

PowerScheduler

Creating Student Preference Constraints Using Excel

Included are instructions on creating student Preference Constraints to keep students with the same teacher for semester 2, but not necessarily the same period. This procedure is not 100% guaranteed however in most cases the student will get the same teacher in S2, when the second load is run, that they had in S1 when the first load was run.

1. Have a completed Master Schedule, validate the Load and correct all errors. Be ready to Load.
2. Note your school ID number. To find your school ID, on the live side select School > Next School and your school name and number should be listed there.

The screenshot shows the PowerSchool navigation menu on the left. Under the 'Setup' section, the 'School' option is highlighted, and a 'Setup school' button is visible. In the 'Scheduling' section, the 'Next School' option is highlighted with a red box. To the right, a table displays school information:

School Name	School Abbrev.	School Number
Middle School Test Constraints	MS	88

3. Have a list of both S1 & S2 courses. The Course List report may be a good choice. Determine which classes you will be working with. For example Math 6 S1 4300 and Math 6 S2 4301. Isolating your courses/sections by hiliting or grouping will be helpful.
4. In each of the S2 Courses that you have defined, uncheck Schedule this Course on the Course Preferences page.

The screenshot shows the 'Course Information' page for course 4301. The 'Scheduling Preferences' section is expanded, showing three checkboxes: 'Schedule This Course', 'Use The Course For Lunch', and 'Exclude On Report Cards/Transcripts'. A red arrow points to the 'Schedule This Course' checkbox, which is currently unchecked. A callout box on the right contains the following text:

On the Course Preferences screen uncheck **Schedule This Course** and Submit for the effected S2 courses.

5. **Validate the Load** again to confirm that you have no errors, **Load the student schedules**. Because you have unchecked certain S2 Courses to not schedule, you will have many classes that don't schedule, however all the students will have S1 classes. (You will be exporting the S1 classes so we can match them to the S2 classes.)
6. Make sure your File Import# field in Years & Terms on the PowerScheduler side is filled in correctly for all terms, eg. 2300, 2301, 2302. From Years & Terms select the Edit Terms for the next school year.

Start Page > PowerScheduler > Schedule Years & Terms

Schedule Years & Terms

Build: Final for Student Prefere Catalog: MSN Forever Catalog

Year	Abbrev.	1st Day	Last Day	Edit Terms
2010-2011	10-11	09/07/2010	06/10/2011	Edit Terms
2011-2012	11-12	09/07/2011	06/29/2012	Edit Terms
2012-2013	12-13	09/05/2012	06/29/2013	Edit Terms
2013-2014	13-14	09/03/2013	06/29/2014	Edit Terms

Edit Schedule Term

Option	Value
Name of Term	2013-2014
Abbreviation	13-14 (example: Q1) Note: This abbreviation must start with a letter
First Day of Term	09/03/2013 (MM/DD/YYYY)
Last Day of Term	06/29/2014 (MM/DD/YYYY)
What portion of the school year does this term represent?	Full year
Import File Term #	2300

The hard coded number at the bottom of each term must be keyed into the Import File Term # field and Submit. Repeat this for every term.

7. To export the S1 scheduled classes, in System > DDE select the ScheduleCC table. Select all xxxxxx records in this table. Search ScheduleCC for schoolID = xxx, and termID = 2301 (for the 13-14 school year, S1).

Direct Database Export (DDE)

Current Table: ScheduleCC (111)

Current Records in Selection: 96480

List View Table View Export Records Match Selection Table View Setup

Select all 96480 records in this table

Search ScheduleCC

SchoolID = 88

TermID = 2301

Search only in records belonging to Middle School Test Constraints

Search all 96480 records in this table Search within the current 96480 records only.

