



Macomb Intermediate School District

PowerSchool

PowerScheduler

Updated 12/1/2014

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New Features: Program Balancing on page 25 & Automated Engine on page 4.



PowerScheduler Procedures

For additional information on each step refer to the PowerSchool Prepare to Build and Prepare to Load documents which are available on PowerSource. When making changes, always remember to select **Submit** at the bottom of the page.

Scenario Setup (Your PowerSchool Liaison is responsible for steps 1 thru 5)

- 1. Create New Year in district & in each school on live side and put in Import #. Only the year is required at this time. Every school should have a year term on the live side whether you use the school or not.

In School, the start date is the first day of school. The end date for the term can be the last day of the term or any day before the next term begins. Some like to end the term on the day it actually ends so the teachers can see their new classes the next day to start putting in assignments and some schools like to give the teachers the weekend to finish up their gradebooks before the term changes, therefore they end the term on a Sunday. Pearson does advise that you should not begin a term on a Sunday although you can end a term on a Sunday. Dates should not overlap.

- 2. On the live side select the New Year then select PowerScheduler. **Always start in the current year on live side, go to New Year on live side, then select PowerScheduler.**
- 3. Option 1: Select Auto Scheduler Setup to create the years/terms & create scenario (**you must create terms in order and only create the ones you will be using**):
 - a. Select the lowest term level used in this school (when credit is awarded)
 - b. Select the number of periods & days and Continue; include regular day plus seminar or homeroom if used daily.
 - c. Check the boxes only for the terms you will use. You must check Full Year.
 - d. Key in all the term dates and Continue. Use dates as close to correct as possible.

You will now be in the Edit Build Scenario page. Check this page out to make sure all is correct.

- a. Select a catalog. We suggest that you select your previous year's catalog and edit it. If you create a new catalog you will lose the descriptions and the editing from the previous year. (You will not see the Associate button on terms until you Submit the Edit Build Scenario page.)
- b. Make sure the Build & Load button is selected.
- c. Edit Build Name & Description if necessary. Make sure Active Build is checked and periods, & days are correct. Submit.

- d. Click to re-open the new Build Scenario. Check to make sure information there is correct. You can now edit: periods and days, if necessary. Click the "Associate" button and make sure correct terms are checked including Full Year-Full Year is ALWAYS checked. If dates not correct Set Schedule Year then check the Associate again.
- e. On the main menu select Years & Terms; correct the Name of School year and Abbreviation. Select Edit Terms and in each term key in the Import File Term #.
- f. Functions select Set Schedule Year, select the next school year and Submit if you have not already done this.

4. Option 2: Create your Scenario by hand:

- a. Select Years & Terms and create New Year & terms in order (go back and put in Import File Term #)
- b. In Functions Set Scheduling Year
- c. Create Scenario - Associate terms, periods, days, catalog (as described in the Auto-Scheduler Setup)

5. If you are copying your Master Schedule from a previous year:

- a. Make sure the schedule you are copying over has the same number of **terms, days & periods** as your new schedule will have.
- b. Select Functions > Copy Master Schedule.
- c. Select the year you want to copy, (you can use any previous year) check the box to confirm, and Submit.
- d. In Years & Terms correct the year name, abbreviation, and dates if needed.
- e. Key in the Import File Term #'s
- f. In your scenario select the Associate button and re-check the terms if needed & confirm days & periods are correct. Always check the Full Year term. Don't forget to Submit.
- g. **Always make sure your Scheduling Year at the top of the screen is correct.**

Note:

New Feature: You can enable a server-side engine loader for all on your team by going to School > Scheduling Preferences and check the box for Engine Loader. They will no longer need to download the engine onto their computer.

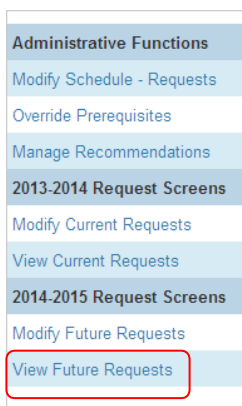
- Remember to enable PowerScheduler for your schedulers. In Security select the Group and check the box to allow scheduling and the terms that they are allowed to edit.
- Also remember to change page permissions on any pages that they are not allowed to access or edit, especially the Commit page.
- Apply the "Workaround for misalignment of periods in PScheduler for manually schedule student pages" if needed:
 - DDE select ScheduleBuilds table

- Look for and select your current Build name

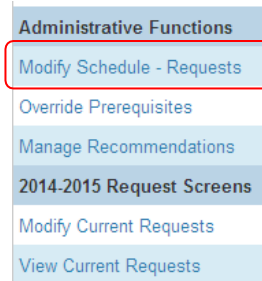
- Note the BuildID number
 - Return to DDE; from the SchedulePeriods table search for BuildID = xxx
 - Once you find the periods for the current build select List View
 - Populate the PeriodID field in the numeric order for each Period and Submit.
 - Confirm that the Scheduling Setup pages are completed correctly for all grade levels including the feeder students.
- Remind your secretaries that when they **enroll a new student** to fill in the Scheduling Setup page correctly; there is a difference in the setup of the students who are starting school now and the students who are registering now for next school year.
 - Also remind your secretaries that when they **Transfer Out** a student from school, do not check the box that the student intends to enroll in school during next school year, and:
 - Go to Modify Schedule and confirm that the system has exited the student from their current classes.
 - While still in the current term, go to the Request Management screen, View Future Requests for the **next** school year & verify that there are no requests for next school year.
 - If the requests for the next school year are listed, change to the next year in Terms at the top, go to Request Management and under Administrative Functions select Modify Schedule-Requests and delete all the requests for the next school year.
 - And on the Scheduling Setup page confirm that the box to Schedule this Student is **not** checked, the Next School Indicator should be blank and leave the Next Year Grade as is.

To see if the student you are transferring out has requests for the next school year:

In the **current term** select Request Management > View Future Requests.



If the student you have transferred out has Future Requests, switch to the **next school year**, select Request Management > Modify Scheduler - Requests and delete all requests.



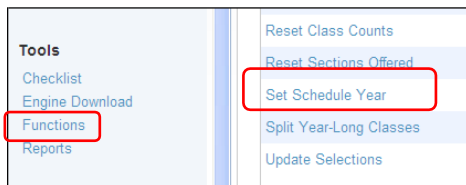
View Future Requests

Delete Future Requests

Scheduling Year

In PowerScheduler always make sure your Scheduling Year at the top-right of the screen is correct. If it is not correct, in the Functions menu select Set Schedule Year and select the correct year. Submit.

Scheduling Year: 2012-2013



Set Schedule Year

Sets the schedule year used for scheduling requests.

Years: 2012-2013 2009-2010 2010-2011 2012-2013

Select Master Schedule from the menu on the left; if you have no Rooms or Teachers listed in the setup, your Master Schedule was not copied over from last year OR your terms are not all checked in **Associate** in your scenario. If you are building a new Master Schedule, it is not necessary to copy a previous Master Schedule. At this point you may not know whether you will use the old however if you copy it over and don't need it, it can easily be deleted.

Master Schedule Preferences

Option	Value
Periods	<input checked="" type="checkbox"/> Period 1 <input checked="" type="checkbox"/> Period 2 <input checked="" type="checkbox"/> Period 3 <input checked="" type="checkbox"/> Period 4 <input checked="" type="checkbox"/> Period 5 <input checked="" type="checkbox"/> Period 6 <input checked="" type="checkbox"/> Period 7 <input type="checkbox"/> All periods
Days	<input type="checkbox"/> A <input checked="" type="checkbox"/> All days
Credit type	<input type="text"/> (leave blank for all)
Rooms	No rooms were found
Teachers	No teachers were found
Sort By	<input type="radio"/> Credit Type <input type="radio"/> Department <input type="radio"/> Room <input checked="" type="radio"/> Teachers

If you want all periods, make sure you check the All periods box.

Edit Build Scenario

Parameters: Buildings, Catalogs, Days, Departments, Facilities, Houses, Periods, Section Types, Teams, Years & Terms

Processing: Auto Scheduler Setup, Scenarios

Build Information

Build and Load
 Use this scenario setting to build a master schedule and load students into the built schedule.

Load Only
 Use this scenario setting if a master schedule is copied or imported and you need to only load students.

Build Name: 2012 - 2013 Dave's Demo
 Build Description: Automated Schedule Setup

Terms:

Schedule Term Setup

Term	Start	End
<input checked="" type="checkbox"/>	2012-2013	09/04/2012 - 06/29/2013
<input checked="" type="checkbox"/>	Semester 2	01/21/2013 - 06/14/2013

Make sure the Year term is always checked. After you Submit on this page, make sure to Submit on the main Scenario page or your changes will not hold in Associate Terms.

The Master Schedule was not copied over **IF** there are no rooms & teachers **OR** the terms may not be checked when you select Associate in your Scenario

Option	Value
Periods	<input checked="" type="checkbox"/> Period 1 <input checked="" type="checkbox"/> Period 2 <input checked="" type="checkbox"/> Period 3 <input checked="" type="checkbox"/> All periods
Days	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input checked="" type="checkbox"/> All days
Credit type	(leave blank for all)
Rooms	<input type="text" value="All Rooms"/> 109 110 111 112 113 114 115 116 117
Teachers	<input type="text" value="All Teachers"/> Abram, Michael Accatino, Steve Adams, Mark B Berndt, Gordie E Bowe, Sheldon K Brachemyer, Dan Bryant, Renata L Carlson, Steven N Caruthers, Elizabeth
Sort By	<input type="radio"/> Credit Type <input type="radio"/> Department <input type="radio"/> Room <input checked="" type="radio"/> Teachers

Always select All Periods, All Days, All Rooms, All Teachers unless you only want certain Periods, certain Days, certain Rooms, or certain Teachers. In Periods, checking all the boxes but not checking the All Periods box may not give you complete data.

When you see Rooms & Teachers your Master Schedule has been copied over from a previous year. If it has not subsequently been deleted you can run the report and view it.

Rooms

In the menu select Rooms. If you have rooms displaying, edit if necessary. If you have no rooms displaying and are copying over a Master Schedule, select the Functions menu, "Auto Generate Rooms" from an existing Master Schedule. If you are NOT copying the Master Schedule, you can create rooms by hand using the "New" tab or use the Auto-Create option in the Functions Menu. Once your Rooms screen is populated, to edit a room click on the room number ([blue link](#)).

- a. We do not recommend that you use Department, Building, or House in your Room Edit (it can inhibit the Builder). If you check the box for Room is Always Free the engine could schedule 2 classes in one room at the same time. Consult the PowerSource documentation to get more information on Department, Facility only use and Facilities - we do not find these fields useful.

Option	Value
Room Number	<input type="text" value="3"/>
Room Description	<input type="text" value="3"/>
Department	<input type="text"/> Associate
Building	<input type="text"/> Associate
House	<input type="text"/> Associate
Use for Scheduling	<input checked="" type="checkbox"/>
Room is Always Free	<input type="checkbox"/>
Department Use Only	<input type="checkbox"/>
Facility Use Only	<input type="checkbox"/>
Room Facilities	<input type="text"/> Associate
Room Maximum	<input type="text" value="32"/>

**To
Mass
Set
Rooms**
"Use for
Scheduling"

- b. Check the box to **Use for Scheduling**. To mass set this field use Update Selections in the Functions menu: Select the ScheduleRooms table, select all records in this school, Modify Records, confirm that you have the correct number of records. **Select Scheduled from the drop down menu and enter 1 (1 = ON ; 0 = OFF). Eg. Schedule = 1 and select Modify Selected Records.**

CAUTION - IF YOU ARE NOT EXPERIENCED AT MASS CHANGE, PLEASE ASK YOUR LIAISON FOR ASSISTANCE - YOU CAN DO A GREAT DEAL OF DAMAGE!

UPDATE SELECTIONS NOTE: Be careful using Update Selections - depending on what selections you make, you may be updating this for all the schools and not just your school.

Update Selections

Current Table: ScheduleRooms

Current Records in Selection: 42 List View Modify Records Select Records by Hand

Select all 42 records in this school

Search ScheduleRooms

=

=

Search all 42 records in this school Search within the current 42 records only

Modify Records

Current Table: ScheduleRooms

Current number of records in selection: 42

Scheduled

Note: This function will permanently modify your database. Use only if you know exactly what you are doing, and then only with extreme caution. Changes are permanent. You may use * to reference the existing value of the field.

Modify Selected Records

- c. Set **Room Max**. If you are building a new Master Schedule using the builder you may want to set the **Room Max** high until the Master Schedule has been created. Remember to change it back to the correct number before you Load.

**To Mass
Set
Rooms
"Room
Max"**

To mass set Room Max use Update Selections in the Functions menu: Select ScheduleRooms, select all records in this school, Modify Records, confirm that you have the correct amount of records. Select Maximum from the drop down menu, enter the number of seats and Modify Selected Records. **CAUTION - IF YOU ARE NOT EXPERIENCED AT MASS CHANGE, PLEASE ASK YOUR LIAISON FOR ASSISTANCE - YOU CAN DO A GREAT DEAL OF DAMAGE!**

Modify Records

Current Table: ScheduleRooms

Current number of records in selection: 42

Maximum

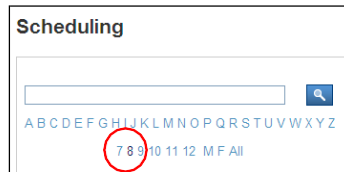
Note: This function will permanently modify your database. Use only if you know exactly what you are doing, and then only with extreme caution. Changes are permanent. You may use * to reference the existing value of the field.

Modify Selected Records

- d. Rooms can be alpha-numeric.

