Untis
GRUBER & PETTERS

Untis

Calendar - Year Planning

untis.com

Table of Contents

I Introduction 3

1 Calendar - yearly scheduling 3

II General 3

1 Lessons 3

Yearly periods 3

Yearly periods or weekly periods 4

2 Calendar - yearly scheduling 7

Introduction 7

Allocating lessons to weeks 9

Overview window 10

Automatic allocation 10

Principle 10

Functions 12

Lock allocation 12

Blocking 12

Lesson blocks 13

Locking weeks 13

Calendar sequences 13

Minimum/maximum lessons 14

Copy allocation of a week 14

Restrictions and lesson grooups 15

Scheduling periods 16

Manual scheduling 16

Calendar window --> timetable 16

Block sizes 16

Enter yearly periods in weekly timetable 17

Yearly periods in weekly overview 18

Yearly periods in scheduling dialogue 18

Change of rooms 21

Calendar absences 22

How to enter absences 22

Warning messages 25

Automatic scheduling (optimisation) 25

Diagnosis 26

Index 28

1 Introduction

1.1 Calendar - yearly scheduling

Untis Calendar - yearly planning is a timetable scheduling system specially designed to meet the following requirements:

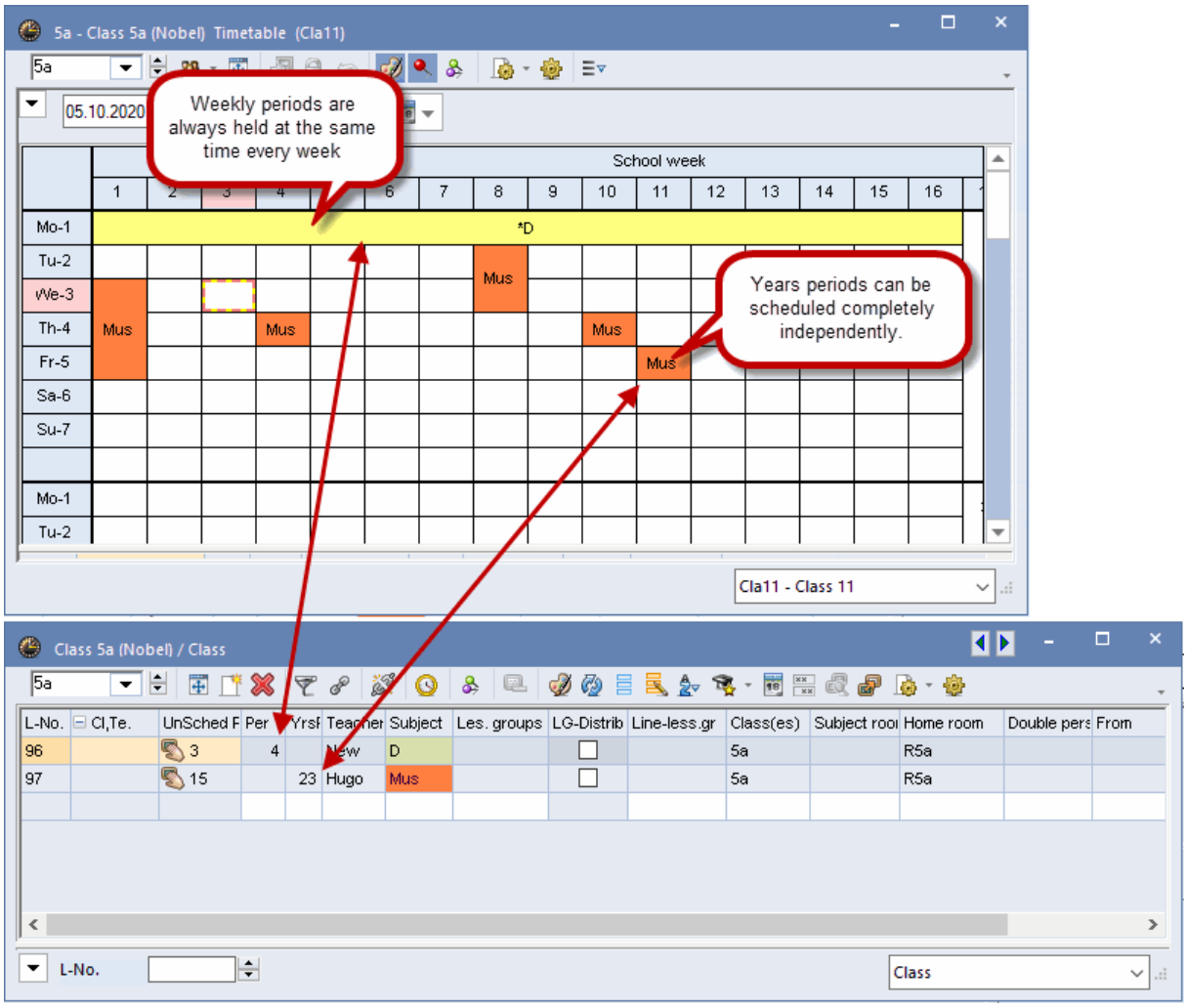
- Scheduling yearly periods at unconnected times
- Blocking teachers at certain times.

2 General

2.1 Lessons

2.1.1 Yearly periods

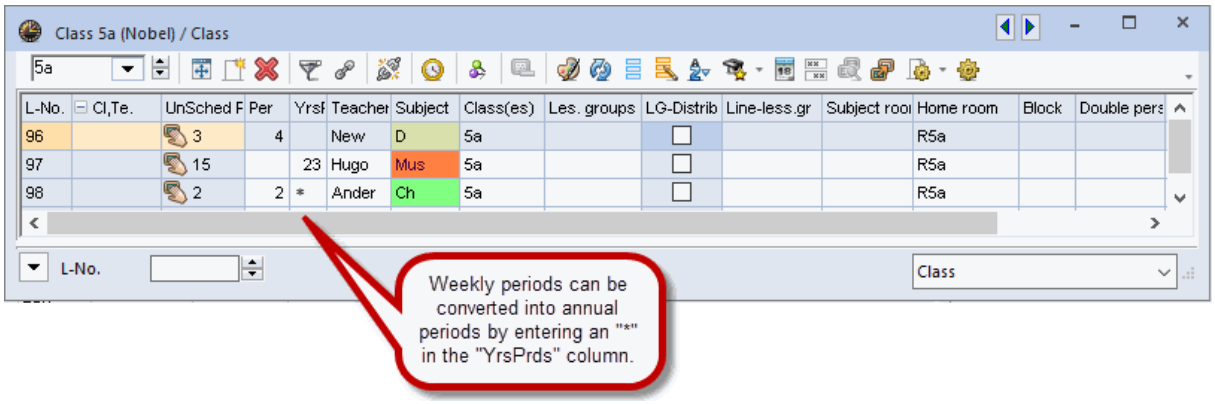
The great advantage of working with the calendar module is that it allows you to deal with genuine *yearly periods* . In contrast to weekly periods, these yearly periods can be scheduled on completely unconnected dates.



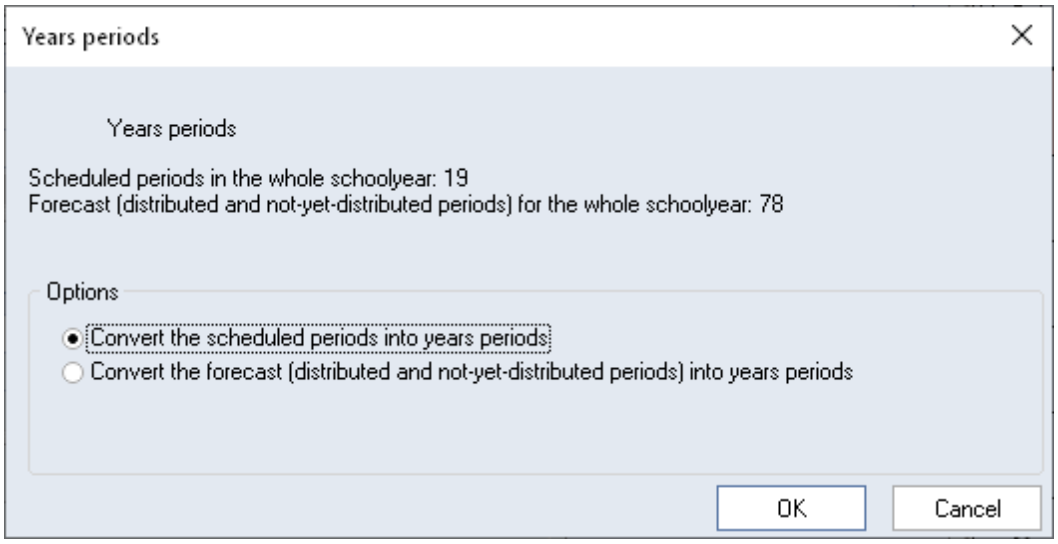
2.1.2 Yearly periods or weekly periods

Use weekly periods if the lessons in question are to be scheduled at the same time each week in the timetable and yearly periods if lessons are to be scheduled on an irregular basis.

Note:
You can convert weekly periods to yearly periods later on by entering a '*' in the 'YrsPrds' column.

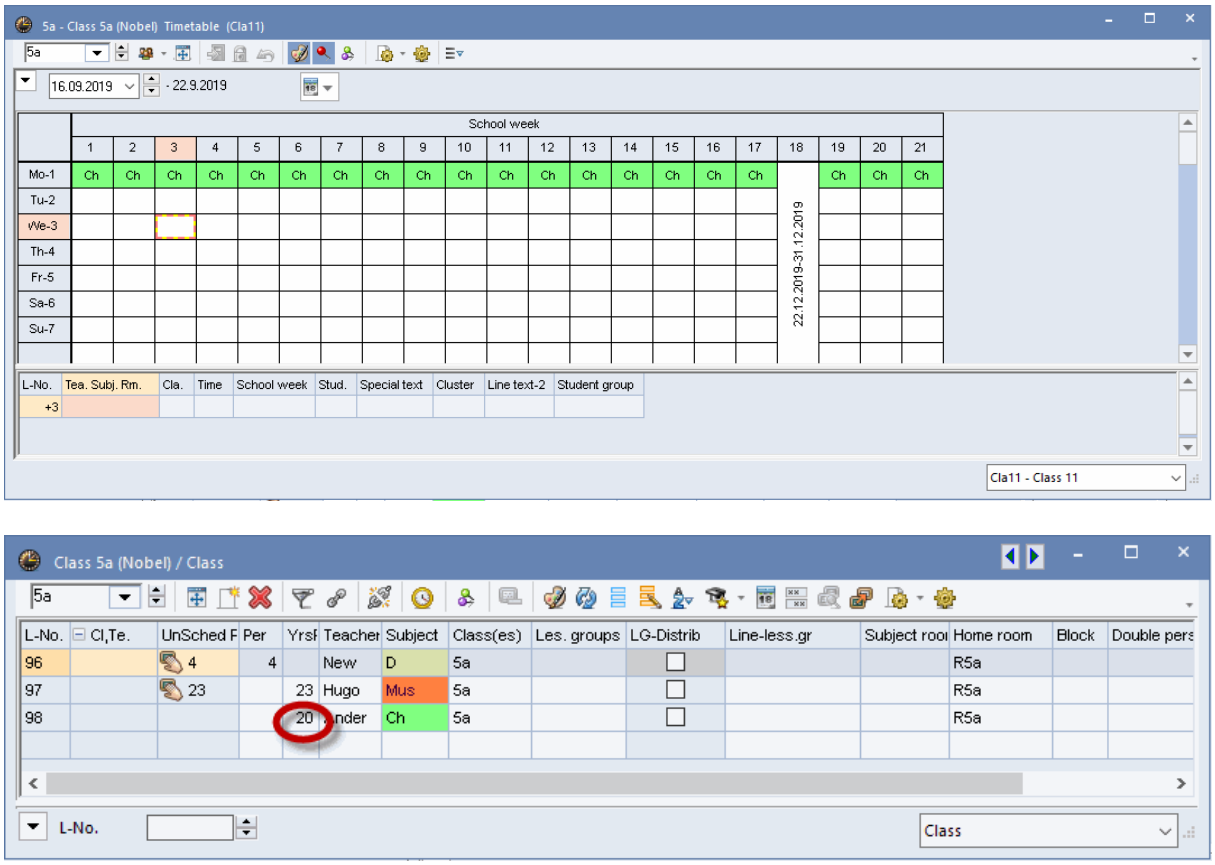


The following prompt is displayed if some of the weekly periods have already been scheduled:



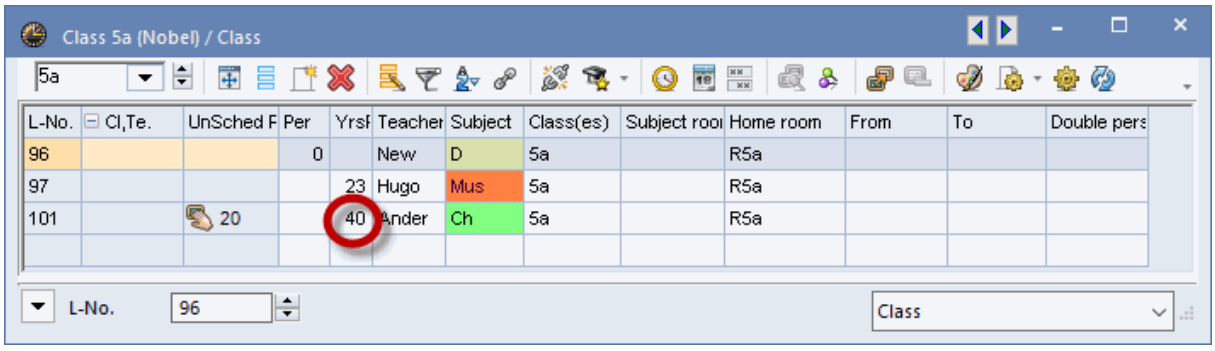
Option 1: convert scheduled periods into weekly periods

If one period of a 2-period lesson has already been scheduled, this one weekly period will be converted into a number of yearly periods. In the example, this concerns 20 yearly periods, since the school year has 21 weeks including one week of holiday.