Import File Term # for S1

Current Table:

Current Records in Selection: 3458

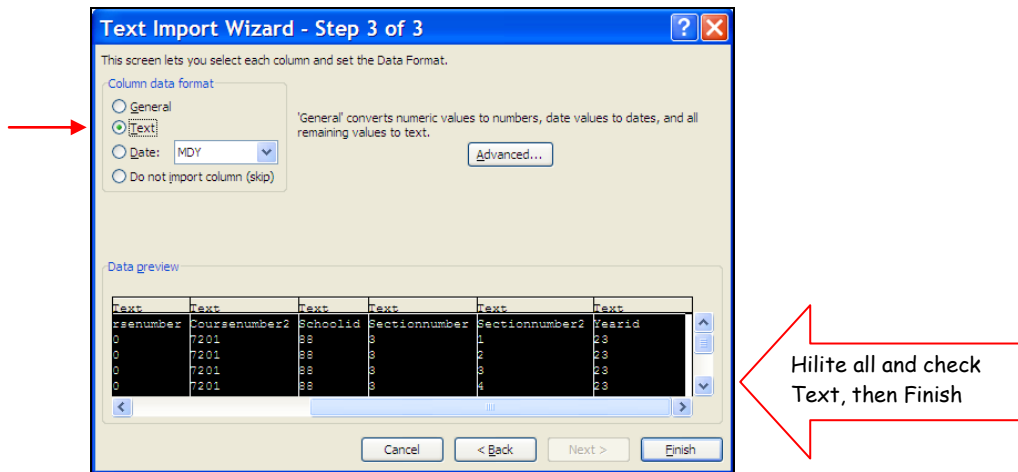
List View Table View Export Records

It has found all the CC records for S1 in this school. Table View to confirm you have the correct records. Now you will Export these records.

8. Export these fields and save to your desktop:

- BuildID
- Course_number
- SchoolID
- SectionID
- Section_number
- StudentID
- TeacherID
- TermID

9. Open Excel. In Excel, File/Open, drop down and select "All Files" in Files of Type and navigate to your saved file. The file Text Import Wizard window will open. Select Next, Next again, and on the third step hold down your shift key, move the scroll bar over to the far right and click down in the last field which will hilite all the data; select the Text radio button and Finish.



10. View your export to make sure it is the correct info. Sort by the Course Number column to group them sequentially. (Here you will isolate the Semester 1 CC records which will be copied to the S2 Preference export worksheet you will create in future steps.)

11. In PowerScheduler select a student that will need a Preference. Enter the first record by hand so it can be exported and used as a template. On the Students Preference Constraint screen associate the **Student, Course Number, Semester, and Teacher.**

12. In System > DDE select the ScheduleConstraints table and search for TermID > 2299 (or 1 less than the next year termid) and ConstraintCode = 05. Check the box to search only in this school which should produce 1 record (the one you just created by hand).

Direct Database Export (DDE)

Current Table: ScheduleConstraints (110)

Current Records in Selection: 1312

List View Table View Export Records Match Selection Table View Setup

Select all 1312 records in this table

Search ScheduleConstraints

ConstraintCode = 05

TermID > 2299

Search only in records belonging to Middle School Test Constraints

Search all 1312 records in this table Search within the current 1312 records only.

The search returns the 1 record you just entered to create the template.

Direct Database Export (DDE)

Current Table: ScheduleConstraints (110)

Current Records in Selection: 1

List View Table View Export Records Match Selection Table View Setup

13. Select Export. Select the fields below, Submit and save to your desktop.

- BuildID
- CatalogID
- ConstraintCode
- CourseNumber
- SchoolID
- StudentID
- TeacherID
- Term
- TermID
- YearID

BuildID
CatalogID
ConstraintCode
CourseNumber
SchoolID
StudentID
TeacherID

Field Delimiter: Tab

Record Delimiter: CR

"Surround fields" Column titles on 1st row

Optional: Sort Field Name Direction

Back to Direct Database Export Main Screen

Submit

14. Open Excel. In Excel, File/Open, drop down and select "All Files" in Files of Type and navigate to your saved Constraint file. The file Text Import Wizard window will open. Select Next, Next again, and on the third step hold down your shift key, move the scroll bar over to the far right and click down in the last field which will hilite all the data; select the Text radio button and Finish.

As a text file it preserves the leading 0 in the Constraint Code 05. This code must be imported as 05 and not 5.

original 1 constraint export.txt - Microsoft Excel

Home Insert Page Layout Formulas Data Review View Add-Ins Help

Comic Sans MS 11 A A

Clipboard Font Alignment Number Styles Cells

	A	B	C	D	E	F	G	H	I	J
1	Buildid	Catalogid	Constraint	Coursenuml	Schoolid	Studentid	Teacherid	Term	Termid	Yearid
2	802	4	05	4301	88	14009	6408	S2	2302	23
3										

15. Also open your CC table file that is sorted by Course number. It has been recommended that you create a text file for each course that needs to be matched from S1 to S2, however you can create only one text file if you don't find it confusing.