Student

In the Student screen confirm that your feeder students are there by selecting their current grade level. If feeder students are not displaying, notify your liaison. If you need to see your feeder students on the live side you have to select them from the PowerScheduler side and then go to live and they will be your selection.

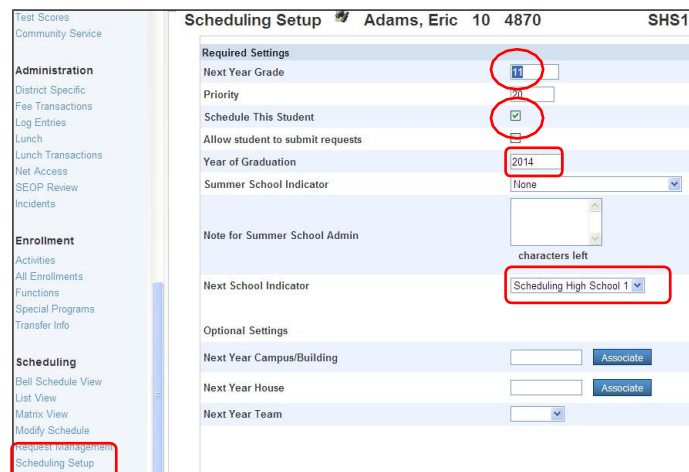


Scheduling

ABCDEF GHIJKL MNOPQRST UVWXYZ

7 8 9 10 11 12 MF All

- On the live side make sure the correct next school is selected in every student's **Schedule Setup** screen. This can be changed in mass by your Liaison. Also make sure the students that are not returning or will be retained have the Scheduling Setup page edited.



Scheduling Setup Adams, Eric 10 4870 SHS1

Required Settings

Next Year Grade 11

Priority 200

Schedule This Student

Allow student to submit requests

Year of Graduation 2014

Summer School Indicator None

Note for Summer School Admin

characters left

Next School Indicator Scheduling High School 1

Optional Settings

Next Year Campus/Building Associate

Next Year House Associate

Next Year Team

Request Management

Scheduling Setup

Live Side

Mass Set to allow students to submit requests through portal

If the students will schedule on the portal you must check the student's Scheduling Setup screen on the Live side to "Allow student to submit requests". To mass fill this field, ask your Liaison to select the students and from Functions select Student Field Value and change the field Sched_AllowRequests to 1. (1 = true; 0 = false -this field must be set to 1 and not "true") Submit. If you cannot see that field as a choice in Student Field Value, initialize the field by manually selecting a student, check the box on the Scheduling Setup page and Submit.

- Auto-fill student information from the Functions menu and select **Auto-Fill Student Info**. You **must** have the correct grad year, next year grade level, select **Yes** to schedule this student and you may enter a priority. This priority tells the engine which students to Load first. Notice that Grade 12 goes to next year grade 99 which will send their record to the Graduated School. This

should be their selected school in Scheduling Setup on the live side. We don't need a priority and

do not check to Schedule This Student. NOTE: We believe the system only looks at the whole number and not any preceding 0's, therefore if you key in 05 the system won't load those students until after the 40 students. You may want to start with 20, 30, 40, 50 and leave 10 for SE or any other student that must schedule before anyone else.

Auto-Fill Student Info					
Field Name	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Next Year Grade	<input type="text" value="9"/>	<input type="text" value="10"/>	<input type="text" value="11"/>	<input type="text" value="12"/>	<input type="text" value="99"/>
Priority	<input type="text" value="40"/>	<input type="text" value="30"/>	<input type="text" value="20"/>	<input type="text" value="10"/>	<input type="text"/>
Schedule This Student	<input type="button" value="Yes"/>	<input type="button" value="Yes"/>	<input type="button" value="Yes"/>	<input type="button" value="Yes"/>	<input type="button" value="No"/>
Year of Graduation	<input type="text" value="2017"/>	<input type="text" value="2016"/>	<input type="text" value="2015"/>	<input type="text" value="2014"/>	<input type="text"/>

←

- c. On the Student's **Preferences** page you can see the fields you mass changed in Auto Fill Student Information and the Next School Indicator is coming from the live side. Do not set Buildings or Houses. Teams can be selected here if they need to be on a specific team and you don't want the system to assign the team. Students can be on only 1 team.

Edit Scheduling Preferences	
Adams, Eric 10 4870 SHS1	
Constraints Demographics Grad Planner Grad Progress Matrix Preferences	
Required Settings	
Next Year Grade	<input type="text" value="11"/>
Priority	<input type="text" value="20"/>
Schedule This Student	<input checked="" type="checkbox"/>
Year of Graduation	<input type="text" value="2014"/>
Next School Indicator	<input type="button" value="Scheduling High School 1"/>
Optional Settings	
Next Year Building	<input type="text"/> <input type="button" value="Associate"/>
Next Year House	<input type="text"/> <input type="button" value="Associate"/>
Next Year Team	<input type="text"/> <input type="button" value="Associate"/>

9961

PowerScheduler Side

- d. From the Reports menu, run the Student List Report and make sure all students are showing correctly.

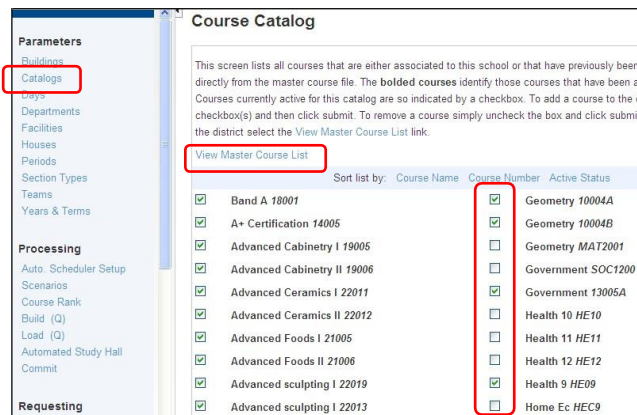
NOTE: Remind your secretaries that when they **Enroll** a new student, fill in the Scheduling Setup page correctly; note that there is a grade level difference in the setup of the students who are starting school now and the ones who are registering for the next school year. Also remind your secretaries that after the student is **Transferred Out** of school they need to go to Modify Schedule and confirm that the system has exited the student from their current classes. Then go to the Request Management screen, View Future Requests for the **next** school year (still in current term) and verify that the requests for next year are gone. If the requests for the next school year are listed, change to the next year in Terms at the top, go to Request Management and under Administrative Functions select Modify Schedule-Requests and delete all the requests for the next school year. Last, on the Scheduling Setup page confirm that the box to Schedule this Student is **not** checked, the Next School Indicator should be blank and leave the Next Year Grade as is. This is for version 7.6 and later.

Course Catalog

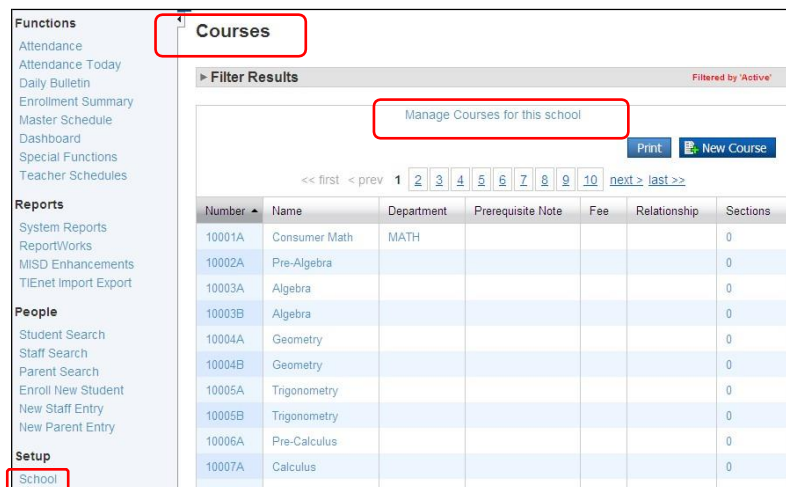
Edit the Course Catalog (this is for your school only). If new courses are needed, please contact your liaison. **If you have the authority to create new Courses, do not use punctuation or special characters in the name or number and no spaces in the number.** Courses can have the same name and different course numbers.

Do not create a new Course Catalog; edit one that is already there. Select Catalog from the menu, and select Edit Course Catalog on the Active catalog. To change the catalog name, click on the catalog name and re-name.

- Check or uncheck classes as needed on the Course Catalog page (this is only for your school). Submit.
- To find new Courses for your school or remove current courses, select View Master Course List and check on/off to edit catalog. Submit, which takes you back to the school catalog.



- If you cannot find the course on Master Course List, go to the live side, select School>Courses and select the blue link to Manage Courses for this School. Find the course in this list on the Unavailable tab and check it. Submit. If the course is not listed there, ask your Liaison to activate the course for your school at the District level. **Courses need to be activated for the current school year as well as the next school year.**



Live Side

Courses

Before you begin to edit courses you may want to run the Course List Report to quickly view your course list and which fields that may need to be entered/edited.

To Edit Courses: Select Courses, select a Course, select the Preferences tab and edit:


- Check to Schedule this course - can be auto-filled.
- All classes going to transcript or receiving graduation credit must have a Department selected.
- Enter Max Enrollment - can be auto-filled then edit any changes
- Periods per meeting & Frequency are usually 1 unless block class.
- Select Valid Periods - Builder use only
- Select Valid Terms - Builder use only
- Select Valid Day Combinations only if using more than a one day rotation - Builder use only. Once you have your valid day combinations set in all your courses, please export the SchedCourseCatalog information to preserve this setup in case they are lost.
- You must have a Load Priority. The Load Priority tells the engine which courses to load first. The lower the number the higher the priority.
- Check to Close section after Max - can be auto-filled.
- Auto-fill Course Info in Functions can be use to mass fill fields, however we usually only auto-fill Schedule this Course, Maximum Enrollment, and Close at Max.

Three areas of the Auto-Fill Course Info to be completed:

Auto-Fill Course Info	
Apply To:	<input checked="" type="radio"/> All courses in the active catalog <input type="radio"/> The selected 0 courses
Field Name	Value
Schedule This Course	<input type="text" value="Yes"/> ▼

Maximum Enrollment	<input type="text" value="32"/>
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Close at Max	<input type="text" value="Yes"/> ▼
Use Section Types	<input type="text" value="No Change"/> ▼
Don't Allow Substitutions	<input type="text" value="No Change"/> ▼

- Course Prerequisites are set on the live side in the District Course file. Select the course, then the Prerequisite tab. Enter a note then select the  to select the Rule Type and complete the rule. For further instructions on Prerequisites check PowerSource for Document ID 63465 - Course Prerequisites User Guide for PS 7. We do not recommend using Course Prerequisites because it limits your building and loading.

Changing a Course Name: If you change a course name during the school year it will change the active courses, therefore it is recommended that if you need to change a course name, wait until school is out and grades have been stored before you change the name. Once the course is stored the name will not change in stored grades. Also remember to consider what this will do in Data Director. Never change a course number - add a new course if necessary.

The following 2 pages contain an example of the Course Preferences screen.

Pay particular attention to the italics in "Manually Defining Course Preferences"

Note: If you want to "**Average Final Grades**" at the end of the school year for S1 & S2, all 3 trimesters or 4 quarters, the *Course Name*, *Course Number*, *teacher*, & *period* must be the same for all terms being averaged. If the *Course Name* is the same for 2 different *Course Numbers*, they will be listed on the same line in *Historical Grades*, however they will not average together - they may look like they are averaging, **but Pearson states that they really are not correctly averaging.**

Note: In Functions, if you select "Calculate Target Number of Sections to Offer" it currently lumps required and electives together to calculate the target number of sections.

PowerScheduler: Manually Defining Course Preferences

Assignments | Constraints | **Preferences** | Relationships | Requests | Sections

General Information

Course Number	14005	Course Name	A+ Certification
Credit Hours	<input type="text" value="0.5"/>	Credit Type	CS
Alternate Course Number	<i>Never change the Credit Hours here</i>	Grade Scale	
CIP Code		Vocational Class	No

These fields are from the District Course file

Use for Build & Load

Scheduling Preferences

Schedule This Course	<input checked="" type="checkbox"/>	<i>This <u>must</u> be checked to use in Scheduling.</i>
Use The Course For Lunch	<input type="checkbox"/>	<i>Normally this is not used.</i>
Exclude On Report Cards/Transcripts	<input type="checkbox"/>	<i>Optional - check if this course needs to be excluded.</i>

Use for Build & Load

Department	<input type="text"/>	Associate	<i>A Department <u>must</u> be selected for Courses used on Transcripts and/or those that receive HS credit.</i>
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Use for Build only

Build Type	<input type="text" value="Standard"/>	<i>Leave set at Standard Class.</i>
------------	---------------------------------------	-------------------------------------

Full Catalog Description

Optional - Course description.

Use for Build & Load

Maximum Enrollment	<input type="text" value="30"/>	<i>You must enter a Max Enrollment.</i>
--------------------	---------------------------------	-----------------------------------------

Sections Defined

Target Number of Sections to Offer	<input type="text" value="0"/>
Number of Teacher Assignments	6

Must fill in target number of sections to offer if you are going to use the Visual Scheduler

Use for Build only

Periods Per Cycle	1		
Periods Per Meeting	<input type="text" value="1"/>	<i>How many periods does it meet?</i>	Frequency
			<i>How many cycle days does it meet?</i>
Terms per year	2 of 2		
Allow Student Repeats in the Same Term	<input type="checkbox"/>	Allow Student Repeats in Different Terms	<input type="checkbox"/>
			<i>Check either or both boxes if appropriate.</i>
Balance Terms	<input type="checkbox"/>	<i>Leave un-checked - let the Scheduling Engine balance the terms.</i>	

Use only with Builder

Check appropriate box if course must be in a certain period. If you leave all unchecked it can schedule in any period (all in same period is possible). If all are checked it will spread out the sections to different periods.