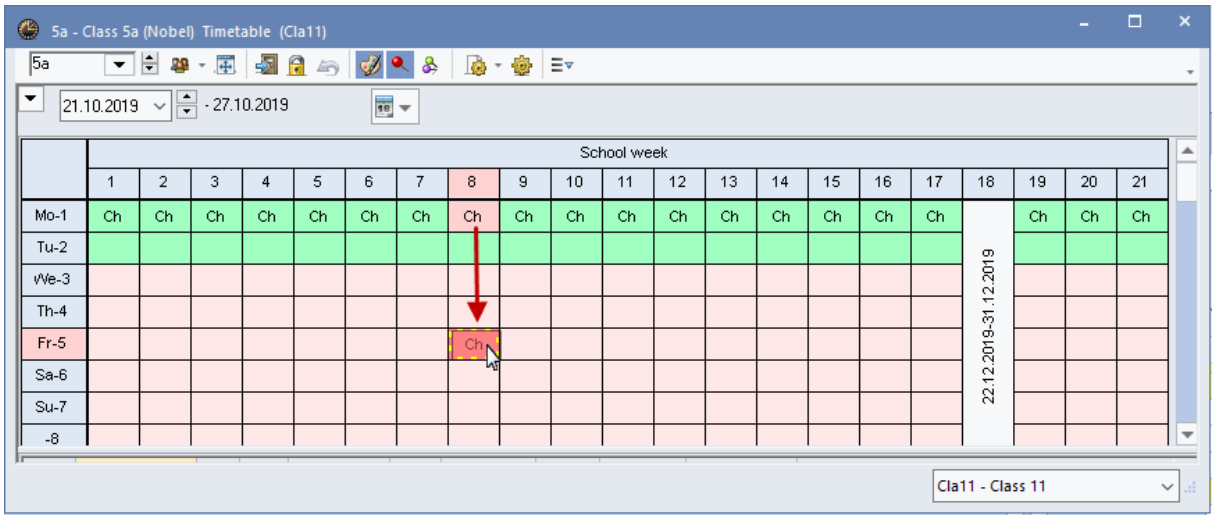


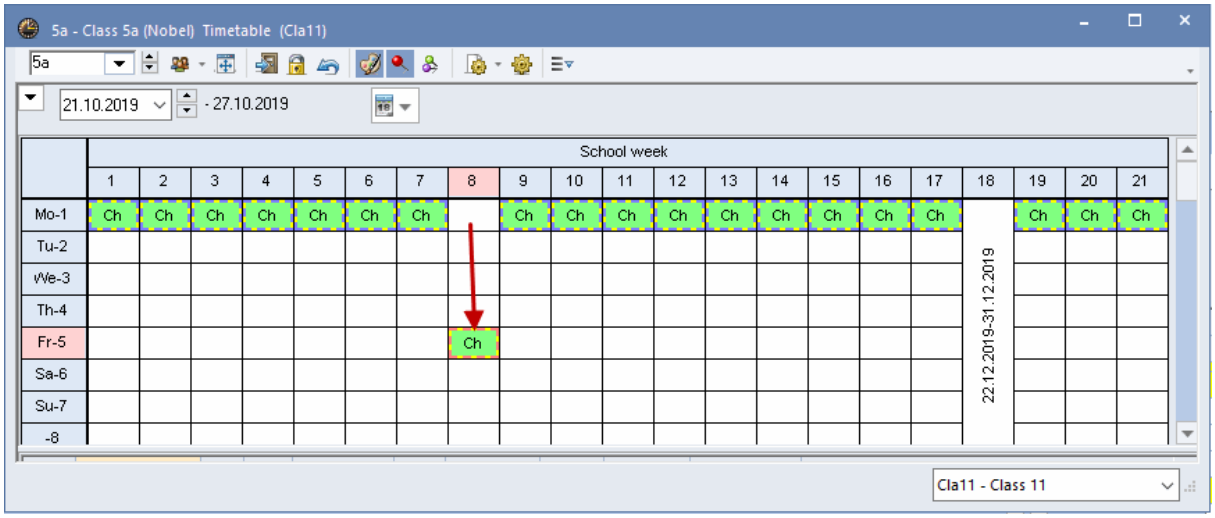
Option 2: extrapolation - scheduled and unscheduled periods are converted to yearly periods.

This option results in 40 yearly periods; 20 have already been scheduled while a further 20 remain to be scheduled.



In both cases the yearly periods can now be rearranged as independent calendar entries.





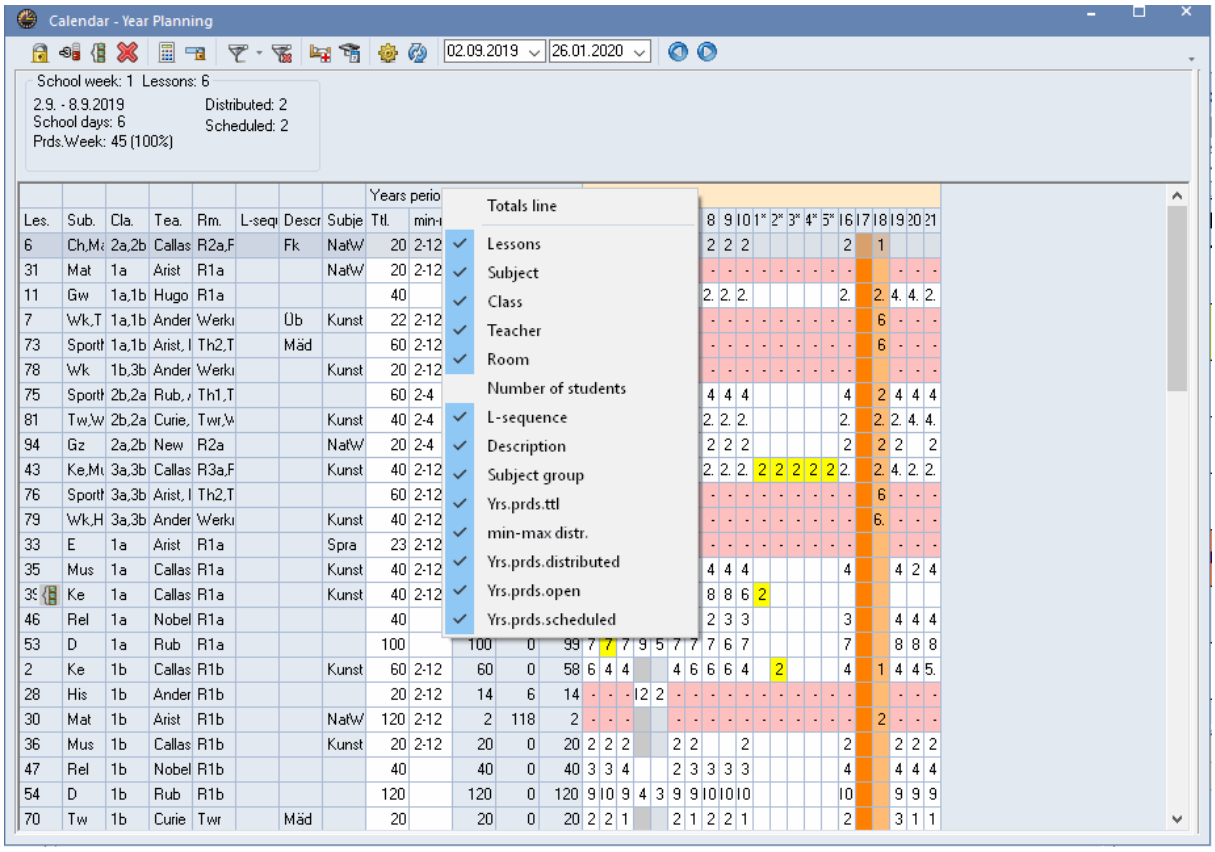
2.2 Calendar - yearly scheduling

2.2.1 Introduction

The heart of 'Calendar - Year Planning' is the window of the same name, which you can open via 'Modules | Calendar - yearly scheduling'. If you have already worked with Year's Planning in Terms the similarities in the windows will be obvious. The great advantage of calendar - yearly scheduling is that you do not need to create and work with terms.

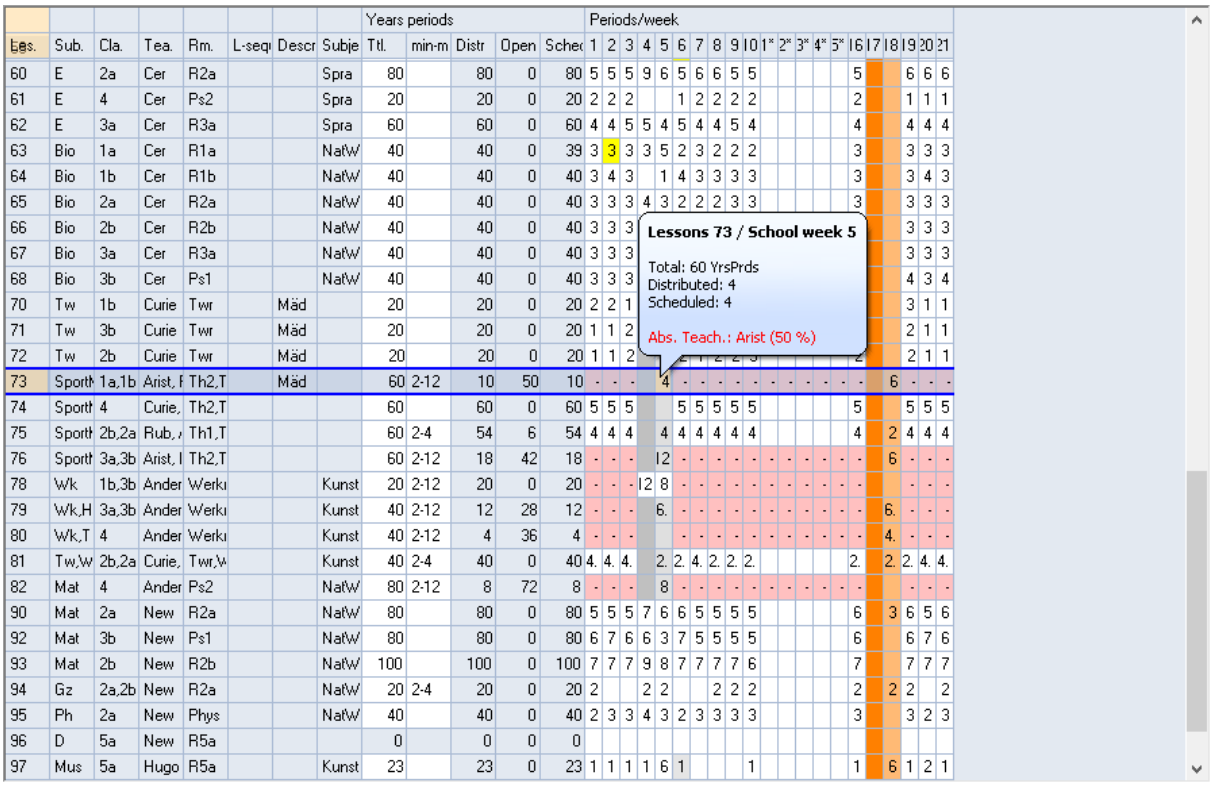
The window is divided into two sections. Let's look at the display in the left section of the window, where you will see a list of all the lessons in the school.

You can hide or show details for each lesson such as lesson number, subject, class, number of students etc.



The white columns display the individual school weeks. A column shaded dark-orange indicates that all the days of the week in question lie within a holiday, while lighter shading indicates that some days of the week lie within a holiday.

Yearly periods can be allocated simply by entering them in the individual lesson weeks. By moving the mousre over a cell you get further information on the current lesson. In addition to how many periods are scheduled or not, you also get information on coloured cells, why they are coloured.