	A	B	C	D	E	F	G	H	I	J	K
1	Id	Buildid	Course Number	Dateenrolled	Dateleft	Expression	Loadlock	Schoolid	Studentid	Teacherid	Termid
2	1944251	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	14049	486	2301
3	1944250	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	18884	486	2301
4	1944249	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	18912	486	2301
5	1944248	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	18925	486	2301
6	1944255	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	16963	486	2301
7	1944254	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	15645	486	2301
8	1944253	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	14097	486	2301
9	1944252	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	14081	486	2301
10	1944305	802	4300	9/5/2013	1/18/2014	4(A-B)	FALSE	88	14098	486	2301
11	1944304	802	4300	9/5/2013	1/18/2014	4(A-B)	FALSE	88	14083	486	2301
12	1944365	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	17272	6408	2301
13	1944364	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	17355	6408	2301
14	1944367	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	34901	6408	2301
15	1944325	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	17194	486	2301
16	1944324	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	19013	486	2301
17	1944331	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	14099	486	2301
18	1944330	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	18874	486	2301
19	1944329	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	14057	486	2301
20	1944328	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	18881	486	2301
21	1944399	802	4300	9/5/2013	1/18/2014	3(A-B)	FALSE	88	13811	6408	2301
22	1944488	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	18860	458	2301
23	1944489	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	18853	458	2301
24	1944490	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	17397	458	2301
25	1944491	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	17333	458	2301
26	1944492	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	18839	458	2301
27	1944493	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	41654	458	2301
28	1944494	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	31559	458	2301
29	1944495	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	13751	458	2301

It may be easier if you identify the Course Numbers that you will be working with by grouping them.

16. You will copy the StudentID and TeacherID columns from the CC table over to the Constraint export in the StudentID and TeacherID for the first Course.

	A	B	C	D	E	F	G	H	I	J	K
1	Id	Buildid	Course Number	Dateenrolled	Dateleft	Expression	Loadlock	Schoolid	Studentid	Teacherid	Termid
2	1944251	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	14049	486	2301
3	1944250	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	18884	486	2301
4	1944249	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	18912	486	2301
5	1944248	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	18925	486	2301
6	1944255	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	16963	486	2301
7	1944254	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	15645	486	2301
8	1944253	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	14097	486	2301
9	1944252	802	4300	9/5/2013	1/18/2014	2(A-B)	FALSE	88	14081	486	2301
10	1944305	802	4300	9/5/2013	1/18/2014	4(A-B)	FALSE	88	14098	486	2301
11	1944304	802	4300	9/5/2013	1/18/2014	4(A-B)	FALSE	88	14083	486	2301
12	1944365	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	17272	6408	2301
13	1944364	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	17355	6408	2301
14	1944367	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	34901	6408	2301
15	1944325	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	17194	486	2301
16	1944324	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	19013	486	2301
17	1944331	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	14099	486	2301
18	1944330	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	18874	486	2301
19	1944329	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	14057	486	2301
20	1944328	802	4300	9/5/2013	1/18/2014	6(A-B)	FALSE	88	18881	486	2301
21	1944399	802	4300	9/5/2013	1/18/2014	3(A-B)	FALSE	88	13811	6408	2301
22	1944488	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	18860	458	2301
23	1944489	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	18853	458	2301
24	1944490	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	17397	458	2301
25	1944491	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	17333	458	2301
26	1944492	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	18839	458	2301
27	1944493	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	41654	458	2301
28	1944494	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	31559	458	2301
29	1944495	802	4400	9/5/2013	1/18/2014	1(A-B)	FALSE	88	13751	458	2301

	A	B	C	D	E	F	G	H	I	J
1	Buildid	Catalogid	Constraint	CourseNum	Schoolid	Studentid	Teacherid	Term	Termid	Yearid
2	802	4	05	4301	88	4009	6408	52	2302	23
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

You will be copying the StudentID and TeacherID from the CC file and paste into the Preference Constraint StudentID and TeacherID fields.