Use for Build only

Valid Start Periods

Period 1 Period 2 Period 3
 Period 4

Valid Terms

10-11

Valid Day Combinations *Only used for multiple day rotations.*

Example:

Click on the Associate button and select all terms this course will be offered (hold Ctrl down to select more than one term). (If term is not visible, go to active scenario, select Associate and check appropriate terms.)

Lab Info is optional - not normally used - for Build only

Labs Defined

Is This Course A Lab

Lab Frequency Lab Periods Per Meeting

Valid Lab Day Combinations

Example:

Room Requirements

Facilities

You must enter a Load Priority. The lower the number, the higher the priority. 1,10,20,30,etc. up to 99 or 1,3,7,15,31,63 up to 99.

Use for Build & Load

Load Options

Load Priority Load Type *Leave set to Academic.*

Balance Priority *Recommend leaving it set to Section - it will schedule equal # of students in class.*

Use Pre Established Teams *Used for teams only* Close Section After Max *Check to Close at Max - Recommended.*

Use Section Types *Check only if you have section types created.*

These are Optional.

Substitute Information

Don't Allow Student Substitutions *If this is checked fill in the box(es) below.*

Global Substitution 1

Global Substitution 2

Global Substitution 3

Example: If a student can't get in this course - it will automatically try to schedule with the course you associate.

Teacher

Edit Teacher Preferences.

- a. If a teacher's name does not display or shows but shouldn't, ask your Liaison to turn them on or off from the live side. Your liaison can also create placeholder teachers for you.

Staff Scheduling Preferences - Abram, Michael 50000	
Required Settings	
Department	<input type="text"/> Associate
Preferred Room	2 Associate
Maximum Consecutive Periods	6
Maximum Periods Free	1
Schedule This Teacher	<input checked="" type="checkbox"/>
Is Always Free?	<input type="checkbox"/>
Optional Settings	
Building Code	<input type="text"/> Associate
House Code	<input type="text"/> Associate
Team Code	<input type="text"/>
Maximum Student Load	0

Max consecutive periods may need to be set to the max if the teacher teaches block class

- b. Make sure Schedule this Teacher is set to 'Yes'. This can be done in mass in Functions/Auto Fill Teacher Information.

Auto-Fill Teacher Info	
Apply To:	<input checked="" type="radio"/> All teachers set for scheduling <input type="radio"/> The selected 0 teachers
Field Name	Value
Department	<input type="text"/> Associate <input type="checkbox"/> Clear Value
Preferred Room	<input type="text"/> Associate <input type="checkbox"/> Clear Room
Maximum Consecutive Periods	No Change
Schedule for Lunch	No Change
Schedule This Teacher	Yes
Is Always Free?	No Change

- c. We do not recommend that you put teachers in Departments; it is not necessary and limits the teacher to only teach classes within that department.
- d. If the teacher has a preferred room, select Associate and select the room. Used with Builder only.

- e. Set Maximum Consecutive Periods to one less than the number of periods in your day unless you know that a certain teacher can only teach a limited number of sections. If you are building a new Master Schedule you may want to increase this by one just until the Master Schedule has been built. Use with Builder only. Leave set at "1" if using an existing schedule or creating a new schedule by hand.
- f. Do not check Always Free. If you check Always Free the teacher could be assigned to multiple classes in one period.
- g. Do not Schedule for Lunch.
- h. Optional settings can be blank unless your teachers have a maximum amount of students they can see in a day per their contract; key in the number of students in Maximum Student Load.
- i. Do not select a team; it's not needed and a teacher can be on more than 1 team.

The screenshot shows the 'Teacher Scheduling Preferences' form for Michael Abram. The form is titled 'Teacher Scheduling Preferences - Abram, Michael' and includes a breadcrumb trail: 'Build: 2012 - 2013 Dave's Demo Catalog: 2011-2012 Course Catalog'. The form is divided into two main sections: 'Required Settings' and 'Optional Settings'. In the 'Required Settings' section, the 'Maximum Consecutive Periods' dropdown menu is highlighted with a red box and shows the value '6'. The 'Schedule This Teacher' checkbox is checked. In the 'Optional Settings' section, the 'Team Code' dropdown menu is set to a blank value.

Three Must Haves: Associate a Preferred Room if they have one
 Set Max Consecutive Periods
 Check the box to Schedule This Teacher

Used for Builder

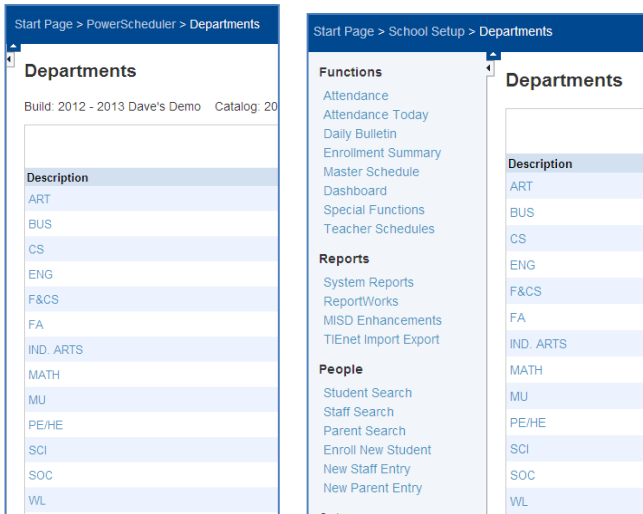
Must always be checked

- j. Run the Teacher List Report from the Reports menu.
- k. You can use the Function 'Auto-fill Teacher Information' for certain fields that are the same for all teachers.

Scheduling Setup

Under the Scheduling Setp heading in the menu, we do not use Buildings, Facilities, Houses. Section Types can be used; reference your Pearson documentation for instructions.

- **Department** names are a must for high school credit courses and the Department name on the PowerScheduler side must be **exactly** the same as the Department name on the live side.



PowerScheduler Side 'Departments' - Live Side 'Departments'

- **Days, Periods, and Years & Terms** were already set in the scenario, but can be changed and it will reflect in these screens. These fields should not be changed after the Commit process in July except by the liaison. Do not use zero (0) period; use additional period(s) at the end, edit in Scenario then change name, abbreviation, sort. It is confusing for students to have 0 period with a 1(A) expression.
 - **Teams** can be created here. Make team names very short with no punctuation. Teams are usually only **assigned to the section**. When using teams select the team in the section and check the box in the course for teams. It is not recommended to put Teachers on a team, rather assign the correct section to the teacher - the section should have the team selected.

Note: Teams can be selected for students; the Preferences tab on the student screen has a dropdown to select the Next Year Team. The Student List Report has a heading for Teams but if they are not listed, have your liaison contact the help desk for directions on how to make mass changes to have the teams list properly in this report. This happens when the teams are imported or mass changed. **In the student's internal record, the field Sched_nextyearteam should have the Team ID entered and not the name; the name should be entered in the Team field for use on the live side.**

Student Course Requests

Determine how to enter Student Course Requests; one class at a time, mass add, use student request screens, or import.

NOTE: There is a known issue with feeder student requests containing the incorrect schoolID if mass add course request is used (however, requests entered one student at a time works), therefore they may not be counted in the Course Request Tally report and will not schedule until the correct schoolID is entered by your district liaison. We have found that if you start on the LIVE SIDE in the CURRENT YEAR and do not go to the Next Year as you normally do, open PowerScheduler and mass enter feeder student requests, these requests may enter with the correct schoolID. When you are not entering feeder requests, remember to always go to the next school year on the live side before going to PowerScheduler.

- a. You can enter Course Requests one student at a time by hand in the Student screen, Requests tab. Select New, Associate and select the Courses. Hold the Ctrl key to select multiple Courses. Submit.

Search Students

Preferences

Anderson, Dixie
Andrews, Juan
Bailey, Jennifer
Bennett, Brittany
Briggs, Holly
Briggs, Jesse
Brito, Joseph
Bushman, Elliott
Butler, Jenilyn
Butterfield, Kendall
Cowley, Brett
Dansie, Blake
Dukatz, Anthony
Earl, Garrett
Emch, Joshua

PowerSchool

School: Scheduling High School 1 Scheduling Year: 2012-2013

Start Page > PowerScheduler > Selected Students > Requests

Requests

Anderson, Dixie 9 4883 SHS1

0% Scheduled
0% Core Scheduled
0% Primary Requests Satisfied
0% Total Requests Satisfied

Constraints | Demographics | Grad Planner | Grad Progress | Matrix | Preference | Requests | Schedule

New

Number	Course Name	Note	Alt	Code	Priority	Section Type	Alternate 1	Delete
10001A	Consumer Math	<input type="checkbox"/>		0			Associate	<input type="checkbox"/>
10004A	Geometry	<input type="checkbox"/>		0			Associate	<input type="checkbox"/>
10004B	Geometry	<input type="checkbox"/>		0			Associate	<input type="checkbox"/>

You can delete a Request by checking the Delete box for the Course and select

Delete Requests

Edit Course Request: Anderson, Dixie

Courses

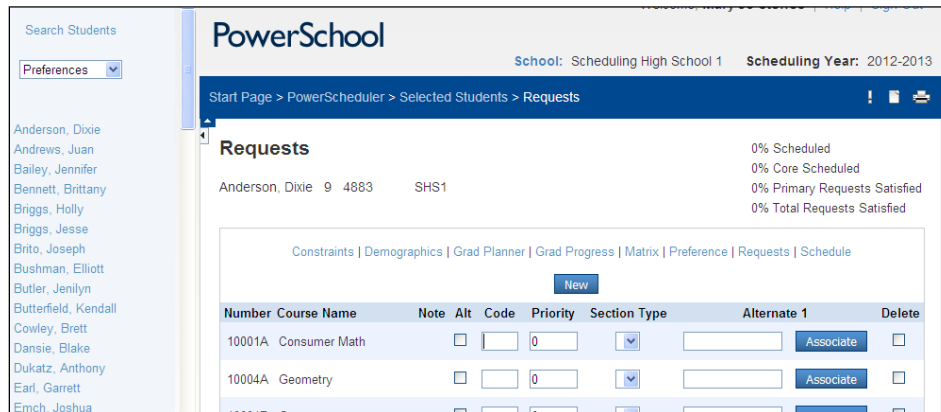
Hold down the CTRL key to make multiple selections

10001A	Consumer Math
10001B	Consumer Math
10002A	Pre-Algebra
10002B	Pre-Algebra
10003A	Algebra
10003B	Algebra
10004A	Geometry
10004B	Geometry
10005A	Trigonometry
10005B	Trigonometry
10006A	Pre-Calculus
10006B	Pre-Calculus
10007A	Calculus
10007B	Calculus
10008A	AP Calculus
10008B	AP Calculus
11001A	Earth Science
11001B	Earth Science
11002A	Environmental Science

Associate

Submit

Submit



You must designate E for elective in the Code box and check the Alt box by hand if the class is an alternate. If there is no E and/or not a check in the Alt box it will consider the class a core.

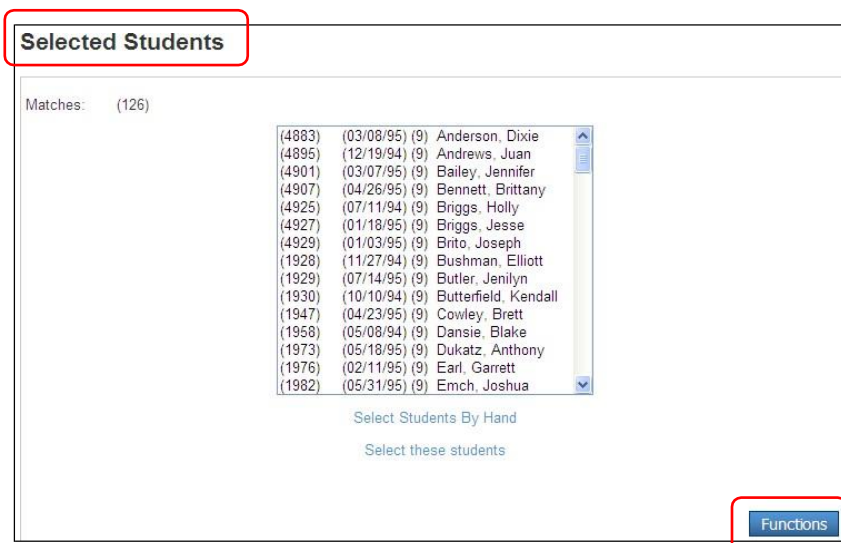
- b. You can Mass Add Requests for a group of students. In PowerScheduler:
- select your group of students (by grade or by hand using the ctrl key)
 - select Functions
 - select Mass Add Requests
 - Select Associate, select the Course
 - Be sure to select a Request Type and Submit.

The process is different for feeder student requests because of a "Known Issue". See "NOTE" above.

Required, Elective (E code in box), or Alternate (E code in box and check the alt. box).

Leave the Priority box alone - we will be using other priorities instead.

Remember that Alternates are for Electives only, never for Core classes.