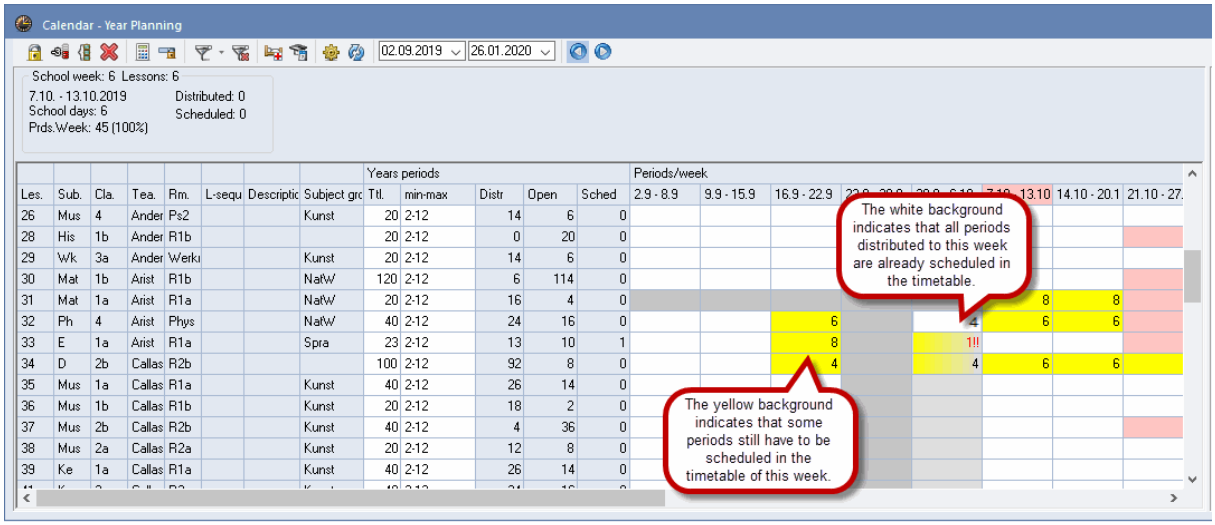


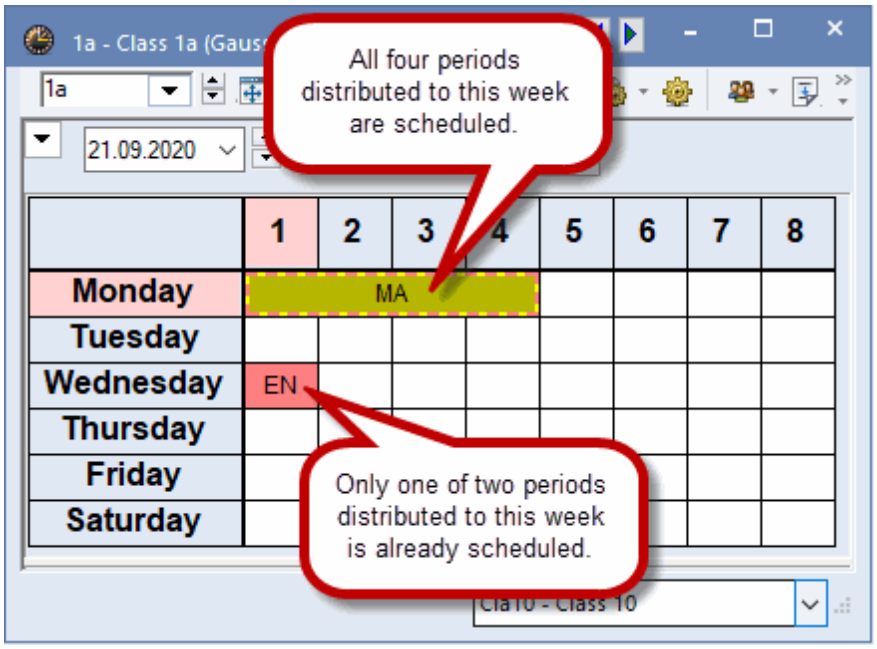
As a rule, the 'Calendar - Year Planning' window displays weekly lessons, yearly lessons and periodic lessons (lesson groups).

2.2.2 Allocating lessons to weeks

You can allocate yearly periods to different weeks by simply entering the number of periods that should be scheduled in a certain week into the relevant column.

Yellow shading indicates that not all periods which are *planned* for the week in question have actually been *scheduled* in the timetable.

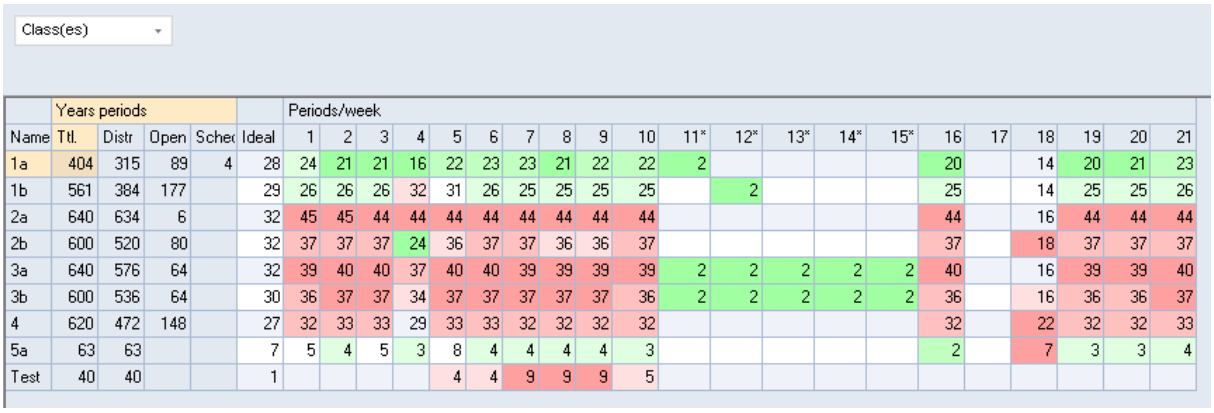




2.2.3 Overview window

The right section of the calendar window provides an overview of the scheduled load for classes, teachers and students and the capacity utilisation of rooms in the individual school weeks.

The 'Ideal' column displays the (calculated) average value. Red shading in individual weekly columns indicates that elements are overutilised while green shading indicates spare capacity.

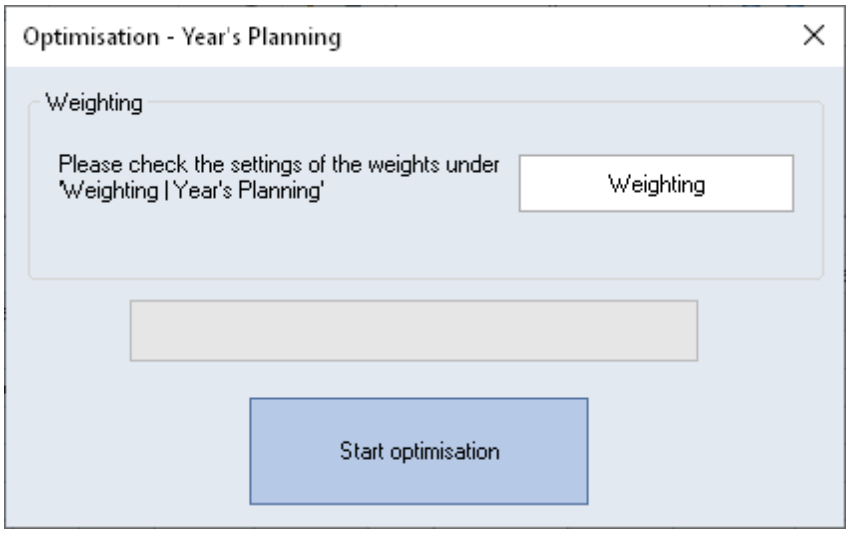


	Years periods					Periods/week																			
Name	Ttl.	Distr	Open	Schec	Ideal	1	2	3	4	5	6	7	8	9	10	11*	12*	13*	14*	15*	16	17	18	19	20	21
1a	404	315	89	4	28	24	21	21	16	22	23	23	21	22	22	2					20		14	20	21	23
1b	561	384	177		29	26	26	26	32	31	26	25	25	25	25		2				25		14	25	25	26
2a	640	634	6		32	45	45	44	44	44	44	44	44	44	44						44		16	44	44	44
2b	600	520	80		32	37	37	37	24	36	37	37	36	36	37						37		18	37	37	37
3a	640	576	64		32	39	40	40	37	40	40	39	39	39	39	2	2	2	2	2	40		16	39	39	40
3b	600	536	64		30	36	37	37	34	37	37	37	37	37	36	2	2	2	2	2	36		16	36	36	37
4	620	472	148		27	32	33	33	29	33	33	32	32	32	32						32		22	32	32	33
5a	63	63			7	5	4	5	3	8	4	4	4	4	3						2		7	3	3	4
Test	40	40			1					4	4	9	9	9	5											

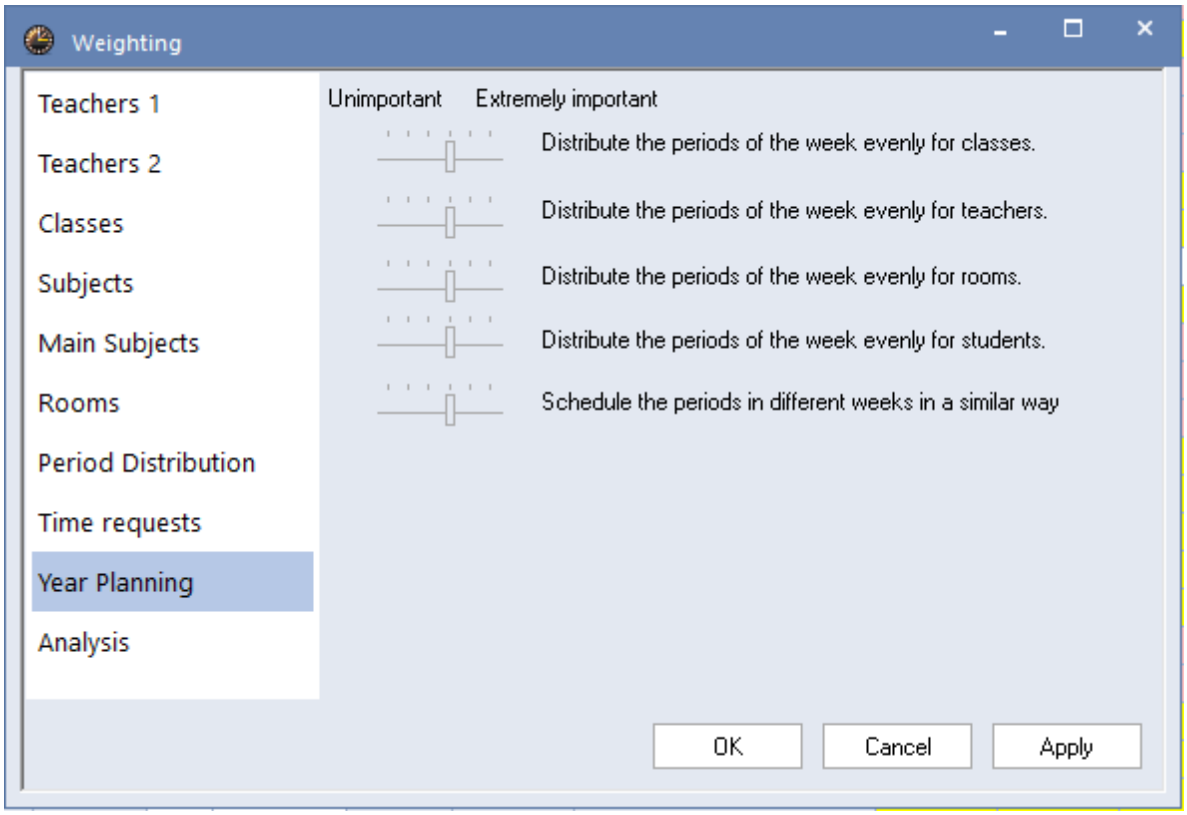
2.2.4 Automatic allocation

2.2.4.1 Principle

If you wish to allocate lessons to the individual school weeks automatically, open the optimisation window by clicking on the <Optimise> toolbar icon.



It is important that you first enter weighting settings. To do this, click on the <Weighting> icon.



When allocating yearly periods to individual weeks automatically, the basic assumption is that all periods should be spread as evenly as possible over the school year. No assumptions are made concerning the capacity load of teachers, classes, rooms or students.

It is therefore essential that you enter weighting for allocating periods for the individual elements according to your requirements.

