_new:nnn 7
\msg_warning:nn 9

N

\newday 2, 115
\NewDocumentCommand . . . 26, 37, 78, 109, 115
\NewDocumentEnvironment 54
\node 111, 167, 192, 208, 221, 232, 292, 310, 341, 360, 378

P

\paperheight 61, 156
\paperwidth 59, 147, 163, 167, 179, 194, 210, 226, 239, 259, 276, 301, 319, 350, 369, 383
\ProvidesExplPackage 3

R

\RequirePackage 5

S

seq commands:
\seq_item:Nn 16, 22
\seq_set_split:Nnn 14, 20
\small 112

T

\thispagestyle 56
\tikzpicture 63
\timelist . . . . . 1, 2, II, IV, 37
tl commands:
\tl_if_empty:NTF 165
\tl_if_empty_p:N 288, 289, 306, 307, 331, 332, 356, 357
\tl_if_novalue:nTF 75, 106
\tl_set:Nn 16, 22, 290, 291, 308, 309, 334, 338, 358, 359
\tl_set_eq:NN 76, 107
\ttfamily 45, 47, 227

W

\weeklist . . . . . 1, I, IV, 26