Student Scheduling Functions	
Function	Description
Export Using Template	Uses a template to
List Students	Prints a quick list of
Mass Add Requests	Lets you enter the
Mass Delete Requests	Lets you delete the

Also note that you can Mass Delete Requests

To re-use Student Request Screens

c. You can use Request Screens to have the student select their classes through the portal (Public portal from home or from computer labs in school) or a staff member can use the screens on the live side in the student's Request Management > Modify Future Requests screen. **You can also reuse student requests screens from a previous year; ask you PowerSchool liaison to follow the MISD document How to Reuse Student Requests Screens in PowerScheduler.** To set up new request screens:

- i. In **Course Groups & Screen Setup** you will be setting up for the grade level they will be in the **next school year**. For example, in the Students screen you would select 8th grade to see your future 9th graders, but in Course Groups & Screen Setup you will be selecting 9th grade to set up because that is the grade you are scheduling them for.
- ii. Set up Course Groups first. Select Course Groups from the menu. Tip: When creating a Course Group select Current Catalog (blue link) before you name your group. Select to apply this to your school only. Create as many course groups as needed; also you can re-use last year's course groups. Check all the classes you will offer in this group. Submit. **Make sure there are no spaces at the end of the course group name or the classes may not show up when you preview the Screen Setups.**

Examples of Course Groups

- iii. Once all your Course Groups have been created, select Screen Setup from the menu. In Screen Setup select a grade level. If there is nothing setup and you would like to copy over the Screen Setups from last year ask your Liaison to contact the helpdesk for the instructions "How to Re-Use Student Request Screens".

2012-2013 Requests

2013

Grade 12

Grade 11

Grade 10

Grade 9

Grade 8

Grade 10 Request Screen Setup for 2012-2013

This grade may register for classes [Preview Student Registration Screen](#)

Message to display on registration screens for students in this grade:

Number of credit hours each student must submit (excluding alternate requests) Minimum: Maximum:

Instructions and options presented to students in this grade

[New Single Course Requirement](#) [New Multi-Course Requirement](#) [New Core Requirement](#)

Sort Order	Requirement Name	Type	Course Group
<input type="text" value="1"/>	10th Grade Math and Science	Multi-Course	10th Grade Math and Scie
<input type="text" value="2"/>	10th Grade Music	Multi-Course	10th Grade Music
<input type="text" value="3"/>	10th Grade Electives	Multi-Course	10th Grade Electives
<input type="text" value="4"/>	10th Grade Alternates	Multi-Course	10th Grade Electives

If your setup from the previous year is not displaying, and you want to re-use it, contact your liaison to import it for you.

- iv. To create new Course Request screens you will need to select one of the following:

- New Single Course Requirement which will only allow students to make one selection.
- New Multi-Course Requirement which will allow the students to make multiple selections.
- New Core Requirement which will automatically assign all the selected classes to the students - they have no choices.

Instructions and options presented to students in this grade

[New Single Course Requirement](#) [New Multi-Course Requirement](#) [New Core Requirement](#)

Once selected you will key in a name for the requirement and instructions on how to comply with the requirement (eg: Please select 5 classes). Select a Course Group from the drop down list. Enter min & max number of courses to select. Enter a message to appear if they make an incorrect selection/number of classes (eg: You MUST select 5 classes). You must select whether this is an Elective, Alternate, or Required class. Note that if you select Elective, it will enter an E on the student's request screen. If you select Alternate, it will enter an E and check the box for Alternate on the student's request screen. Always select 1 as the Number of request to generate unless these Courses can be taken twice.

Grade-Specific Requirement For Course Requests: Grade 9 for 2012-2

Multi-Course Requirement

Name of this requirement: 9th Grade Electives

Description/Instructions: Advises students on how to comply with this requirement. Only select 2 electives if you have not chosen to take Band or Chorus.

List of valid courses for this item: 9th Grade Electives

Number of courses student must select to meet this requirement: Min: 0 Max: 2

Message to display if the number of courses selected is not correct (leave blank for a generic message): You MUST select 2 classes if you are not taking Band or Chorus.

Request type (alternates will be used if an elective cannot be filled): Elective

Number of requests to generate: 1

Item sort order (affects display only): 4 (a number from 0 to 100)

Groups created in Course Groups

Number of requests to generate is always set to 1.

List of valid courses for this item: 9th Grade Electives

- 10th Grade CORE
- 10th Grade Electives
- 10th Grade Math and Science
- 10th Grade Music
- 9th Grade CORE
- 9th Grade Electives
- 9th Grade Math and Science CORE
- 9th Grade Music

Request type (alternates will be used if an elective cannot be filled): Elective

Number of requests to generate: 1

Item sort order (affects display only): 4

Preview Student Registration Screen to check your setup. When ready to schedule, check the box so "This grade may register for classes". It is suggested that you login as a student and test scheduling that student. If you keep the box checked for students to register in the portal, they can go in at any time and change their schedule. If you have the enhanced portal your Liaison can turn on/off the screen for them to schedule. It may be wise to only leave this box checked when the students are actually allowed to schedule.

2012-2013 Requests

Grade 12

Grade 11

Grade 10

Grade 9

Grade 8

PowerSchool School: Scheduling High School 1 Scheduling

Start Page > PowerScheduler > Requesting Setup > Grade 9 Request Screen Setup for 2012-2013

Grade 9 Request Screen Setup for 2012-2013

This grade may register for classes

Message to display on registration screens for students in this grade: Please make your selections for the 2012-2013 school year. You need to select a total of at least 7.0 credits.

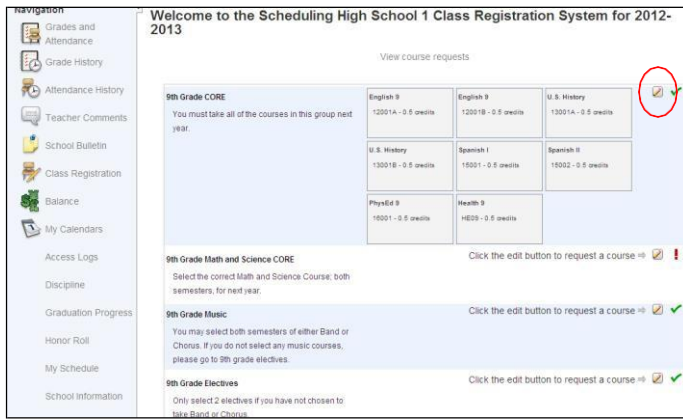
Number of credit hours each student must submit (excluding alternate requests): Minimum: 7.0 Maximum:

Instructions and options presented to students in this grade

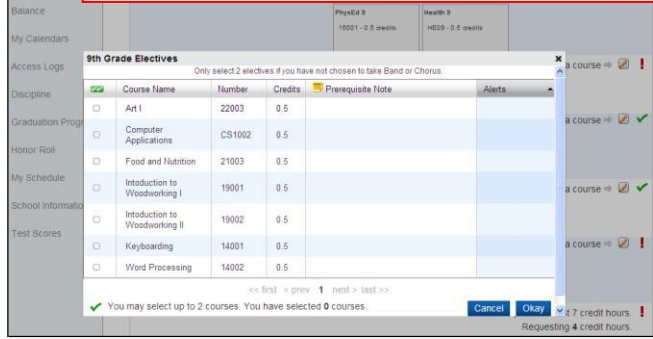
New Single Course Requirement New Multi-Course Requirement New Core Requirement

Sort Order	Requirement Name	Type	Course Group
1	9th Grade CORE	Core Required	9th Grade CORE
2	9th Grade Math and Science CORE	Multi-Course	9th Grade Math and Science CORE
3	9th Grade Music	Multi-Course	9th Grade Music
4	9th Grade Electives	Multi-Course	9th Grade Electives
5	9th Grade Alternates	Multi-Course	9th Grade Electives

Select a Number of Credit hours each student must submit. If you enter a minimum & maximum, the student must satisfy the minimum & maximum when he enters requests or the request screen will not save. Alts. are not included in min & max.



Click on a pencil and the screen below opens to make your selections. If the selections are made correctly, a green check mark will display.



Remember, if you are not seeing your list of classes to choose from and you believe everything is setup correctly, check the title of the course group and make sure there are no spaces before or after the title.

Before entering any requests, make sure your school's grade levels are set to accommodate feeder students. Select the feeder students and make sure they display.

- d. Liaisons can Import Course Requests. Create an import template with the appropriate field names for the liaison, eg: Student_Number CourseNumber SchoolID YearID
 Fill in the values in each column and save as a .txt file.
 The liaison will navigate to Live side > Special Functions > Importing & Exporting > Quick Import.
 Select ScheduleRequests table > Browse to find the .txt file > Import. Confirm that the fields match > check the box to exclude first row and Submit.

New Feature

Program Balancing

If enabled, Program Balancing allows PowerScheduler to evenly balance students in programs across sections during PowerScheduler loads and Automated Walk-In Scheduling. **Program Balancing uses the new server-side engine loader, which removes the need to run the client scheduling engine on client machines**, provides program balancing, and optimizes processing for faster and better results.

On the live side you will need to define the Special Programs from the Special Functions menu. Next you will need to select the student and under Special Programs define what special program the student is in.

Select School from the menu on the left and under Scheduling open Preferences. At the bottom of the page check the box to Enable Server-Side Engine Loader.

To Define Program Balancing, in PowerScheduler select Programs in the menu. Check the boxes of the programs to balance and enter the date from which you want the Scheduling Engine to evaluate special programs. Submit and a confirmation message displays.

Student Program Balancing **Reports** are both on the PowerScheduler side and live side:

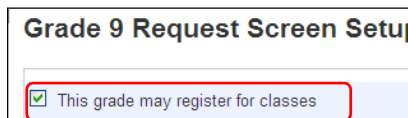
In PowerScheduler under Post Build Reports select Student Program Balancing. On the live side in System Reports, under Scheduling select Student Program Balancing.

Enter Course Requests

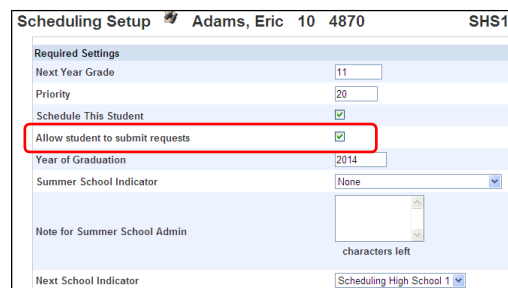
Now that you have determined how you are going to enter Course Requests, it's time to do it, whether you **mass assign**, use the **Enhanced Portal** for students to enter requests themselves with their parents or in a lab setting, or if the **staff will hand enter** the requests.

Mass Change to "Allow student to submit requests"

- a. If using the Enhanced portal you must make sure the box is checked on the PowerScheduler Screen Setup screen "This grade may register for classes" and the box is checked on the student's screen on the Live side to "Allow student to submit requests". To mass fill the student field, ask your Liaison to select the students and from Functions select Student Field Value and change the field Sched_AllowRequests to 1. (1 = true; 0 = false - if using the Enhanced Portal this field must be set to 1 and not "true") If you cannot see that field as a choice in Student Field Value, initialize the field by manually selecting a student, check the box on the Scheduling Setup page and Submit.



PowerScheduler Side



Live Side

"Allow student to submit requests" needs to be checked for the student to be able to enter requests in the portal.

- b. If using the **Enhanced Portal** to select requests:

- In addition to checking the box in Screen Setup "This grade may register for classes", in PowerScheduler and checking the box to "Allow student to submit requests" on the Scheduling Setup page on the Live side for each student, the Parent Portal Settings screen must be setup correctly.
- On the Parent Portal Settings screen (live side) in the "Student Schedule Requests" field select Edit Full. If you would like your students & parents to see Graduation Progress, also select that on the Parent Portal Settings screen.

Parent Portal Settings

Any item checked will not appear as an icon on that school's parent portal.
 The First Page Per Day redirects the Parents to a specified page the first time they log in for the
 The 1x feature of Student Schedule Requests only works when logged in as a Guardian. Student
 set to 1x or Full.

First page per day	(Disabled)
Grades & Attendance	<input checked="" type="checkbox"/>
Score Detail	<input checked="" type="checkbox"/>
Score Detail Setup	Traditional
Score Weighting	<input checked="" type="checkbox"/>
Grades History	<input checked="" type="checkbox"/>
Attendance	<input checked="" type="checkbox"/>
Email	<input checked="" type="checkbox"/>
Comments	<input checked="" type="checkbox"/>
Bulletin	<input checked="" type="checkbox"/>
Next Years Schedule	<input checked="" type="checkbox"/>
Schedule	<input checked="" type="checkbox"/>
Student Schedule Requests	Edit Full
Balances	<input checked="" type="checkbox"/>
iCal Calendar	<input checked="" type="checkbox"/>
Graduation Progress	<input checked="" type="checkbox"/>
Graduation Progress Setup	[Grad Planner (new)]

Enhanced Parent Portal

Grade 9 Request Screen Setup

This grade may register for classes

Message to:

Schedule this student

Allow student to submit requests

Year of Graduation: 2014

To schedule in the Enhanced Portal, you must setup 3 areas:

1. Parent Portal on the live side "Student Schedule Requests" set to Edit Full.
2. Screen Setup on the PowerScheduler side; check the box "This grade may register for classes".
3. Check the box on the student's Scheduling Setup screen on the live side to "Allow students to submit requests" or mass change as described above. Schedule this student should already be checked.

It is also recommended that you test the screens out by logging in as a student and scheduling the student.

On the portal, once the student has selected classes, **Submit**, and the screen will display Course Requests.

Only on the Enhanced Portal can you also find a link to View Graduation Progress.

There is a Custom Report under Scheduling called "Schedule Course Requests Report" that will **print all the student's requests** however it will not run in IE, run this report in Firefox.

Navigation
Class Registration

Welcome to the Apple Grove High School 1 Class Registration System for 2012-2013 : Adams, Corby

GRADE 11 TEST

[View course requests](#)

11th Grade English Class
Choose one english class.