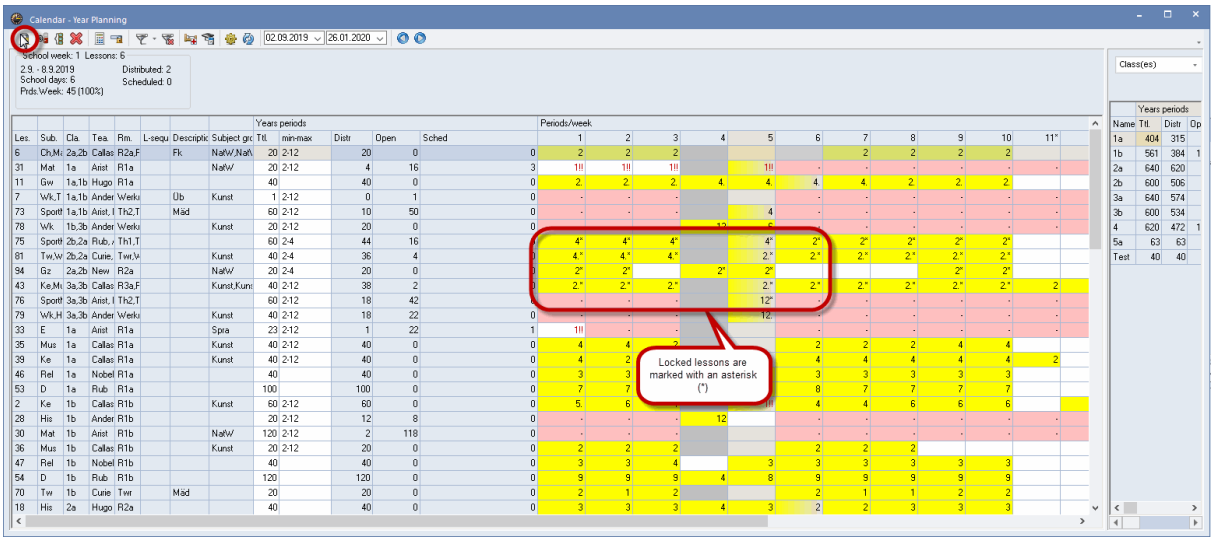
The possibilities for blocking certain weeks or lessons or for specifying minimum/maximum numbers of periods per week are essentially the same as those for year's planning in terms. For this reason, please refer to the chapter of that name for more details

Note:
You can also open weighting to optimise calendar - yearly planning via 'Scheduling | Weighting'

2.2.4.2 Functions

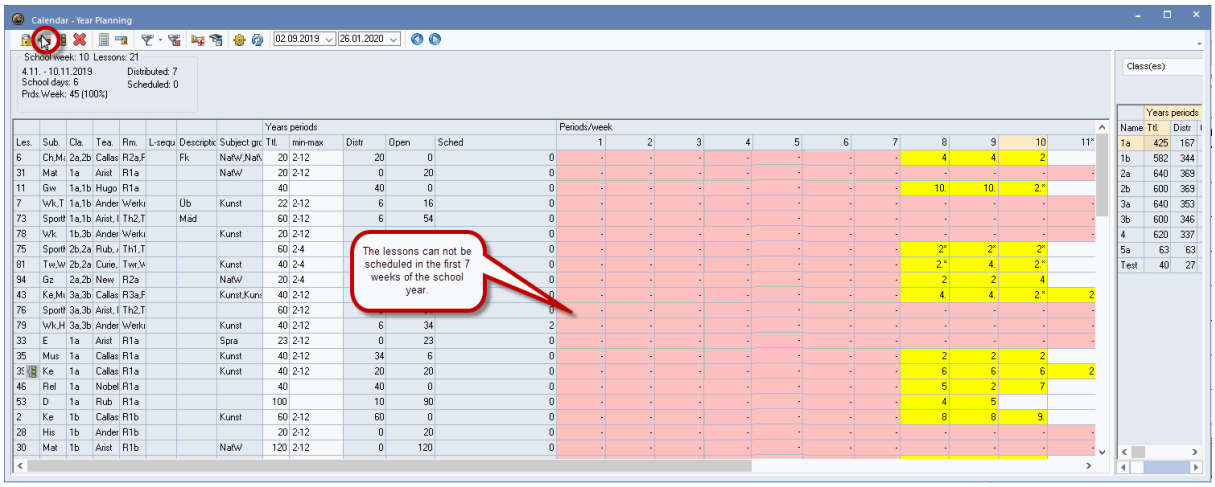
2.2.4.2.1 Lock allocation

Use the <Lock allocation> function to permanently retain the period allocation you entered manually.



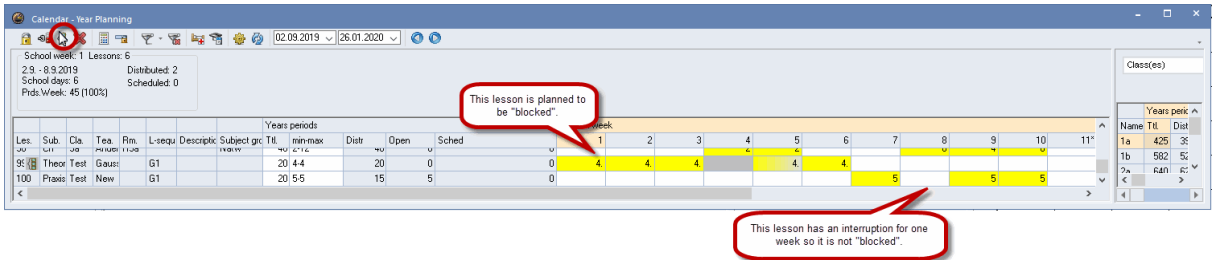
2.2.4.2.2 Blocking

Use blockings to prevent periods of specific lessons being allocated to certain weeks.



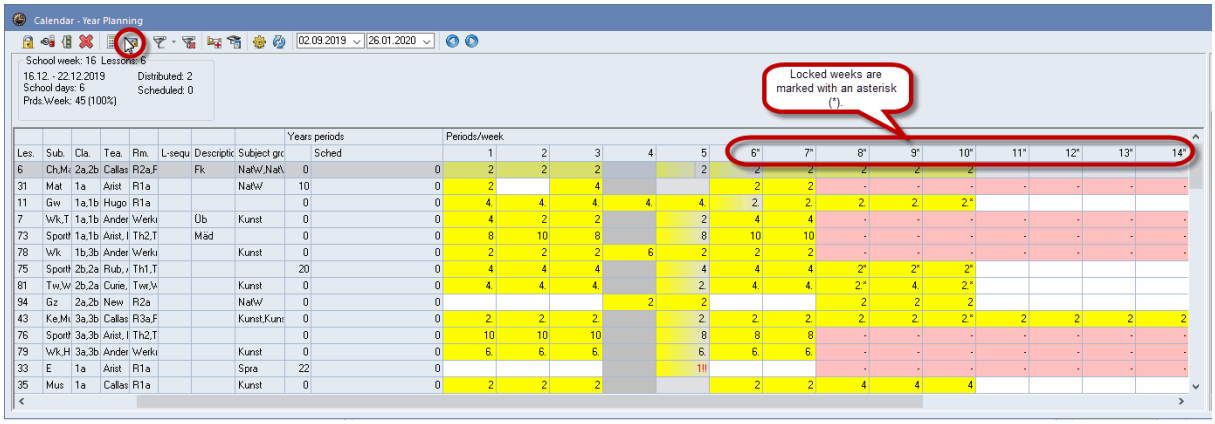
2.2.4.2.3 Lesson blocks

Lesson blocks should be scheduled in consecutive weeks (without any breaks).



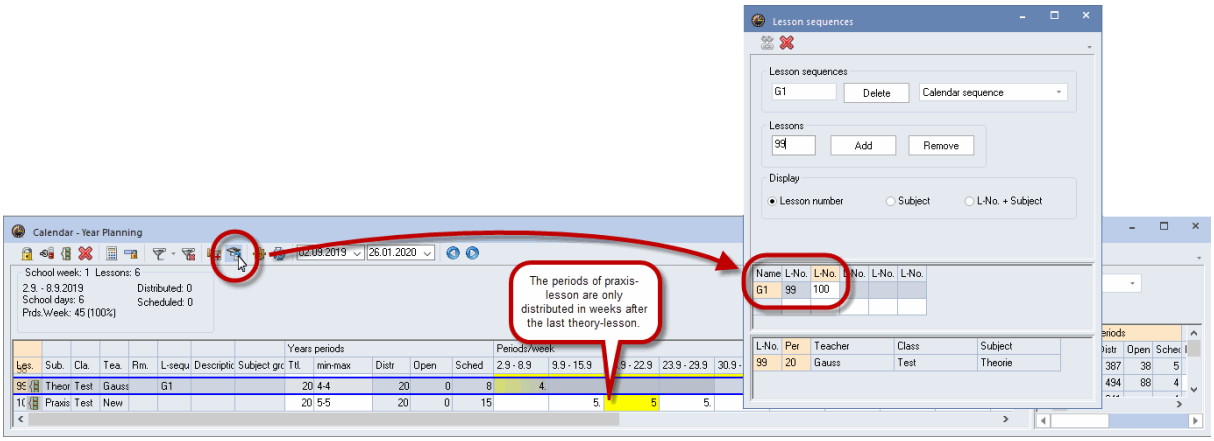
2.2.4.2.4 Locking weeks

The <Lock weeks> button allows the timetables of individual weeks to be 'frozen' in such a way that they can no longer be changed during timetable optimisation.



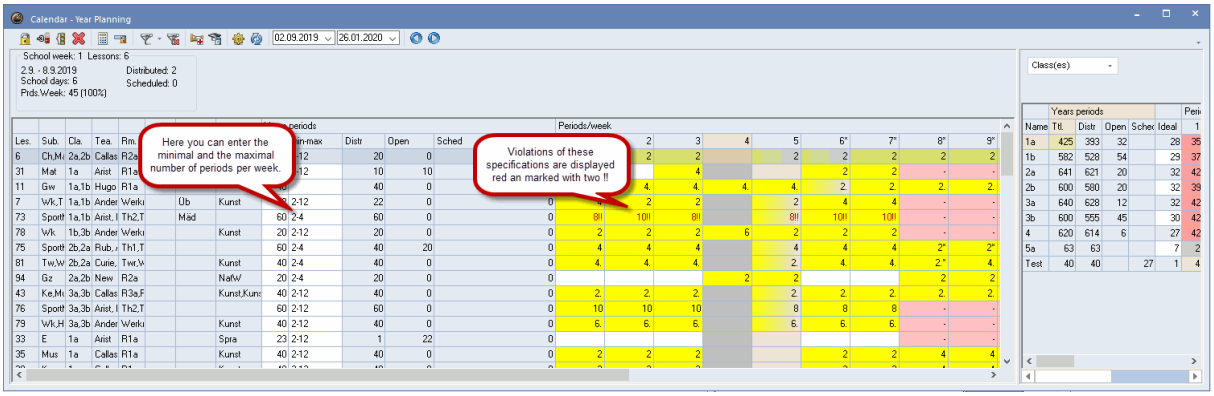
2.2.4.2.5 Calendar sequences

Calendar sequences allow the option of specifying that certain lessons should be scheduled sequentially. Sometimes, for example, a theoretical lesson must have been given before the periods of practical instruction can be scheduled.



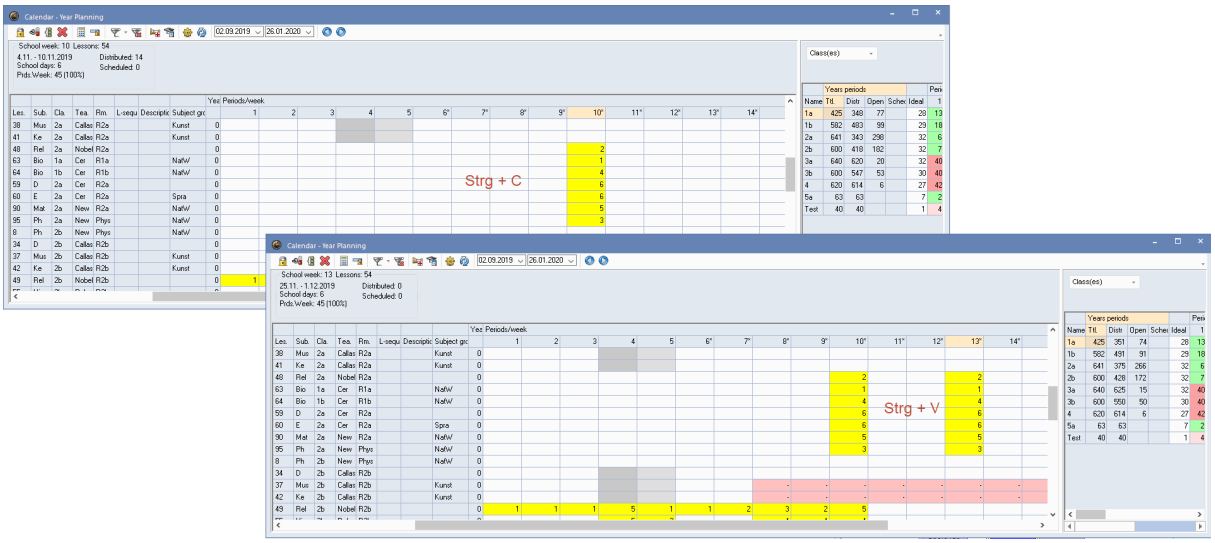
2.2.4.2.6 Minimum/maximum lessons

Use the 'min-max' field to define the minimum and maximum number of periods of a lesson that may be held in any one week.



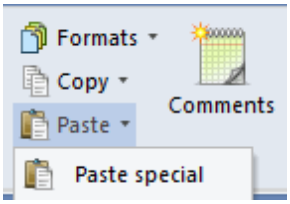
2.2.4.2.7 Copy allocation of a week

In the calender window you can also select an entire column by clicking on its heading. Copy and paste and the allocation of a week is transferred to another week.