17. After you copy the first course information on the StudentID & TeacherID make sure you copy down the correct Course Number for the S2 course.

Copy down the correct S2 Course Number for the StudentID & TeacherID that you just pasted in from the CC file.

If you are creating a separate text file for each course, copy down the other columns as well.

If you are creating only one file, wait until all StudentID, TeacherID, & Course numbers are copied over then copy all the data in the other columns down at one time.

	A	B	C	D	E	F	G	H	I	J
	Buildid	Catalogid	Constraint	Coursenuml	Schoolid	Studentid	Teacherid	Term	Termid	Yearid
	802	4	05	4301	88	14009	6408	S2	2302	23
				4301		14049	486			
				4301		18884	486			
				4301		18912	486			
				4301		18925	486			
				4301		16963	486			
				4301		15645	486			
				4301		14097	486			
				4301		14081	486			
				4301		14098	486			
				4301		14083	486			
				4301		17272	6408			
				4301		17355	6408			
				4301		34901	6408			

S1 Course number was 4300 in the CC file which we change to the S2 Course number 4301 for the import file

18. The rest of the columns can be copied down as they appear on the first record. Continue this process until all S2 Courses are complete.

19. **NOTE: On the import text file, the CONSTRAINT CODE IS 05 NOT 5. Make sure all fields are Text and save as .txt file.**

20. Once your spreadsheet(s) is complete go to Special Functions > Importing & Exporting > Quick Import and select Schedule Constraints table, browse out and find your Constraint .txt file, check the box for Suggest field map and **Import**.

The screenshot shows the MISD PowerScheduler interface. On the left, the 'Special Functions' menu is open, with 'Importing & Exporting' selected. Below it, the 'Importing' sub-menu is open, and 'Quick Import' is selected. On the right, the 'Quick Import' dialog box is displayed. The 'Table' dropdown is set to 'Schedule Constraints'. The 'Field delimiter' is set to 'Tab'. The 'End-of-line marker' is set to 'CR'. The 'Character Set' is set to 'Mac Roman'. The 'File to import' field is set to 'C:\Documents and Settings\ [Browse...]'. The 'Suggest field map' checkbox is checked. The 'School' dropdown is set to 'Middle School Test Constraints'.

21. Check your mappings to make sure all are there and correct. Check the box to exclude first row and Submit. They should all say Imported.

Check these fields to confirm that they match. Check the box to exclude first row. Submit. Once you submit you should see Imported list down the page.

Importing: file to import for student preference1.txt

- 1. : Imported.
- 2. : Imported.
- 3. : Imported.
- 4. : Imported.
- 5. : Imported.
- 6. : Imported.
- 7. : Imported.
- 8. : Imported.
- 9. : Imported.
- 10. : Imported.
- 11. : Imported.

22. Once they are imported and you see the word Done in the lower left corner you are ready to go back to PowerScheduler, open Student Preference Constraints and see that they did import correctly.

Student Preference Constraints

Build: 2013 - 2014 Catalog: 2013-2014 Course Catalog

[New](#)

Student	Course Number	Section Number	Term	Teacher
Adams, Corby	ART1000		S2	Abram, Michael
Adams, Gerald C	ART1000		S2	Abram, Michael
Allen, Victor C	ART1100		S2	Accatino, Steve
Ackerman, Stan	ART1000		S2	Abram, Michael
Ahlberg, Emmy	ART1000		S2	Abram, Michael
Almanza, Olivia C	ART2000		S2	Berndt, Gordie E

Notice that we don't have any Section Numbers because we want the student to get this teacher for this course in **any section** for Semester 2.

23. Open the S2 Courses that you previously unchecked to schedule and now check those boxes and Submit.

Scheduling Preferences

Schedule This Course

24. Validate the Load again and if no errors, check box to close at max and Execute. Import the Load and check your student's schedules.

This procedure is not 100% guaranteed, but in most cases the students will get the same teacher for S1 and S2 and not necessarily in the same period.

We have not tested this process with trimesters.

Never re-Build after this process or you will need delete all the Student Preference Constraints and begin again.