English 2
ENG2000 - 1 credits

11th Grade Math Class
Choose one math class.

Chemistry 2
SCI2100 - 1 credits

Navigation
Class Registration

2012-2013 Course Requests: Adams, Corby

[View Graduation Progress](#)

Crs Num	Course	Type	Cr Hrs	Prerequisite Notes
1. ENG2000	English 2	Required	1.00	
2. PE1101	First Aid	Required	0.50	
3. SCI2100	Chemistry 2	Required	1.00	
4. SOC2000	Current Affairs	Required	1.00	
5. CS1000	Keyboarding	Elective	0.50	
6. CS1002	Computer applications	Elective	0.50	
Total Credit Hours Requested			4.50	

Enhanced Parent Portal

Navigation
Class Registration

Graduation Progress: Adams, Corby

Graduation Contracts

Subject Group	Earned	Enrolled	Requested	Required	Progress
• High School Diploma	9.5	3.5	3	22	6
• English	1.5	0.5	1	4	1
• Math	0.5			4	3.5
• Science	0.5	1	0.5	2	
• Social Studies	1.5	0.5		2	
• Physical Education/Health	3			3	
• Fine Arts	1	0.5		2	0.5
• Life Skills	0.5			1.5	1
• Technology Education	1		0.5	1.5	
• Electives	0	1	1	2	

Progress Bar Legend: ■ Completed Credits ■ Current Enrollments ■ Requested Courses

Enhanced Parent Portal

Feeder School Requests Note:

There is a known issue with mass entering feeder student requests containing the incorrect schoolID (however, entering requests one student at a time should work), therefore they will not be counted in the Course Request Tally report and will not schedule until the correct schoolID is entered by your district liaison. We have found that if you start on the LIVE SIDE in the CURRENT YEAR and do not go to the Next Year as you normally do, open PowerScheduler and mass enter feeder student requests (then return to next year on live side), these requests may enter with the correct schoolID. When you are not entering feeder requests, remember to always go to the next school year on the live side before going to PowerScheduler.

Feeder School Setup Note: If you plan on using the Portal or the student's Request Management screen for feeder school students to select requests, you will also need to setup a Scenario on the PowerScheduler side for each feeder school. **Make sure the Years & Terms year name & Schedule Year are correct after you create the Scenario.** Only the Scenario setup is needed.

Tally

Once all your Requests are in PowerScheduler you can Tally to determine how many Sections are needed for each Course offered and to assign Sections to Teachers. You can find the MISD Tally spreadsheets & directions at <http://powerschool.misd.net> select PowerSchool Admin > Scheduling > PowerScheduler > Course Tally Tools.

Requests → Sections → Staffing → Master Schedule
Turn **Requests** into **Sections** and Sections into **Staffing** in order to create your **Master Schedule**

Step 1 - Confirm that all/most student course requests are entered into PowerScheduler.

1. Make sure the Add New Student Process and Drop Student Process' are up-to-date and maintained.
 - New students need to be enrolled, have their Scheduling Setup Screen filled in correctly, have a schedule for current year created (if active in current year) on the live side and have requests for the New Year entered on the PowerScheduler side.
 - Dropped students need to have their requests removed from PowerScheduler and their Scheduling Setup Screen on the live side blanked out before exiting them from the current schedule and being transferred-out.
 - New students for the next school year should be enrolled into the next school year. All their screens should be completed including the Scheduling Setup screen. When students are enrolled, they are enrolled into the grade they will be in next year and the Scheduling Setup screen will contain the grade level for next school year - they should both be the same.
2. Use PowerScheduler Reports from the Reports menu to assess requests and determine if there are students missing requests.
 - **Student Request Tally** Report displays the number of requests per student.
 - **Requests by Student** Report displays a list of requests for each student.
 - **Course Request Tally** Report displays the number of requests for each Course.
 - **Requests by Course** Report displays a list of students requesting each Course.

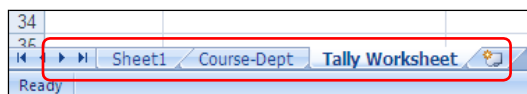
Step 2 - Once you have all/most of your requests are in, evaluate course requests to determine courses with small numbers of requests and whether they will be kept, dropped, or combined.

1. Use PowerScheduler **Course Request Tally** report:

- The Course Request Tally report displays the number of requests for each course. Use it to "eyeball" courses with small numbers of requests.
- Use the Course Request Tally report in conjunction with the Tally Worksheet Template on the MISD PowerSchool website (<http://PowerSchool.misd.net> > Powerschool Admin > Scheduling > PowerScheduler). Complete instructions are also on this website.

2. Use the MISD PowerSchool Course Tally Worksheet Template from MISD web site (<http://PowerSchool.misd.net> > Powerschool Admin > Scheduling > PowerScheduler) to determine the number of sections to be created for each Course using the number of student course requests.

- Download the Tally Worksheet Template to your desktop. If necessary, copy the detailed Worksheet Instructions. Notice the tabs at the bottom of the worksheet.



- On the Course Tally report from PowerScheduler, place your cursor to the left of the first Course number, left click, hold down and select all the data to highlight the information. Copy this information.

Course	Course Name	Primary	Alternate	Elective Alt	Total
10003A	Algebra	75	0	0	75
10003E	Algebra	75	0	0	75
10004A	Geometry	126	0	0	126
10004E	Geometry	126	0	0	126
10005A	Trigonometry	110	0	0	110
10005E	Trigonometry	110	0	0	110

- Paste into the Worksheet Template on Sheet 1, cell A2. If working in Firefox you will need to right click and select Paste Special, select Text, OK - don't select html.

	A	B	C	D	E	F
1						
2	10003A	Algebra	75	0	0	75
3	10003B	Algebra	75	0	0	75
4	10004A	Geometry	126	0	0	126
5	10004B	Geometry	126	0	0	126
6	10005A	Trigonometry	110	0	0	110
7	10005B	Trigonometry	110	0	0	110
8	10007A	Calculus	164	0	0	164
9	10007B	Calculus	164	0	0	164
10	11001A	Earth Science	110	0	0	110
11	11001B	Earth Science	110	0	0	110
12	11003A	Biology	75	0	0	75
13	11003B	Biology				

- Select the Tally Worksheet tab. You will see all your data nicely arranged with the yellow column for the class size displaying 30 as an example. Key in the actual class size you need for most of your classes.

	A	B	C	D	E	F	G	H	I
1	Course #	Course Name	Dept	Requests	Sections Needed	Class Size	Avg Size	Seats Left	Comments
2	10003A	Algebra	#N/A	75	3	30	25	15	
3	10003B	Algebra	#N/A	75					
4	10004A	Geometry	#N/A	126					
5	10004B	Geometry	#N/A	126					
6	10005A	Trigonometry	#N/A	110					
7	10005B	Trigonometry	#N/A	110					
8	10007A	Calculus	#N/A	164					
9	10007B	Calculus	#N/A	164					
10	11001A	Earth Science	#N/A	110					
11	11001B	Earth Science	#N/A	110					
12	11003A	Biology	#N/A	75					
13	11003B	Biology	#N/A						
14									
15									
16									

When you select the cell with the class size, place your cursor in the lower right corner until you see a + and click down on it, drag it down to the bottom of your list and release.

D	E	F	G
Requests	Sections Needed	Class Size	Avg Size
110	4	30	
127			
165			

Hover your cursor in the lower right corner and you will see a + which you will hold down and drag to the bottom of your data. Release and the column will populate along with the other columns.

This will copy the Class Size number down the page and will fill in all your information except Department.

1	Course #	Course Name	Dept	Requests	Sections Needed	Class Size	Avg Size	Seats Left	Comments
2	10003A	Algebra	#N/A	75	3	30	25	15	
3	10003B	Algebra	#N/A	75	3	30	25	15	
4	10004A	Geometry	#N/A	126	5	30	25	24	
5	10004B	Geometry	#N/A	126	5	30	25	24	
6	10005A	Trigonometry	#N/A	110	4	30	28	10	
7	10005B	Trigonometry	#N/A	110	4	30	28	10	
8	10007A	Calculus	#N/A	164	6	30	27	16	
9	10007B	Calculus	#N/A	164	6	30	27	16	
10	11001A	Earth Science	#N/A	110	4	30	28	10	
11	11001B	Earth Science	#N/A	110	4	30	28	10	
12	11003A	Biology	#N/A	75	3	30	25	15	

- The Department column must be filled in to determine staffing and assign sections. You can key them in by hand or you can select the Course List Report from PowerScheduler, place your cursor just to the left of the first Course number, highlight the data, copy, and paste onto the Course-Department sheet in cell A2.

10001A	Consumer Math	MATH	32	1	1	1	1	1	S1,S2	10	390
10001B	Consumer Math		32	0	1	1	1	0		0	0
10002A	Pre-Algebra		32	2	1	1	1	2	12-Nov	10	510
10002B	Pre-Algebra		32	0	1	1	1	0		0	0
10003A	Algebra	MATH	32	3	1	1	1	1	S1,S2	10	630
10003B	Algebra	MATH	32	0	1	1	1	0		0	0
10004A	Geometry	MATH	32	3	1	1	1	2	12-Nov	10	640
10004B	Geometry	MATH	32	0	1	1	1	0		0	0
10005A	Trigonometry	MATH	32	6	1	1	1	2	12-Nov	10	1110
10005B	Trigonometry	MATH	0	0	0	0	0	0		0	0
10006A	Pre-Calculus		32	5	1	1	1	2	12-Nov	10	1000

- Now select the Tally Worksheet tab and you will see all your data including departments.

	A	B	C	D	E	F	G	H	I
1	Course #	Course Name	Dept	Requests	Sections Needed	Class Size	Avg Size	Seats Left	Comments
2	10003A	Algebra	MATH	75	3	30	25	15	
3	10003B	Algebra	MATH	75	3	30	25	15	
4	10004A	Geometry	MATH	126	5	30	25	24	
5	10004B	Geometry	MATH	126	5	30	25	24	
6	10005A	Trigonometry	MATH	110	4	30	28	10	
7	10005B	Trigonometry	MATH	110	4	30	28	10	
8	10007A	Calculus	MATH	164	6	30	27	16	
9	10007B	Calculus	MATH	164	6	30	27	16	
10	11001A	Earth Science	SCI	110	4	30	28	10	
11	11001B	Earth Science	SCI	110	4	30	28	10	
12	11003A	Biology	SCI	75	3	30	25	15	

- Review the Class Size for each Course to determine the correct number of sections for that Course. Determine if you are dropping a class, combining with another class, or need to fill in the class with more students. As you modify the Class Size number for each class, you will notice that the Sections Needed, Avg Size & Seats Left all change to reflect the new Class Size. Class

Size is the only dynamic column, therefore if you make changes to the Sections Needed column to decrease/increase sections you will need to hand edit Class Size.

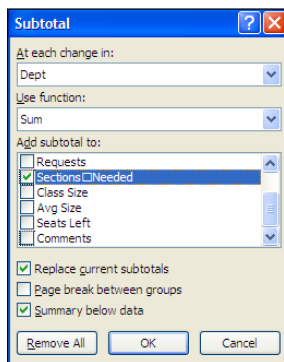
- In the example below we have decided not to hold Intro to Art 1 with only 12 students so we have zeroed out the Class Size, put a note in the Comments box, and notice that the number of requests remain for reference. Those students need to have their Intro to Art I course request removed and another course request put in its place. In the Art 1 course we increased the Class Size to hold one class of 31 and not 2 classes that were only partially filled.

1	21005 Advanced Foods I	CS	41	2	30	21	19	
2	22001 Introduction to Art I	ART	12		0			drop/combine with Art 1
3	22003 Art I	ART	31	1	31	31	0	
4	22004 Art II	ART	41	2	30	21	19	
5	22005 Studio Art I	ART	78	3	30	26	12	

- Remember to use this template to record comments or notes about combined, drop, or small courses. You may be creating several of these worksheets so name, date, and save it for future reference.
- Sort Descending by Department. Place the cursor in a cell in the Department column and select descending.



- Once the worksheet is sorted by Department you can tally by Department. With your cursor in the Dept column select Data then Subtotal. Select to change at **Dept** and Use function **Sum**, **uncheck Comments** if it is checked and **check Sections Needed**. **Check to Replace current subtotals & Summary below data**.



At each change in: Dept
Use function: Sum
Add subtotal to: the only box that should be checked is Sections Needed
Check the box to: Replace current subtotals & summary below data

- Once you select OK you will notice to the left of the A column are numbers 1, 2, 3.

1	2	3	A
		1	Course #
		2	10003A

- If you select the number 2, you will see a synopsis of the Department totals. Select 3 to get back to your Tally Worksheet.

Dept	Requests	Sections Needed	Class Size	Avg
WL Total		16	30	
SOC Total		36	30	
SCI Total		36	30	
PE/HE Total		16	30	
MU Total		20	30	
MATH Total		36	30	
ENG Total		58	30	
CS Total		31	30	
BUS Total		2	30	
ART Total		11	30	

- Sort Descending by Department. Place the cursor in a cell in the Department column and select descending.



- Once your tally is complete, you will need to re-assign the students for the courses you are dropping or combining. To find your students open your Course Request Tally report from PowerScheduler. Find the class that will be changed. Click on the blue link number of students which will produce a list of the students that need changing. This is now your selection of students.

21005	Advanced Foods I	41
22001	Introduction to Art I	12
22003	Art I	31
22004	Art II	41

- PRINT THIS LIST OF STUDENTS, date, and record what is being done to this request.