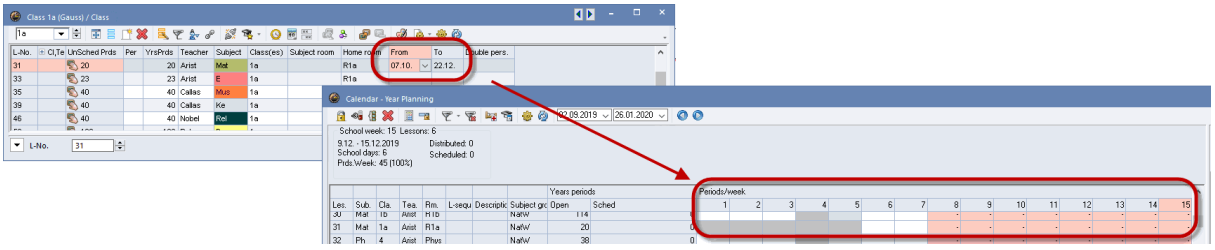
When you have selected a column you can also block the whole week by clicking n the -3 time request button.

Tip:
If you want to copy the allocation plus the timetable, go to the 'Data' tab and select 'Paste | Paste special'.



2.2.4.2.8 Restrictions and lesson grooups

When you work with restrictions coming from lesson groups or entries into the fields 'from-to', they are going to be highlighted with a colour.



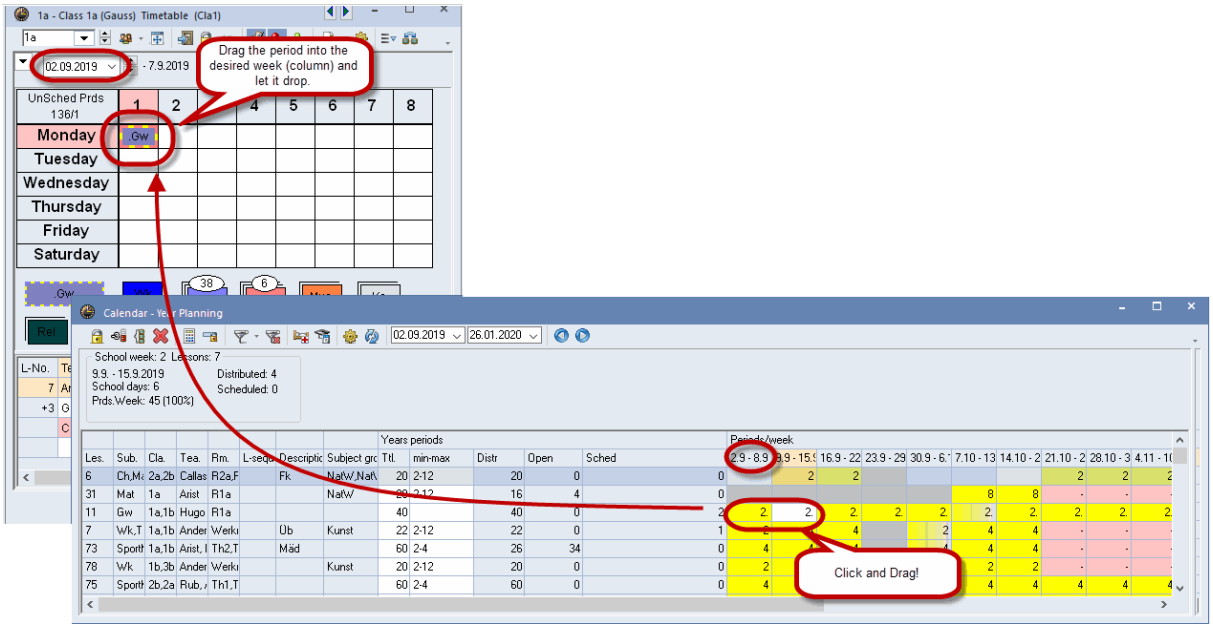
2.2.5 Scheduling periods

2.2.5.1 Manual scheduling

Untis calendar scheduling provides a number of additional ways of scheduling periods in the timetable.

2.2.5.1.1 Calendar window --> timetable

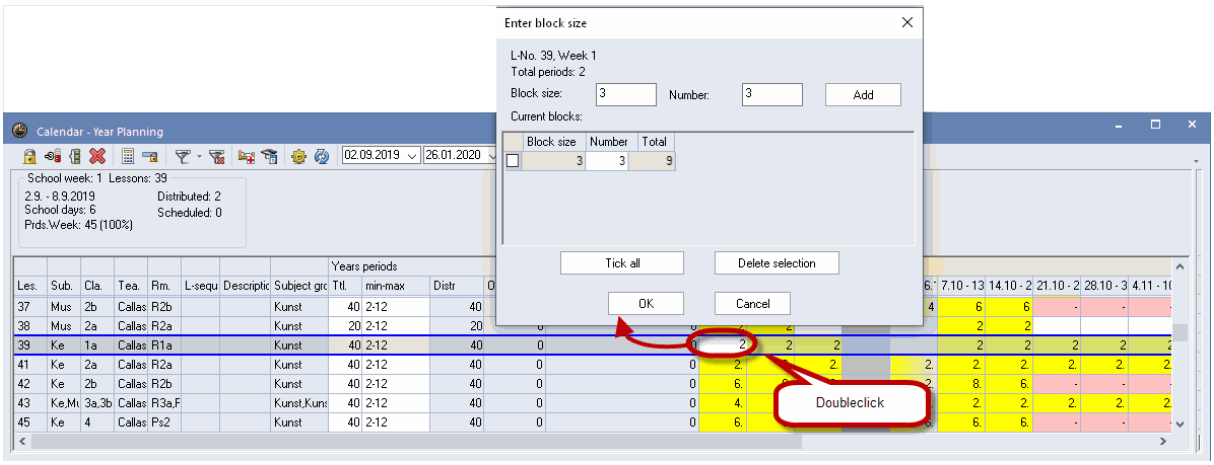
You can use drag&drop to place periods from the calendar window directly in the timetable. Please note that the initial click in the calendar window synchonisess the corresponding date in the timetable window.



2.2.5.1.2 Block sizes

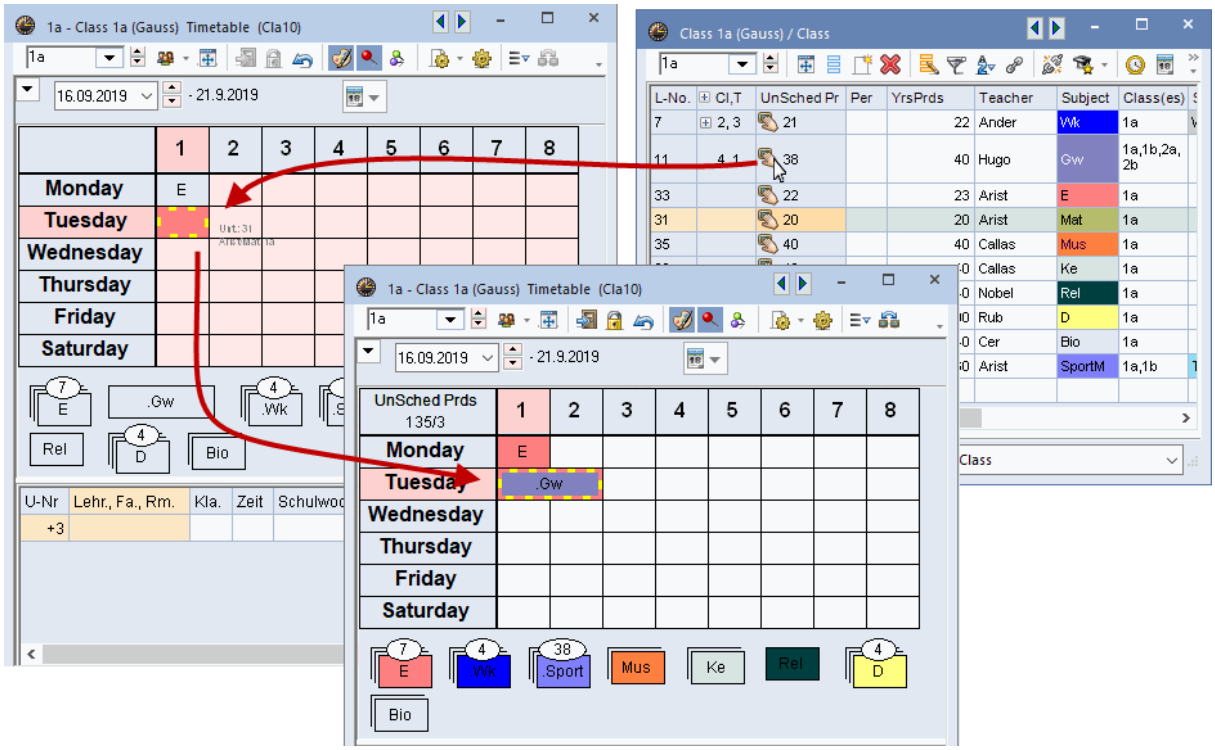
The calendar - year planning window enables you to specify, by double-clicking in individual cells, the size of the blocks of periods in which the periods assigned to the relevant weeks are to be scheduled in the timetable.

.



2.2.5.1.3 Enter yearly periods in weekly timetable

You can also drag yearly periods directly into a (weekly) timetable from the lessons window

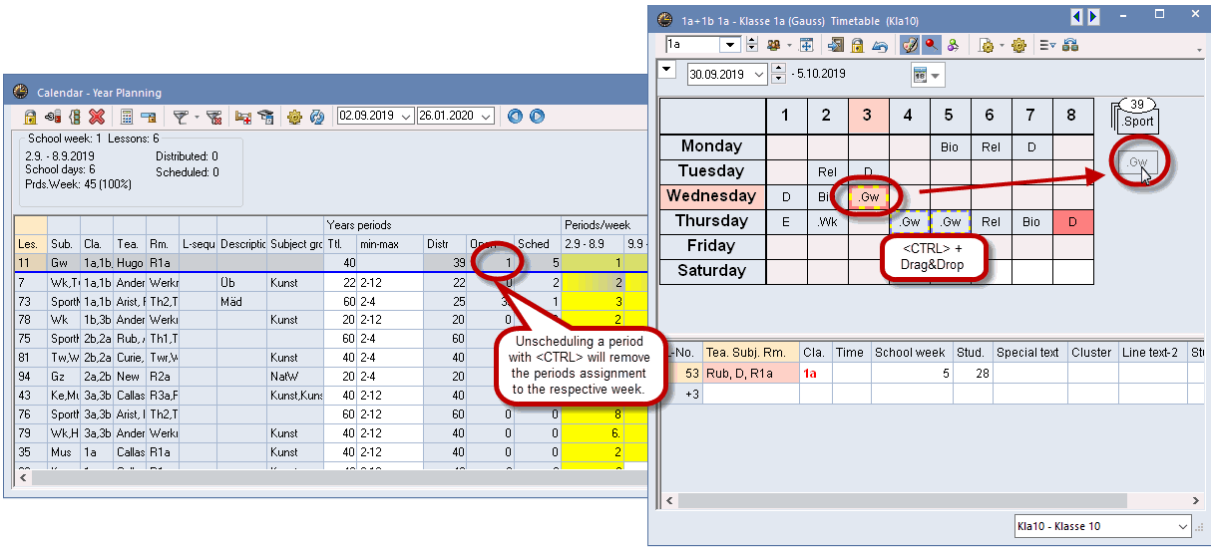


Use the time range setting in the timetable window to set the week in which you wish to schedule the period in question.

Note:
Unschedule via <CTRL>+Drag&Drop

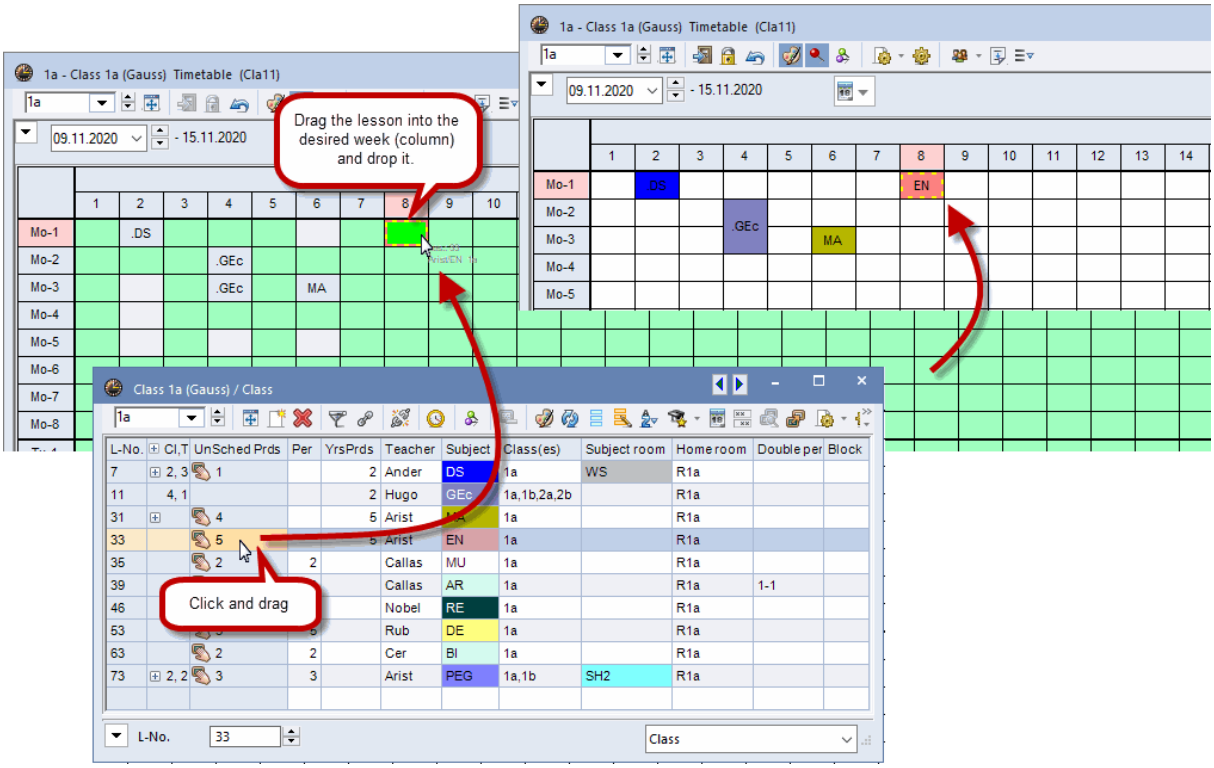
If you unschedule a yearly period in the timetable, this period is allocated to the current week in the 'Calender - Year Planning' window by default. By changing to another week in the timetable, the unscheduled period vanishes from the area of non-scheduled periods next to the timetable.