- At the top of the list of students will be the Functions Menu. Selecting the Functions Menu will allow you to Mass Delete, Mass Add, or you can select the students one at a time and edit their requests by hand.

Requests: Course Number: 22001

#	Student
1.	Ackerman, Stan
2.	Anderson, Christopher C
3.	Athmann, Ashley S
4.	Barnes, Nathan T
5.	Benson, Cassie S
6.	Boss, Christine P
7.	Bruce, Lindsey P
8.	Byrd, Clara P
9.	Cervantes, Gilberto P
10.	Cole, Katherine P
11.	Dalen, Zachary H
12.	Donner, Jordan C

- In the Functions Menu, if you select Mass Delete Requests, select the Associate box, select the Course that you wish to delete for this group of students, select All Occurrences and Submit. If your Course Request Tally report has students listed for this class as an Alternate you will need to select those students from the Course Request Tally report, Alternates column and in Mass Delete Requests, Associate the Course, check the box for Alternate, All Occurrences and Submit. When process completes select the Back button.

Mass Delete Requests

Option	Value
Course Number	22001 <input type="button" value="Associate"/>
Section Type	<input type="button" value="v"/>
Alternate	<input checked="" type="checkbox"/>
What to Delete	<input type="radio"/> First Occurrence <input checked="" type="radio"/> All Occurrences

Determine how to replace those course requests:

mass add requests
or
add requests one student at a time.

- b. Once you have deleted the course request for those students, they will still be your selected group therefore you can easily mass assign a new course request for them. Select **Students** from the left menu then choose **Current Selection (xx)** to display the list of students you are working with. Select **Functions**, then Mass Add Requests to give this group a replacement request.

Start Page > PowerScheduler > Scheduling

Scheduling

[View Field List](#)

A B C D E F G H I J K L M N O P Q R S T

Next Year Grade Level: 9 10 11 12

Current Year Grade Level: 8 9 10 11 12

Other Options: M F All **Current Selection (8)**

Selected Students

Matches: (8)

(50)	(03/03/98)	(10)	Bowles, Ben C
(939)	(09/15/99)	(10)	Dowdle, Jon-Michael
(984)	(09/11/99)	(10)	Graham, Gregory
(1014)	(06/28/99)	(10)	Jenson, Lacey
(1398)	(10/13/99)	(10)	Moore, Christopher
(1800)	(07/14/99)	(10)	Ruziska, Nicholas C
(2541)	(08/28/99)	(10)	Webb, Nathan
(95)	(12/03/99)	(10)	Worman, Margaret

Select Students By Hand

Select these students

Functions

Student Scheduling Functions

What do you want to do for all of the 8 students you have selected?

Function	Description
Export Using Template	Uses a template to export data on currently selected students.
List Students	Prints a quick list of currently selected students.
Mass Add Requests	Lets you enter the same course request for selected students at on
Mass Delete Requests	Lets you delete the same course request for selected students at o

- c. If you do not want to mass add a request, you can select each student individually, select their Request tab and enroll them into a new Course by hand. To do this select Students from the menu on the left and they will display on the left. Select Requests and New.
- Once you have made your corrections to all the student's schedules from the original Tally Worksheet, you will need to **repeat the process** of running the Course Request Tally report from the Reports menu, copying & pasting into a new blank spreadsheet. Continue through the process until you are satisfied with the results and all the student's requests are accounted for.
 - If you have decided that some Courses will not run, make sure to go back to your Course Catalog and **turn them off** for scheduling. This will insure that they will not be selected by mistake.

Step 3 - Once your Tally Report is completed, you will have the **Sections Needed** to determine Staffing for each Course, Department, and School.

1. Use the **Sections Needed** from your spreadsheet along with your **District Seniority & Highly Qualified List** to determine appropriate staffing for your school. Below is an example of a Staffing-Highly Qualified by District Seniority list. You will find a blank copy (.pdf or .doc) of this worksheet at: <http://www.misd.net/powerschool/coursetally.htm>

Highly Qualified In

Key in the total number of Sections needed for the subject

Seniority

Listed from highest district seniority to lowest with their highly qualified listed, you can assign sections. In the example there, 51 sections of English needed for the next school year. The school has 2 semesters and 6 classes per day, therefore, each teacher can teach 5 classes in each semester totaling 10 for the year. You can assign the number of sections each teacher can teach by department. Once completed, you will have your total staffing requirements for the next school year.

	ENGLISH			SCIENCE		
	51			49		
Applegate (Eng/Thea)	10	1		Pearson (Sci)	10	5
Woodruff (Eng)	10	9		Nuss (Sci/EarSci/Math)	10	14
West (Eng/SE-Eng)	10	17		Roodbeen (Sci/Forensics)	10	23
Griesbaum (Eng/BMT)	10	21		Schleder (Sci/Math)	10	26
Shagena (Eng/SS)	10	24		Gabridge (EarSci/Eng)	9	27
♀ Gabridge (Eng/EarSci)	1	27	10	Germain (EarSci/Math)		35

Gabridge was only assigned 1 section in English, therefore he had 9 more classes he could teach.

Number of Sections assigned to teacher

Gabridge has now been assigned 9 sections in Science, so we have crossed out the 9 needed in English. Germain was not assigned any Science sections yet, so he has 10 sections he can teach elsewhere.

2. Use Staffing with Central Office to get approval to build a new Master Schedule.

- Once approved, determine which Teacher will teach each section. Typically an administrator or the department head can assign sections to each teacher. You can provide them with a blank copy of the form **Recommendations from Department for Teaching Assignments for New Year**. This (.pdf or .doc) can also be found on our website: <http://powerschool.misd.net> > PowerSchool Admin > Scheduling > PowerScheduler > Course Tally

Recommendations from Department for Teaching Assignments for New Year

Please do not indicate periods for specific classes or planning periods

Department: _____

Teacher	Course	Course	Course	Course	Course	Course

There Are 3 Ways to Create a Master Schedule

1. **Use your existing schedule** and edit where necessary. This is the easiest of the 3 ways. If the number of periods and terms are the same you can use your Tally to determine if you can use the existing schedule. You can edit the Master Schedule to fit your needs for the upcoming year (see Edit the Master Schedule below). Once you have your Master Schedule, set any Load Relationships or Constraints needed. Validate your Load. Once all Errors are corrected (and Warnings where necessary) you can Load your students.
2. **Create a new schedule by hand.** From your Tally you can determine your sections and can build them by hand. You can create sections by selecting the Course and the Sections link or you can select the teacher and the Schedule link, or select Sections, select the Course and select the Sections link. Once there select New and fill in the information as described below. Once you have your Master Schedule set any Load Relationships or Constraints needed. Validate your Load. Once all Errors are corrected (and Warnings where necessary) you can Load your students.
3. **Build a new schedule using the PowerScheduler Builder** as described below.

It is suggested that you copy over your existing schedule (unless you know for sure that you are building new) and compare your course request tally numbers to see if you can use this schedule with some editing or will if you will have to build new either by hand or the builder. To copy your Master Schedule reference Step 5 on page 4.

To Edit the Master Schedule that you copied from a previous year:

- Add new sections.
 - Select Section in the menu on the left.
 - Then select the Course from the left menu
 - Select New
 - Select a Term
 - Select an Expression (Period)
 - Select a Teacher (can be placeholder teacher)
 - Associate a Room
 - Check the box to Close section at max
 - Key in a Maximum enrollment number
 - Submit and the system will assign a Section number
 - You will now be back at the screen where you can create more sections.

- **Delete sections** not being used. Please note that if you try to delete a section you will get a warning message "**Are you sure you want to delete this section? All enrollment records associated with this section, both past and present, will be deleted along with it**". This is an incorrect warning message; **you can delete sections on the PowerScheduler side without affecting the live side**. This has been confirmed by support.

Also, delete from the highest section number down to the lowest section number.

- Select Section in the menu on the left.
 - Then select the Course from the left menu
 - Select the Section # of the section to delete; please delete the highest section numbers first
 - Select Delete at the bottom of the page, Confirm the delete.
- If you don't know who your teachers will be, ask your liaison to create generic placeholder teachers or use current teachers even if they are leaving or moving. Teachers can be changed without problems up until the first day of school.

If you have copied your Master Schedule and determined that it will not fit next year's requests, you should delete the Master Schedule in Functions > Delete Master Schedule.

If you have copied your Master Schedule but are not sure if you will use it, you can create a second scenario and build a new Master Schedule to see if that will service your requests more efficiently. You can always go back and activate your first or other scenario. If you are creating a second scenario, you can use the Function > Duplicate Scenario and are given the option to copy over the Master Schedule, Student Requests, Teacher Assignments, Constraints, and/or Course Relationships that you have already setup in the original scenario.

Check Rooms, Teachers, and Course settings

a. If you are **copying your Master Schedule or creating new by hand:**

- i. Select **Rooms** from the left menu
 - ii. Select a room number blue link to open
 - iii. Room Number & Description should be set
 - iv. Use for Scheduling **MUST** be set
 - v. Room Maximum should already be set
 - vi. Do not use Department, Building, House, Room Always Free, Department Use Only, Facility Use Only, Room Facilities
(there is no function to mass fill room information however you can mass fill using Functions > Update Selections > ScheduleRooms. We strongly recommend your liaison do this for you or teach you how to perform this mass change)
-

- i. Select **Teachers** from the left menu
 - ii. Select a teacher from the left menu
 - iii. On the Preferences page setting a Department is **NOT** recommended
 - iv. Preferred room is optional but recommended
 - v. Maximum Consecutive Periods is usually one less than the total number of periods (if teaching block classes, open the max consecutive periods to the maximum number)
 - vi. Schedule this Teacher **MUST** be checked
 - vii. Do not set Is Always Free, Schedule for Lunch, Building Code, House Code, Team Code, and Maximum Student Load only if your teachers have a limit in their contract (Functions > Autofill Teacher Information may assist in these tasks)
-

- i. Select **Courses** from the main menu on the left
 - ii. The Preferences page should all be filled out as shown in "Manually Define Courses Preferences" (pg 15-16) with the exception of Valid Start Periods. The Valid Start Periods only need to be checked if you are building new with the Builder.
-

b. If you are **creating a new Master Schedule using the Builder:**

- i. Select **Rooms** from the left menu
- ii. Select a room number blue link to open
- iii. Room Number & Description **MUST** be set
- iv. Do not select Department, Building, or House
- v. Use for Scheduling **MUST** be checked

- vi. Leave "Room Always Free" unchecked but you may need to check it in the future if builder is not building the section
 - vii. Do not check Department Use Only, Facility Use Only, or Room Facilities
 - viii. Room Maximum **MUST** be set (not 99)
-

- i. Select **Teachers** from the left menu
 - ii. Select a teacher
 - iii. **DO NOT** Associate a Department until your build is complete
 - iv. Room should be set
 - v. Maximum Consecutive Periods **MUST** be set. It is suggested that you set that number to the maximum periods or one less than the maximum periods. Those teaching block classes must be set to the maximum periods for the builder to build correctly.
 - vi. Schedule this Teacher **MUST** be set
 - vii. Is Always Free should not be checked but may be checked as you build
 - viii. **DO NOT** use Schedule for Lunch, Building Code, House Code, Team Code, and Maximum Student Load should only be used if your teachers have a contract limiting the number of students they can see in a day.
-

- i. Select **Courses** from the menu on the PowerSchool main page
- ii. Select a Course and setup is the same as above but you must select Valid Start Periods. All Courses must have valid start periods selected:
 - If you do not select any periods, the builder can put the sections in any of the periods including all in the same period
 - If you select all the periods, the builder will spread the sections out among all the periods checked
 - If you select certain periods the builder will honor those period selections

To see a list of your teachers, select Reports, Teacher List.

If you are building by hand and not using the Visual Scheduler run the Conflict Matrix Export from the Reports menu. Use the following settings for an example of how to run the report.

Setup Example for Conflict Matrix Export:

Include All Students

Output Form: select Tab-Delimited (*Simple HTML will print to the screen)

Conflict Definition: select Count students with multiple requests for a ...

Identify Course By: select Course Names

Courses Across Top

Include All Courses

Sort by: select Course Name

Include Rows for: select Number of Requests (or Sections)

Courses Along Side

Include All Courses

Sort by: select Course Name

Include Columns for: select Number of Requests (or Sections)

Because this setup has selected to Include All Courses, you don't need to check all the boxes.

Submit and Save

Select Desktop and Save

In Excel select File > Open

Select Desktop

Down in Files of type: drop down and select **All Files(*.*)**

Select the file SchedulerData.text and Open

Select Next and Next again

On this third screen hold down your shift key and move the bottom bar to the far right and click on the last column - this should highlight all the columns

Select Text and Finish

*If you select Output Form as HTML and want to copy & paste into Excel, you will need to move the top row to the right to align.

You may also want to run on certain groups of classes, for example singleton classes. Select the radio button on **Selected Courses (below)** under the **Courses Across Top & Courses Along Side**, then check the boxes for the courses you want to run.

You can use the Report **Conflicting Student List** to enter the 2 courses that are in conflict from the report above. Once you Submit it will produce a list of the conflicted students. We recommend that you print this list before you make any changes to their requests. There is a Functions menu you can select to mass delete, mass add, or make these students your current selection and look at each student individually.

Create Sections

To continue toward building your master schedule using Build, you must enter Assignments in either Courses or Teachers. You should be able to determine how many sections are needed for each course from your tally and staffing by department worksheets.

If you are in **Courses**:

- Select a Course
- Select Assignments and New
- Select Associate and the Teacher you want to assign this Course to
- Select the number of Sections this teacher will be teaching of the selected Course
- Select a Schedule Term Code. If you do not select a Schedule Term Code the term will default to the one(s) selected in the Course setup. Submit.