When unscheduling a period by <CTRL> + drag&drop, the allocation to this respective week is also cancelled. Thus it is very easy to shift one period from one week to another directly in the timetable.



2.2.5.1.4 Yearly periods in weekly overview

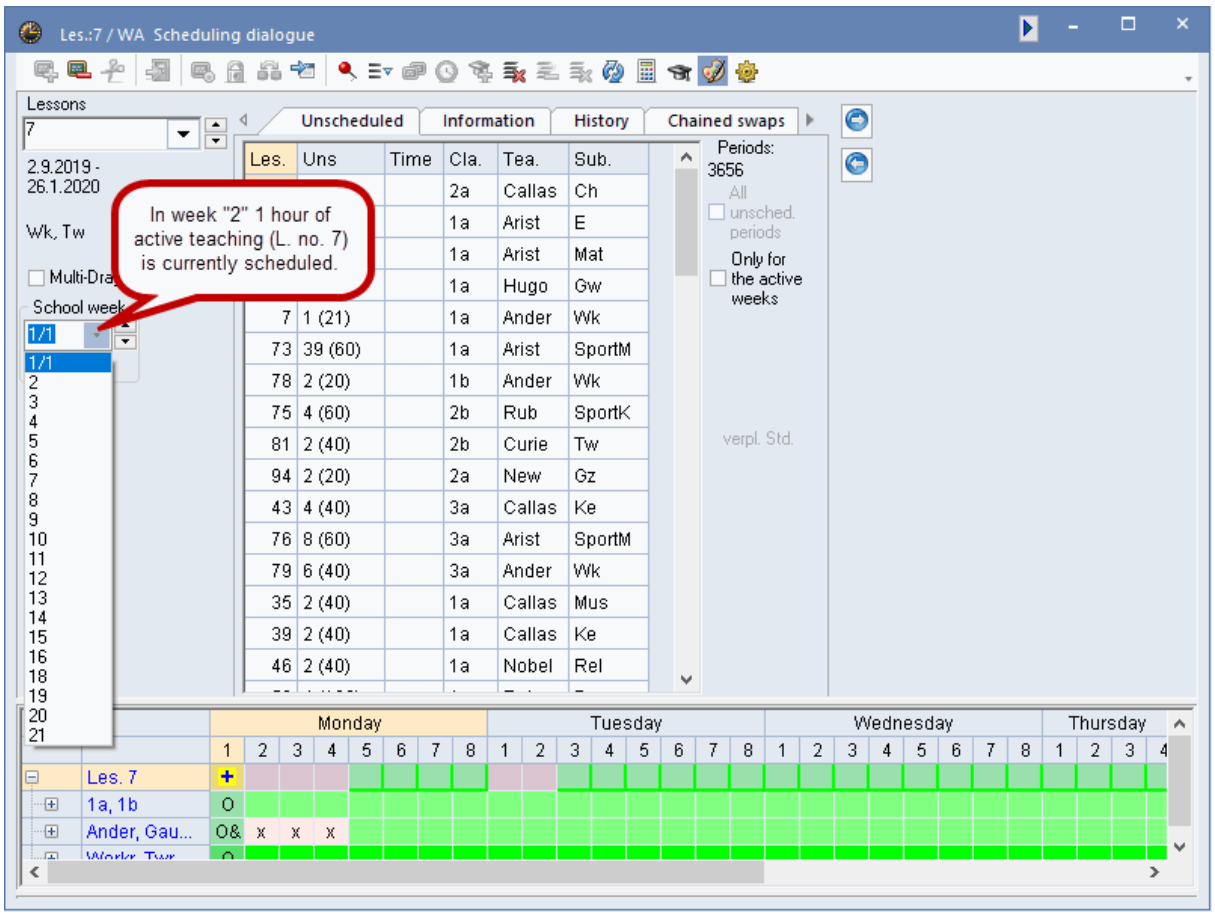
Entering yearly periods in the weekly overview You can also schedule yearly periods by dragging a lesson from a lessons window into a weekly summary timetable (format 11).



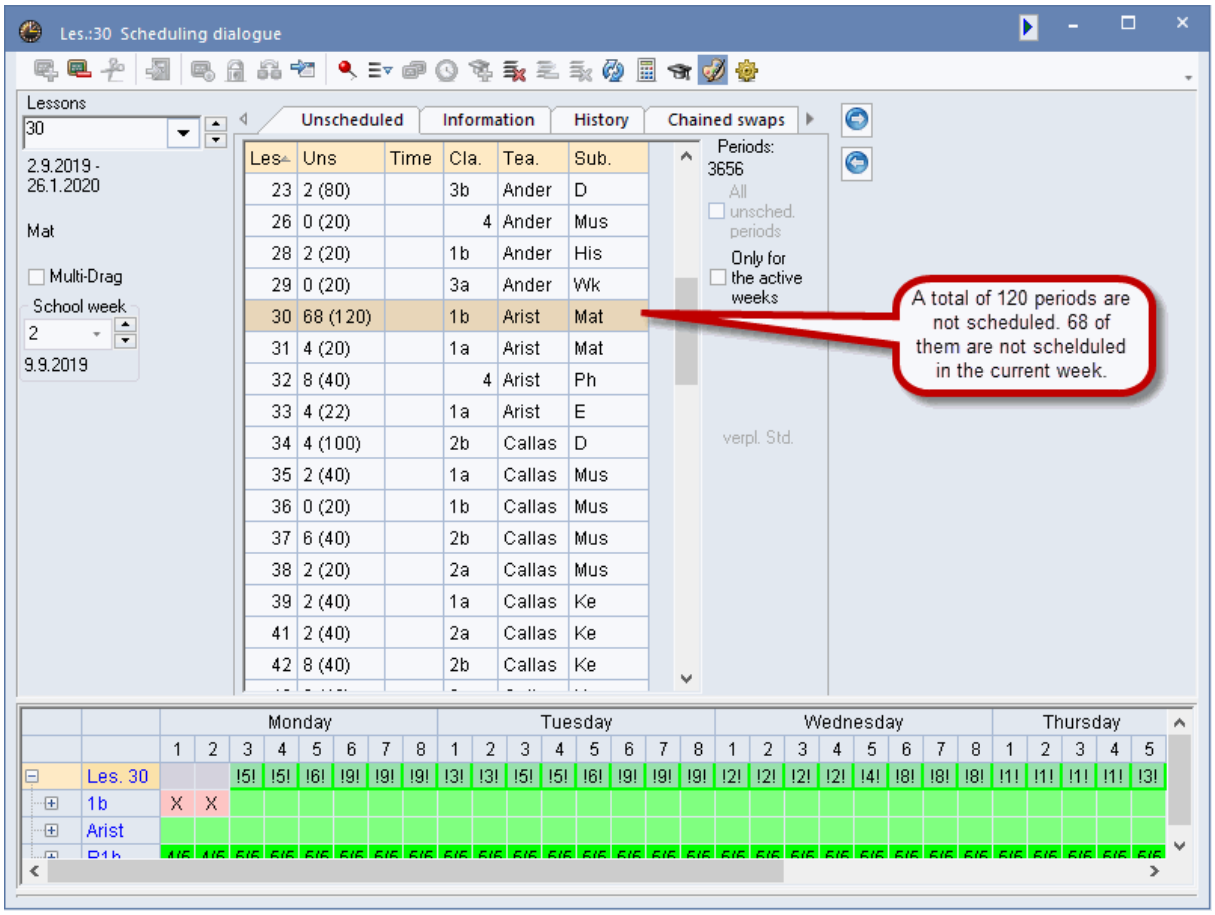
2.2.5.1.5 Yearly periods in scheduling dialogue

When working with yearly periods there are a few additional functions in the scheduling dialogue. In the selection list 'School week' you set the week you want to work on and you also see the number of

scheduled periods of this week (regarding the source lesson).

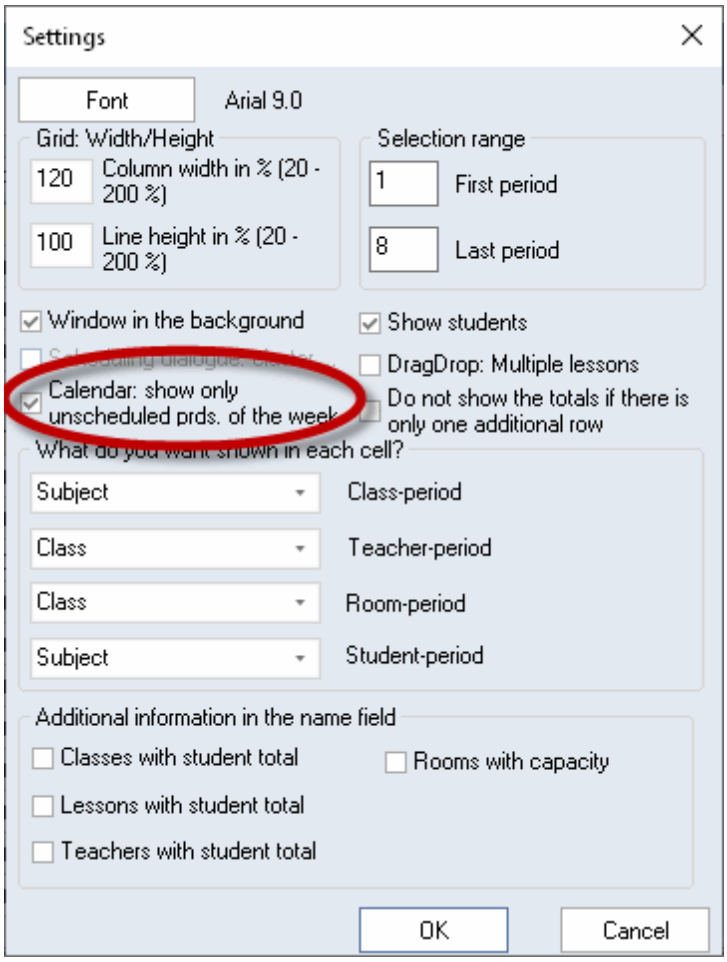


The scheduling dialogue of the yearly periods also shows in the column 'Uns' (for 'unscheduled') how many periods in total and in this week still need to be scheduled.