If you are in **Teachers**:

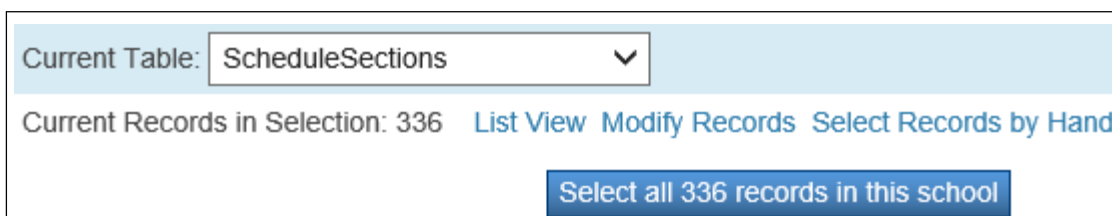
- Select a Teacher
- Select Assignments and New
- Select Associate
- Select the Course you want to assign
- Select the number of Sections this teacher will be teaching of the selected Course
- Select a Schedule Term Code. If you do not select a Schedule Term Code the term will default to the one(s) selected in the Course setup. Submit.

Run the Report **Teacher Assignments by Teacher** to see a list of your teacher assignments.

You can also copy teacher assignments from a previous build. Please check with your PowerSchool liaison who can refer to the MISD document Copying Teacher Assignments to a New Build in PowerScheduler.

Be aware that if you use the Function > "Calculate target number of sections" it will use alternates in its determination of the number of sections based on requests.

To mass set Sections to close at max, in Functions > Update Selection, select the ScheduleSections table. Select all records in this school (this puts the number of records next to "Current Records in Selection: xxx") and select Modify Records. In the dropdown select MaxCut = 1



Current Table: ScheduleSections

Current Records in Selection: 336 List View Modify Records Select Records by Hand

Select all 336 records in this school

Course Relationships

Setup Course Relationships for the Build if necessary. Reference the document below. Once you have set your relationships you can see a list by running the Course Relationships Report.

Course Relationships

The Course Relationships screen is used to set up relationships to fill specific requirements that must be met when building a master schedule and loading students into that schedule.

The relationship screen asks for up to three pieces of data:

1. The associated course you want to relate to
2. The Relationship Type
3. The Relationship Code - you only use this one when the Relationship type is "Is Blocked For Building With". You do NOT use it for any of the others.

These requirements might include the following:

1. **One teacher teaches two subjects at the same time.(Either Block Combine or Block Simultaneous with a Concurrent)**
2. **There is a 2 semester course sequence for the students and the students must stay with the same students in the same period for both semesters with the same teacher. (Block Term)**
3. **Students are taking 2 courses during the same term and the school wants the students to travel together through both sections. (Block Section)**
4. **Two courses need to be built on opposite days during the same period. (Block Opposite Days)**
5. **Students have signed up for 2 courses that must be taken in sequence and offerings of both classes are running during both terms. Not all students sign up for both classes but those that do cannot get them in the wrong order. (Prereq)**
6. **Students sign up for 2 courses that must be taken in the same semester, but not in the same period. (Coreq)**
7. **Students sign up for 2 courses that cannot be in the same term but it does not matter which comes first. (Not Coreq)**
8. **Two courses must run back to back in the day, meaning consecutive periods. (Block Before or After)**

Course Relationships

Relationship Type	Relationship Code	Purpose	Used by Build	Used by Load
Is Blocked for Building With	Simultaneous	Two courses must be taught at the same time; can be two different teachers; can be a different number of sections	Yes	No
	Combine	Two courses taught at the same time with the same teacher; course setup on both courses must be identical	Yes	No
	Different Terms	Two courses scheduled in same period, different terms, same students, same teacher for each section	Yes	Yes
	Before/After	Two courses scheduled in consecutive periods	Yes	Yes
	Opposite Days	Two courses scheduled in same period, opposite days	Yes	Yes
	Section	Two courses in same term, same students	Yes	Yes
May be Built Concurrent With	N/A	Two courses taught by same teacher <u>can</u> be at the same time; use with a Block Simultaneous for 1 teacher who <u>must</u> teach two courses at one time (2 relationships)	Yes	No
Has a Load Coreq of	N/A	The associated course must appear in the same term in the student's schedule as the course where you are putting the relationship	No	Yes
Has a Load Postreq of	N/A	The associated course must appear in a subsequent term in the student's schedule	No	Yes
Has a Load Prereq of	N/A	The associated course must appear in a prior term in the student's schedule	No	Yes
Must not Load Coreq with	N/A	The associated course must not appear in the same term in the student's schedule as the course where you are putting the relationship	No	Yes
Must Load Distinct(no term overlap) with	N/A	The associated course must not appear in any overlapping term in the student's schedule as the course where you are putting the relationship	No	Yes
Must Load the Term After	N/A	The associated course must appear in the next term in the student's schedule as the course where you are putting the relationship (Q1,Q2) (Q2,Q3) (T1,T2),etc	No	Yes
Must Load the Term Before	N/A	The associated course must appear in the term before in the student's schedule as the course where you are putting the relationship	No	Yes

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You only need to enter the relationship once - not visa/versa. Check Reports > Course Relationships

Constraint Codes for Reference:
(from Pearson)

Build Constraints

- 1 = Teacher Free
- 2 = Teacher Part-Time
- 9 = Course Restrict
- 11 = Course Room
- 16 = Pre-Schedule
- 17 = Teacher Dovetail
- 18 = Course Optimize
- 31 = Schedule Break
- 93 = Course Team
- 94 = Teacher Team
- 97 = Room Free

Load Constraints

- 05 = Student/Teacher Avoid
- 05 = Student Preference
- 6 = Student Free
- 7 = Student/Student Avoid
- 20 = Balance Adjustment
- 92 = Section Link

Constraints

Setup Constraints for Build

Build Constraints		
Build: 2012 - 2013 Dave's Demo Catalog: 2011-2012 Course Catalog		
Build Constraint	Description	Count
Course Optimize	Set build optimization parameters for a course.	0
Course Restrict	Restrict a section of a course to a particular period or day.	0
Course Room	Force a course to schedule in a specific room.	0
Course Team	Specify teaching teams for blocked courses.	0
Pre-Schedule	Pre-Schedule a section of a course.	0
Room Free	Block a room from being scheduled for a particular term, day, and period.	0
Schedule Break	Identify breaks in the schedule for max-in-a-row counts.	0
Teacher Dovetail	Partial course scheduled using as few periods possible.	0
Teacher Free	Specify periods that a teacher must be free.	0
Teacher Part-Time	Limit a teacher's schedule to a range of periods.	0
Teacher Team	Specify teaching teams for a set of courses.	0

Do not use **Course Optimize** without help from support.

We do not recommend using **Teacher Team** as a Build Constraint.

If you create constraints, a Count number will display. Click on the number and the constraints that were created will list.

The Load Priority (in Course/Preferences) on load constraints should be set to a lower number to give higher priority when you load the students into classes.

For additional descriptions on each Build Constraint reference the Build Constraints (Apple 2005) document that was handed out in class. If you need a new copy e-mail help@misd.net or search PowerSource for help.

You can also copy previous Build Constraints to a New Build. Have your PowerSchool liaison follow directions on MISD document **Copying Previous Year's Constraints to a New Build**.

Also, be aware that some of the Relationships and/or Constraints may not be necessary if the Course, Room, and Teacher Preferences are set correctly. For example, the Build Constraint of Course Restrict may be satisfied if you have set the Course Preferences Valid Periods to include/exclude that certain period.

Course Rank (for building a new Master Schedule)

Build Course Rank and edit where necessary. The system looks at number of sections per term, demand for the course, and constraints when building course rank. The Course Rank will determine the priority when the system Builds the Master Schedule.

- Select Course Rank from the menu on the left. There should not be any course ranks on the screen.

- Select Build Rank; the system will build the courses in order of what it feels needs to be built first when selecting Build to create your master schedule. When you run a Build and the system stops and will not build at a certain course you will want to re-arrange and move that course in the Build Rank. You may want to give it a higher rank, or you may want to put it last so everything else builds and you can build that course yourself.

- Look carefully at the rank. We recommend that you put constraints, block classes, singletons, and those classes you deem most important to schedule (Band) toward the top so when the system builds the Master Schedule, those will be built first. After that doubletons, academic classes, then electives. To change the rank, determine if you want to move it up or down (it builds from lowest number to highest). Key the number where you want it to fit in and Submit.

- If you have made changes to the number of sections for a course, significantly changed the number of students or added/deleted constraints you must Update Rank. Select Update Rank then Submit.

- **If you have built Course Rank and select Build Rank it will completely rebuild your Course Rank. If you have made any manual changes they will be lost, therefore if you want to rebuild Course Rank note the changes you have made so you can enter those back in once your rank is rebuilt.**

Course Rank

Creates New - doesn't save previous changes.

Use to update or edit rank.

Build Rank

Update Rank

Notice that Band was ranked 230 by the system but we want Band to build first so we changed the Rank to 8 and Submit. On the far right you can key in comments.

Remember to Submit the page after Building or Updating Rank.

Delete	Sys Rank	Rank	Crs Num	Crs Name	Sections	PPC	Demand	Crs Conflicts	Stu Conflicts	Constraints	Comments
<input type="checkbox"/>	230	<input type="text" value="8"/>	18001	Band	1	1	77	70	1094		
<input type="checkbox"/>	30	<input type="text" value="11"/>	22019	Advanced sculpting I	1	1	69	41	1109		
<input type="checkbox"/>	20	<input type="text" value="20"/>	19004	Cabinetry II	1	1	67	44	1167		
<input type="checkbox"/>	10	<input type="text" value="23"/>	22003	Art I	1	1	61	38	1287		
<input type="checkbox"/>	40	<input type="text" value="40"/>	22009	Ceramics I	1	1	61	46	1101		
<input type="checkbox"/>	50	<input type="text" value="50"/>	22017	Sculpting I	1	1	61	47	1064		
<input type="checkbox"/>	60	<input type="text" value="60"/>	20001	Introduction to Electronics I	1	1	49	28	948		
<input type="checkbox"/>	70	<input type="text" value="70"/>	21001	Introduction to Foods I	1	1	50	28	948		
<input type="checkbox"/>	80	<input type="text" value="80"/>	22001	Introduction to Art I	1	1	49	28	948		
<input type="checkbox"/>	90	<input type="text" value="90"/>	21005	Advanced Foods I	1	1	49	31	877		
<input type="checkbox"/>	100	<input type="text" value="100"/>	22015	Introduction to Sculpting I	1	1	41	34	868		
<input type="checkbox"/>	110	<input type="text" value="110"/>	22005	Studio Art I	1	1	48	33	862		
<input type="checkbox"/>	120	<input type="text" value="120"/>	22011	Advanced Ceramics I	1	1	48	38	854		
<input type="checkbox"/>	130	<input type="text" value="130"/>	21003	Food and Nutrition	1	1	41	34	834		

Build the Master Schedule

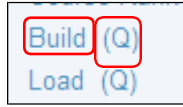
If you are building new (not using your current Master Schedule or building by hand) you will use the internal Builder. You will validate your build and correct all errors, then validate again and correct all errors until all the errors have been corrected and you get the message Validation completed successfully. Warnings & info will pass validation, but we suggest that you correct warnings if possible.

Note: There is a known issue with Section Link Load Constraints being deleted by the system if you run a Build, therefore if you have jumped ahead and already entered **Section Linking Load Constraints**, print the list and export them. Complete instructions on export procedures can be found on our website under Documents/Scheduling/Backing up Section Link Constraints.

Also, the engine only works for MAC users when using Mozilla Firefox.

- a. **The engine may already be enabled by a new feature or on your computer from previous year. If it doesn't run, download the engine.** To download:
 - Select Engine Download from the menu
 - Click on PSSched Engine Install.zip
 - Open
 - Double click on PSSched Engine Install.exe
 - Run
 - Next
 - Next - it automatically installs to C:/Program Files
 - Finish
 - When you run the engine for the first time you may get a Blocking message, select Unblock and you should not get this message again.

- b. **Validate the Build:**
 - i. Select the word **Build** from the menu.
 - ii. Check the **Validate** box and **Execute**. You will see it run on your screen. Depending on the size of your master schedule this could take a few minutes.
 - iii. Once the validation has finished running, select the **(Q)** to the right of the word Build



iv.

If it ran correctly you will see that it Started True, Success True, lists the date & time. The Results Log & Build Log should have View under them. Take note of the Completed date & time. In larger districts they may not be in order, therefore make sure to check the date carefully.

Build Type	Started	Success	Completed	Results Log	Results	Build Log	Comment
Build	True	True	5/11/12 09:20:05 AM	View		View	<input type="text"/>

Select the **Results Log** by clicking on **View**. In the example below we have 354 validation errors. **Errors must be fixed** before you can run the Build to create the Master Schedule. Warnings & Info do not need to be corrected, however you will want to look at your warnings and correct if possible.

Results Log for Apple Grove High School 1

```

Info Engine version: 3.0.2.0.0201
Info Engine platform: Windows
Info Started schedule: Fri, May 11 at 09:20:21.
Info You have 354 validation errors.
Info Total run time: 0.48 seconds.
Info Finished schedule: Fri, May 11 at 09:20:21.

-----

Warning The Room file contains a room without a Department code. The room is 109.
Warning The Room file contains a room without a Department code. The room is 110.
  