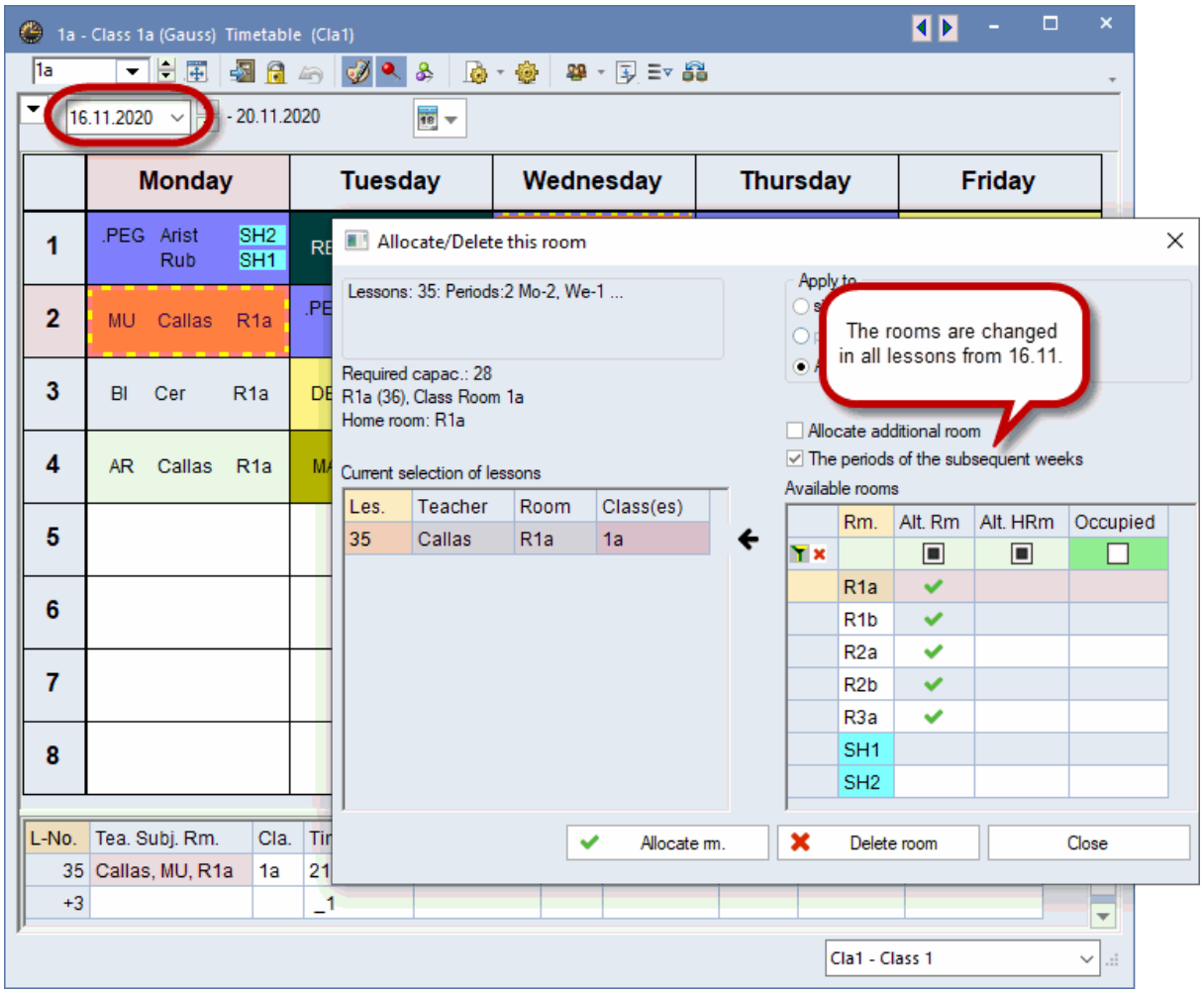
Les	Uns	Time	Cla.	Tea.	Sub.
23	2 (80)		3b	Ander	D
26	0 (20)		4	Ander	Mus
28	2 (20)		1b	Ander	His
29	0 (20)		3a	Ander	Wk
30	68 (120)		1b	Arist	Mat
31	4 (20)		1a	Arist	Mat
32	8 (40)		4	Arist	Ph
33	4 (22)		1a	Arist	E
34	4 (100)		2b	Callas	D
35	2 (40)		1a	Callas	Mus
36	0 (20)		1b	Callas	Mus
37	6 (40)		2b	Callas	Mus
38	2 (20)		2a	Callas	Mus
39	2 (40)		1a	Callas	Ke
41	2 (40)		2a	Callas	Ke
42	8 (40)		2b	Callas	Ke

In the <Settings> of the scheduling dialogue you can additionally define that you only want to have listed those periods in the list of unscheduled periods, which need to be scheduled in the current week.



2.2.5.1.6 Change of rooms

In the 'Allocate/Delete Room' window there are also some special functions when working with yearly periods. You can change the room for the periods of the selected week or for all future periods.



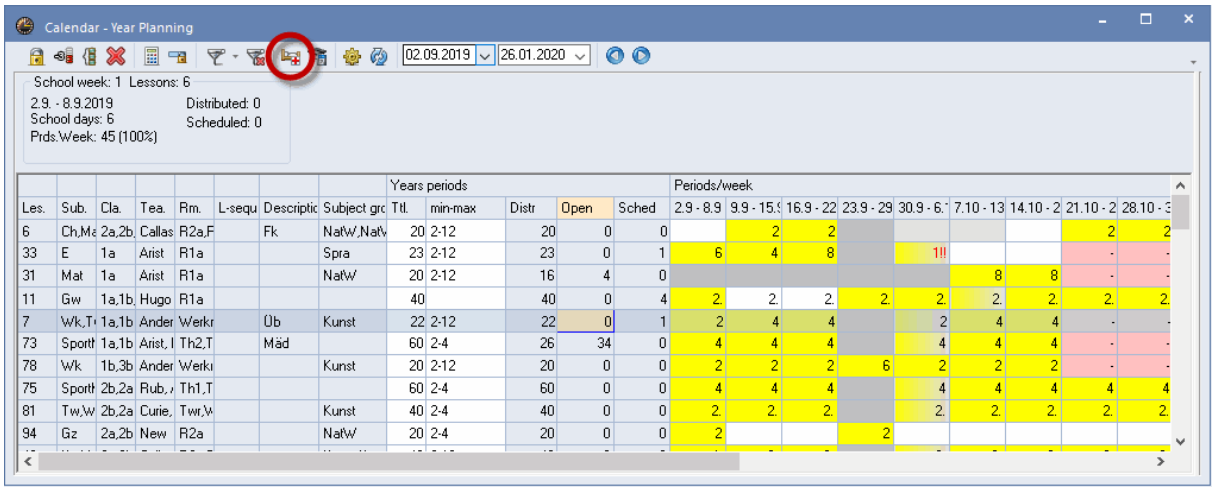
2.2.5.2 Calendar absences

When performing long-term scheduling, the scheduling team must also bear in mind that some teachers will have other commitments on some days of the year. Timetable optimisation should take these days into account by not scheduling any lessons for the teachers in question on these days.

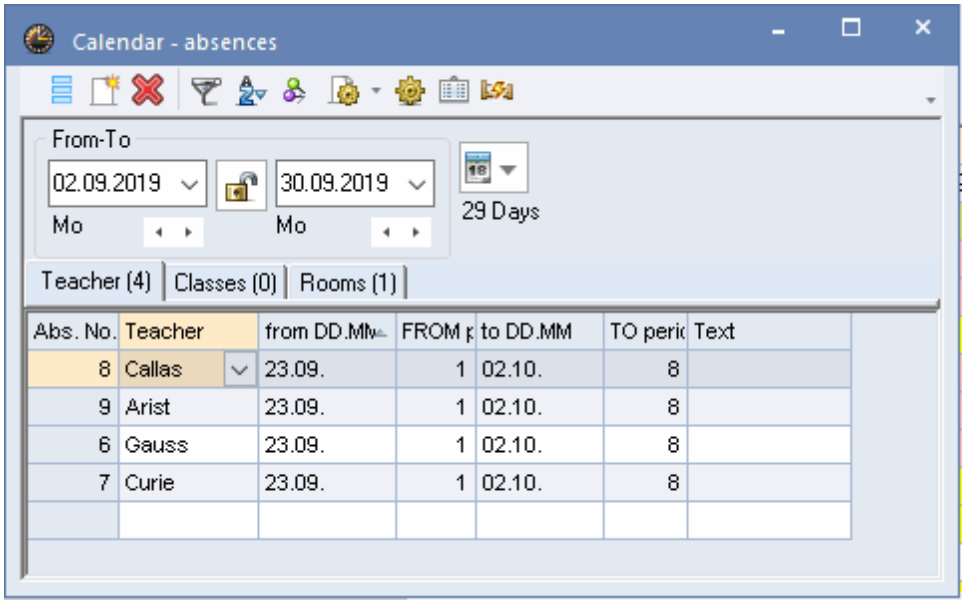
Untis calendar scheduling can take this into consideration by means of *calendar absences* .

2.2.5.2.1 How to enter absences

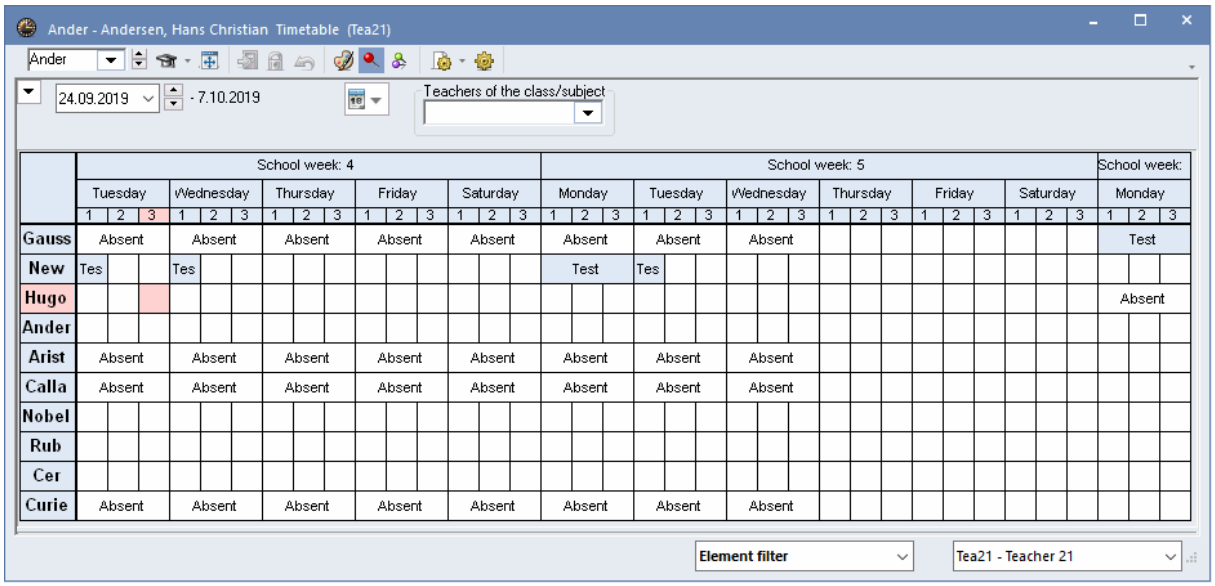
The calendar absences window is opened using the toolbar icon of the same name in the 'Calendar - Year Planning' window.



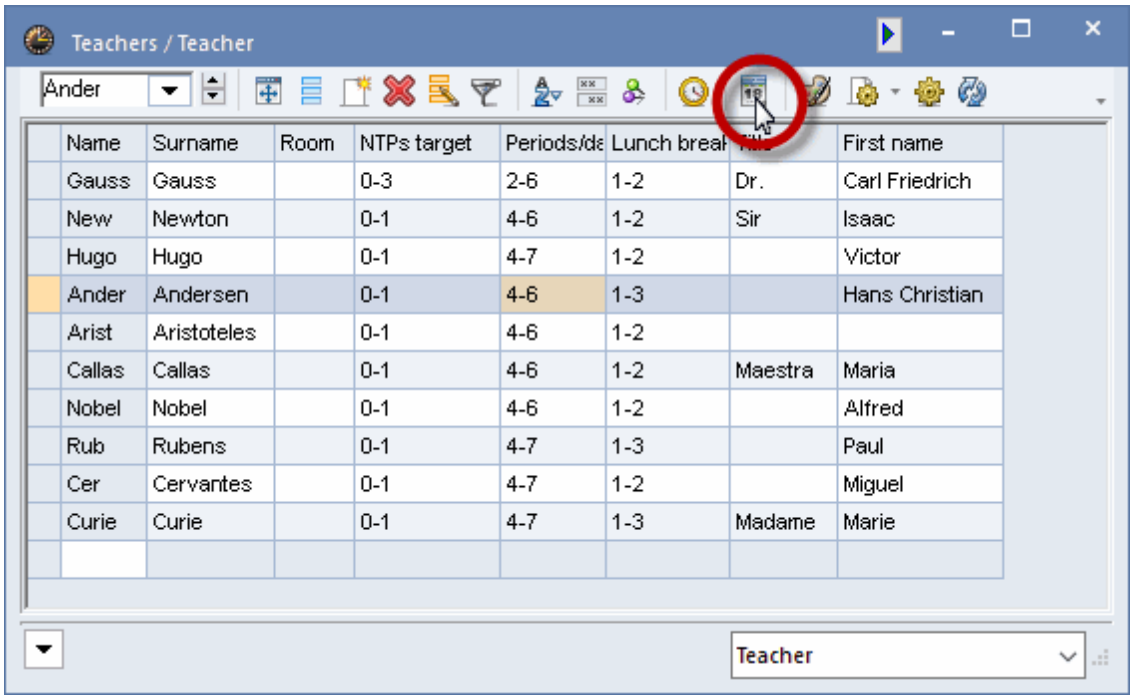
You can enter the 'from' and 'to' dates for the absences of teachers (and also for classes) in this window.

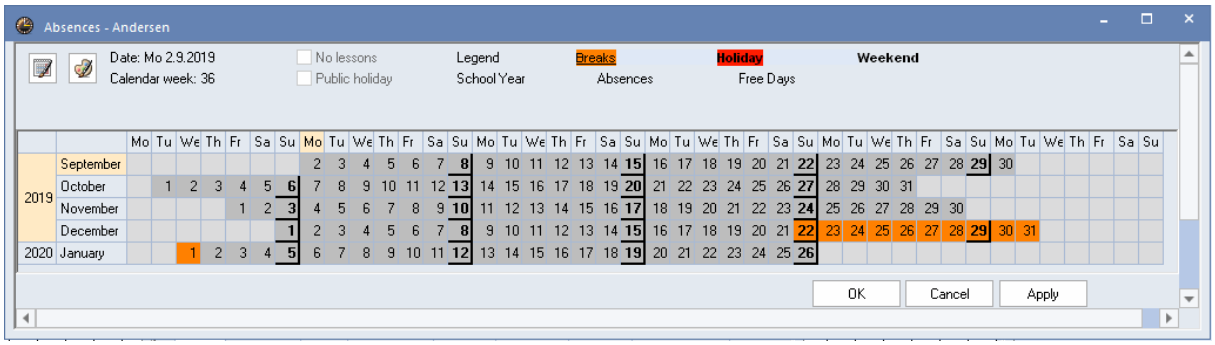


The absences will also be displayed in the timetable window (provided appropriate settings have been made).



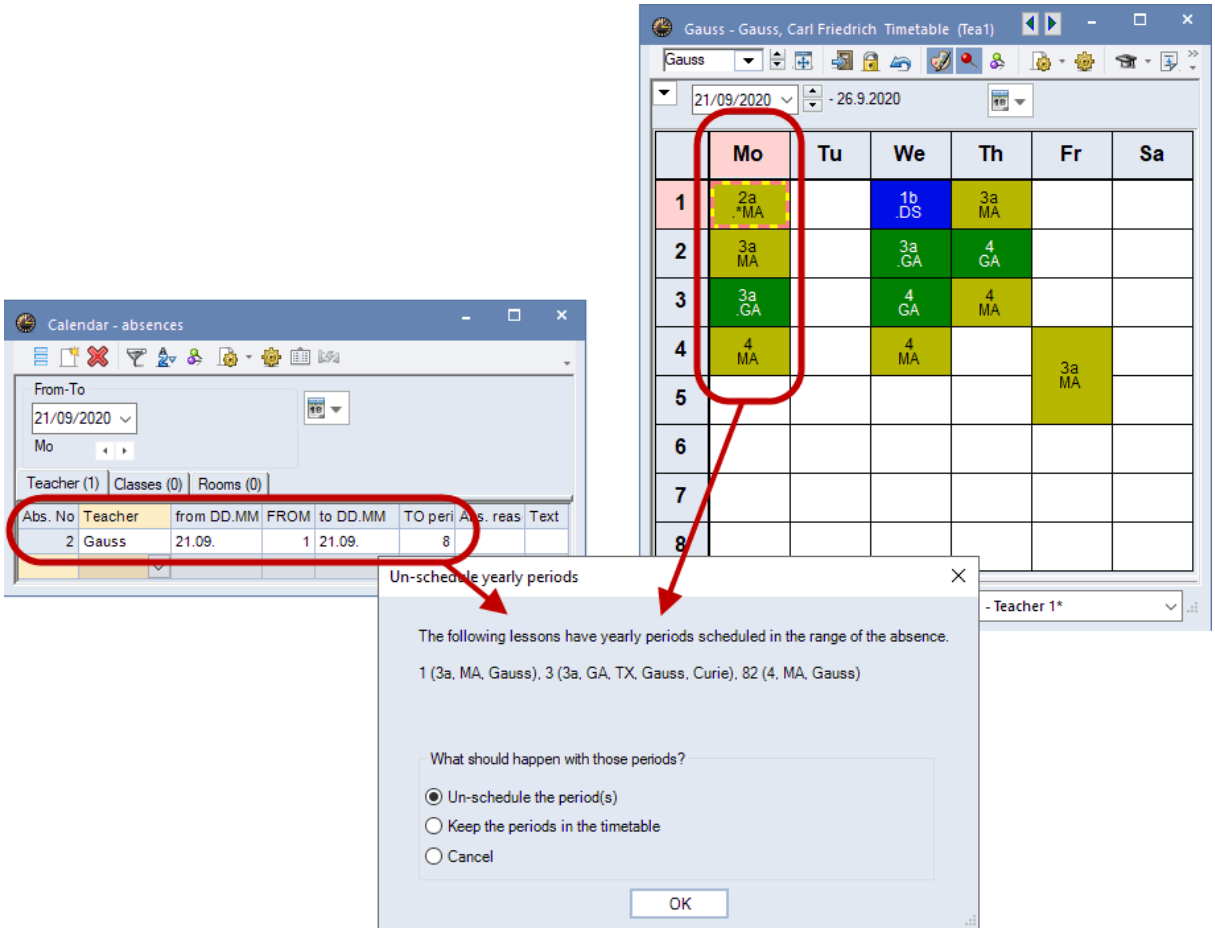
Note:
Calendar absences can also be entered via the school year calendar accessed under 'Master Data | Teachers' (or 'Classes').





2.2.5.2.2 Warning messages

When you enter an absence of a teacher in the calender scheduling who at the respective time is already scheduled, a warning message will pop up from now on. Via this message you can either accept the situation as it is or let the obsolete periods be unscheduled.



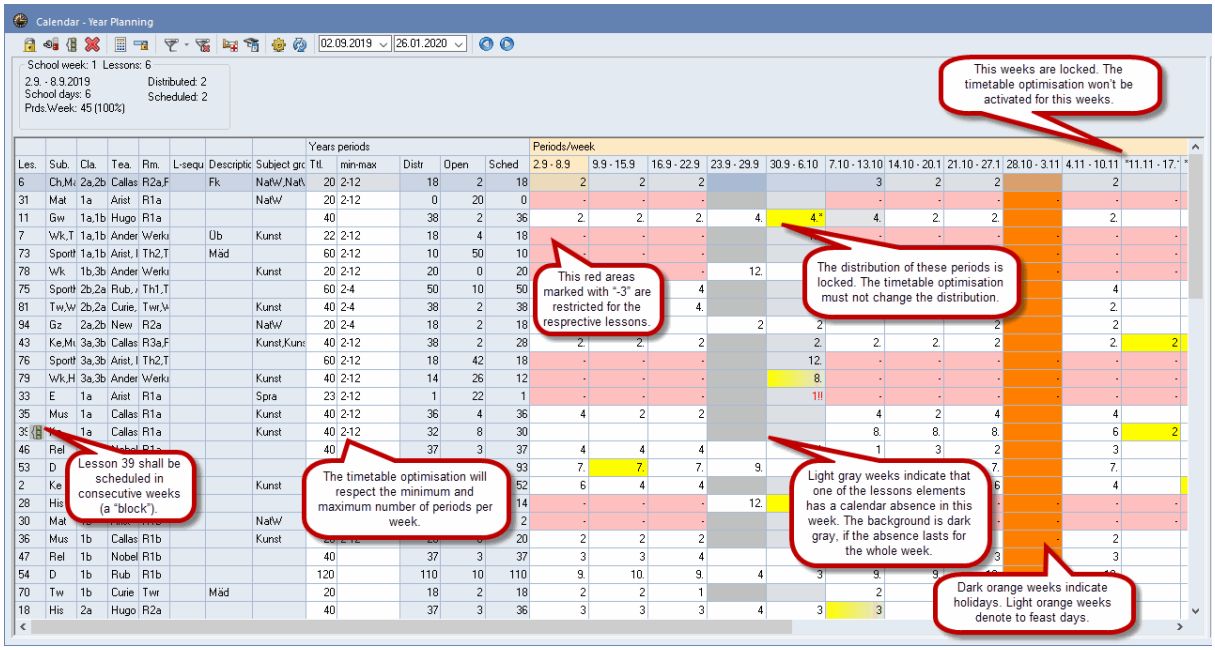
2.2.5.3 Automatic scheduling (optimisation)

Once you launch optimisation via 'Scheduling | Optimisation' all (non-fixed) lesson periods will be scheduled automatically regardless of whether they are yearly or weekly periods.

Untis uses the following logic with regard to yearly periods:

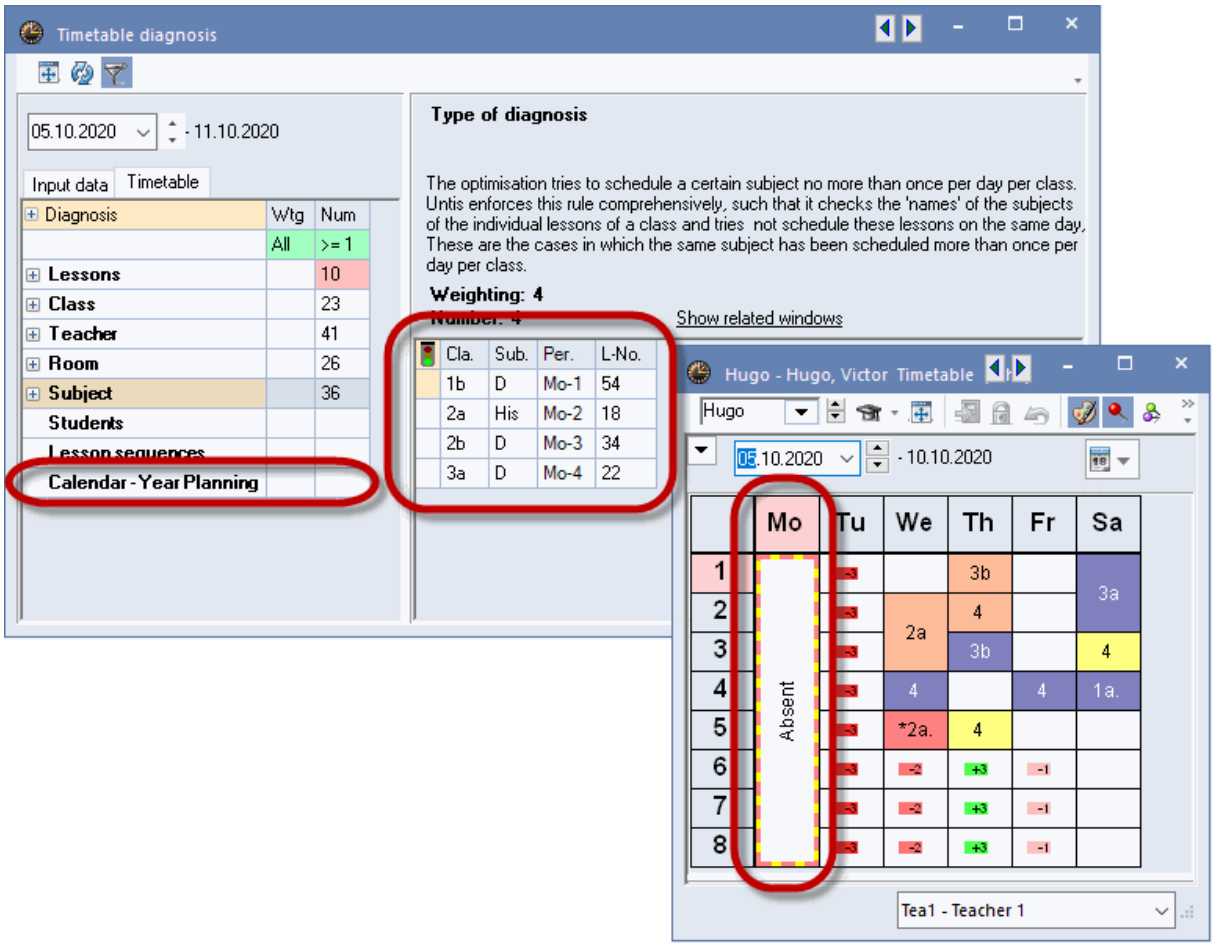
- Allocated periods that have not been fixed in the calendar window will be reallocated
- Allocation criteria entered in the calendar window will be taken into account even if no periods have been entered in the calendar window (for example 'blocked' lessons)
- Calendar absences for classes and teachers will be fully taken into account

Below is a summary of all the icons that may be displayed in the 'Calendar - Year Planning' window:



2.2.5.4 Diagnosis

There are special diagnosis features for working with yearly periods. The diagramme below shows, for instance, that teacher Hugo is absent on 5 October all day. However, he is scheduled for 4 periods this day.


Timetable diagnosis
05.10.2020 - 11.10.2020
Input data
Timetable
Diagnosis
Wtg
Num
All
>= 1
Lessons 10
Class 23
Teacher 41
Room 26
Subject 36
Students
Lesson sequences
Calendar - Year Planning
Type of diagnosis
The optimisation tries to schedule a certain subject no more than once per day per class. Untis enforces this rule comprehensively, such that it checks the 'names' of the subjects of the individual lessons of a class and tries not schedule these lessons on the same day. These are the cases in which the same subject has been scheduled more than once per day per class.
Weighting: 4
Show related windows
Cla.
Sub.
Per.
L-No.
1b D Mo-1 54
2a His Mo-2 18
2b D Mo-3 34
3a D Mo-4 22
Hugo - Hugo, Victor Timetable
Hugo
05.10.2020 - 10.10.2020
Mo
Tu
We
Th
Fr
Sa
Absent
Tea1 - Teacher 1

Index

- C -

Calendar absences 22

- I -

Introduction 7

- Y -

Yearly periods 3

Endnotes 2... (after index)