```

```

Error Invalid course PPM found in the Course file. The course is ART9 [Art], the invalid course PPM value is 0 (must be > 0 and <= PeriodsPerDay).
Error Invalid course frequency found in the Course file. The course is ART9 [Art], the invalid frequency value is 0 (must be > 0 and <= DaysPerCycle).
Error Invalid meetings per cycle value found in the Course file. The course is ART9 [Art], the invalid value is 0.
Error Invalid number of sections. The course is THR1000 [Beginning Acting], the section count is 0.
Error Invalid term length found in the Course file. The course is THR1000 [Beginning Acting], the invalid term length is 0.
Warning Invalid course max value found in the Course file. The course is THR1000 [Beginning Acting], and the invalid value is 0 (must be > 0).
Warning Found a course without a department. The course is THR1000 [Beginning Acting].
Info Invalid schedule type found in the Course file. The course is THR1000 [Beginning Acting], the invalid value is .
Error Invalid course PPM found in the Course file. The course is THR1000 [Beginning Acting], the invalid course PPM value is 0 (must be > 0 and <= PeriodsPerDay).
Error Invalid course frequency found in the Course file. The course is THR1000 [Beginning Acting], the invalid frequency value is 0 (must be > 0 and <= DaysPerCycle).
Error Invalid meetings per cycle value found in the Course file. The course is THR1000 [Beginning Acting], the invalid value is 0.
  
```

You may see a line that says "The previous error message has occurred 25 times...". After you correct the first 25 errors and validate again, you will see more of the same type of error that will need to be corrected.

```
Warning Found a student without any requests. The student name is Flygare, Casey.
Warning The previous error message, 206, has occurred 25 times. This error message will not be printed again.
Warning Student is severely under-requested. The student is Flygare, Casey. Out of 16 time slots available to schedule, requests fill 0.
Warning The previous error message, 225, has occurred 25 times. This error message will not be printed again.
```

For information on what the error means, refer to your manual for a list of common errors and how to fix them. There is also more information on PowerSource. **You must continue fixing errors and re-running validations until it runs error free and it says Info Validation completed successfully:**

```
Info Engine version: 3.0.2.0.0201
Info Engine platform: Windows
Info Started schedule: Wed, Apr 11 at 13:45:52.
Info Validation completed successfully.
Info Total run time: 0.09 seconds.
Info Finished schedule: Wed, Apr 11 at 13:45:52.
```

- c. **Build the Master Schedule:** Once all the errors have been corrected and you receive **Validation completed successfully** you can run the Build. Select Build from the menu however **do not check Validate**, select Execute. After it has run and you open the (Q) you will now see the word **Import** under Results. Also note that you can enter Comments or notes to distinguish one run from another. You can also Delete the runs you no longer want.

Build Master Schedule Queue									
Build Type	Started	Success	Completed	Results Log	Results	Build Log	Comment	Delete	
Build	True	True	4/16/12 02:14:49 PM	View	Import	View	<input type="text"/>	<input type="checkbox"/>	

- i. In order to see what Master Schedule the system built, click on Import and the following screen will display. The system only goes through the student requests once so we suggest that you wait for the Load where the system runs through the student schedules several times before you evaluate individual schedules.

Import Schedule

Import Which Schedule?

Master Schedule?

Master Schedule with Student Schedules?

Submit

- ii. Once you have Imported, select Master Schedule, check all periods, all days, all rooms, all teachers and sort whichever way you want to display it and submit. Begin to evaluate your Master Schedule
- iii. If you are not satisfied with the new Master Schedule, go back and make the changes that you think would help and follow the process of validating the Build until there are no errors, run the Build, Import, display the Master Schedule and re-evaluate it. You can run this process as many times as necessary. You can also go back to a previous Build and Import.

Note: Each section contains a check box next to the Section number called **Locked Section**. When you rebuild the schedule, PS automatically selects the Locked Section checkbox on the Edit Section screen to lock the sections that were successfully scheduled in the previous build. The purpose of the locking is to save time when rebuilding the master schedule. Unlock all sections of a course when you want to rebuild that course in the master schedule. The sections are locked as the build runs successfully. To have the system rebuild sections of a certain course you must unlock the sections of the course and then select Use Locked Master Records checkbox when rebuilding. If you do not select the Use Locked Master Records checkbox when rebuilding the master schedule, the system rebuilds all sections, locked or not. This Locked Sections check box does not lock student's schedules, it is only used in the Build process.

Visual Scheduler – Beware of several “known issues” when creating sections in the Visual Scheduler.

Note: Visual Scheduler may be used with any certified or supported browser. However, due to the use of more technically advanced browser features in the Visual Scheduler, Pearson believes the best user experience from both a functional and a performance perspective will be with the most current versions of Firefox, Safari, and Chrome. (Some features will not work in IE)

For a diagram of the Visual Scheduler refer to the MISD PowerSchool document “Screen Print of Visual Scheduler”.

Pearson has introduced a new scheduling tool called the Visual Scheduler which is an on-line schedule board that allows the editing of the Master Schedule and updates the scheduling data in real time. It is an excellent visual tool to help build, edit, or fine tune the Master Schedule. Select Visual Scheduler from the PowerScheduler menu. **Note:** If you plan to build your entire schedule in the Visual Scheduler, delete your Master Schedule first (if you copied it over from last year) or it will merge with the schedule that is there.




You must set “Target Number of Sections to Offer” on the Course Preferences screen to use Visual Scheduler

Features of the Visual Scheduler

The **Toolbar** at the top of Visual Scheduler:



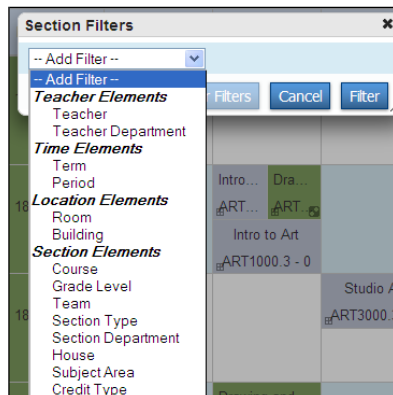
The **Courses** are listed in tiles down the left column. The area under **Sections** encompasses the largest part of the screen. Along with **Courses** & **Sections** in the headings are the following icons:

- The 2 arrow icons  just to the left of the word **Courses** will expand your Visual Scheduler grid up and to the left for a larger work area.
- Filter Courses -  If the icon is blue, no filters are active - if the icon is green one or more filters are active - by default the filter is active and displays only Courses w/ unscheduled Sections for all terms. Note if you set a filter, those settings are retained, making your personalized filter available each time you navigate back to the Visual Scheduler
- Sort Courses -  by name, by Course number, by department, by unscheduled Sections (number of Sections still to be scheduled) or by rank. If the icon is blue the sort function is using default settings - if green the sort function is user-defined. Note if you set a sort option, those settings are retained, making your personalized sort available each time you navigate back to the Visual Scheduler.
 - Sort by Course Name
 - Course Number
 - Department
 - Unscheduled Sections
 - User Defined Rank (Courses that do not have a user defined Course rank appear below Courses that do have a user defined Course rank - this is only for build & load)
 - System defined rank
 - Sort Direction - Ascending or Descending

To the far right on the toolbar are the Section filters, Undo & Redo, and Zoom In & Zoom Out.



- Section Filters - if the icon is blue there are no filters active or the sort is at the default setting if the icon is green filters are active or the sort is user defined.



Below the Sections toolbar, the **Departments** are listed along with the **TeacherName**.

Art	
Russell, Chris C	Thatcher, Ang..

Target Number of Sections to Offer

In order for the Visual Scheduler to work correctly you must specify the target number of Sections to offer. To hand enter the target number of Sections, open your Course Preferences screen and key in the number of Sections from your tally for each Course in the Target Number of Sections to Offer field.

Sections Defined	
Target Number of Sections to Offer	6

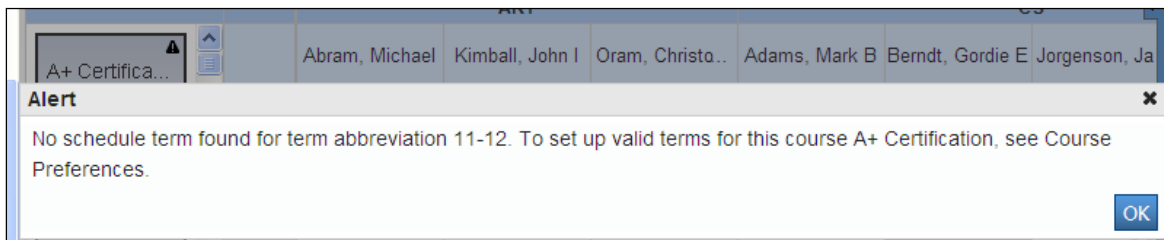
You can also have the system calculate the number of Sections based on student requests or copy them from the current year's schedule:

- Based on Course Requests: Functions > Calculate Number of Sections to Offer **however this includes alternates**
- Based on Current Active Master Schedule: Functions > Auto Generate Course Info, check box and Submit

Alerts



The **triangle with exclamation** in the upper right corner of a tile designates that no terms or periods are selected for this Course/Section. If you click on the triangle a message similar to the one below will display. If the alert is on the Section, the Section cannot be moved until the alert is resolved.





The grid icon in the lower left corner of a tile will display the Course Requests in Common. Click on the grid to display:

Course Requests in Common ✕

Physics SCI2200 (180 course requests)

This shows the courses and the number of course requests in common with the selected course.

Course Name	Number
<input checked="" type="checkbox"/> Drawing and Design (ART1100)	51
<input checked="" type="checkbox"/> Swimming (PE1200)	1

▶ Show All Courses with Requests in Common

Click on the arrow ▶ to display all Course requests in common.

Course Requests in Common ✕

Physics SCI2200 (180 course requests)

This shows the courses and the number of course requests in common with the selected course.

Course Name	Number
<input checked="" type="checkbox"/> Drawing and Design (ART1100)	51
<input checked="" type="checkbox"/> Swimming (PE1200)	1
▼ Hide Multiple Courses with Requests in Common	
Creative Writing (ENG3100)	186
Calculus (MAT2100)	179
Computer OS (CS3000)	179
Current Affairs (SOC2000)	179
Health 12 (HE12)	179

Course Information

If you hover your cursor over a Course the window below will open displaying Course information.

Beginning Acting
THR1000

Seats Available per Grade Level: 0/11/14/0
Optimal Number of Students: 24
Maximum Enrollment: 35

Unscheduled Sections: 5
Scheduled Sections: 4
Target # of Sections to Offer: 9
Teacher Assignments: 0

Seats available for **each grade level** based on requests

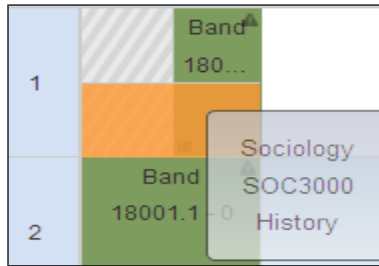
Optimal Number is the ideal balanced classroom size based on requests

Max Enrollment from the Course

Number of Unscheduled & Scheduled Sections
Target # of Sections to offer based on requests
Teachers assigned to teach these Sections

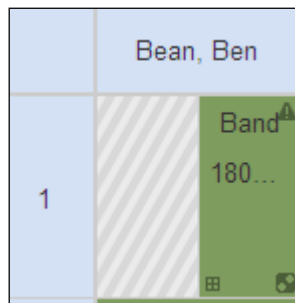
Creating Sections

Drag a Course onto the Sections grid and multiple cells appear orange. You can only drop the Course Section where the tile turns orange. (June 2014 Known Issue with sections created in visual scheduler not loading.)



The Visual Scheduler can display up to 12 terms if needed.

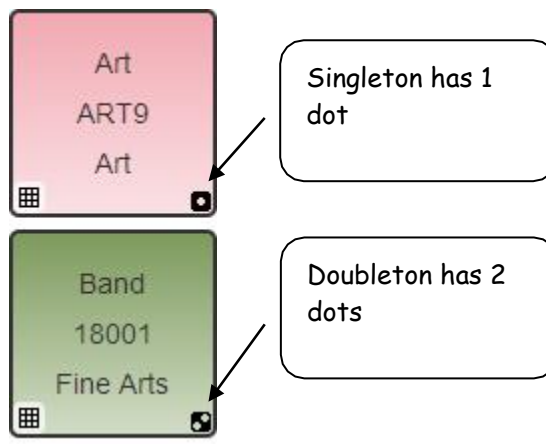
If the tile is shaded with striping, it indicates there is a teacher free constraint on that period for that teacher.



A singleton is denoted by a Pink tile color and icon in lower right corner with one dot


A doubleton is denoted by a Green tile color and icon in lower right corner with two dots

*Singleton & Doubletons are determined by year




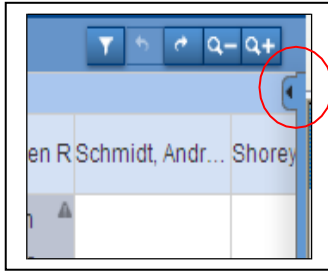
Click on the Section for the Edit Section screen. You can make the same changes on this screen that you would by going to Sections and editing there.

Section Detail											
Course	Pop Choir (MUS2100)										
Section Number	1										
Current Enrollment	0										
Maximum Enrollment	<input type="text" value="70"/>										
Schedule	<table border="1"> <thead> <tr> <th></th> <th>A</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>2</td> <td><input type="checkbox"/></td> </tr> <tr> <td>3</td> <td><input type="checkbox"/></td> </tr> <tr> <td>4</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>		A	1	<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>
	A										
1	<input checked="" type="checkbox"/>										
2	<input type="checkbox"/>										
3	<input type="checkbox"/>										
4	<input type="checkbox"/>										
Term	<input type="text" value="S1"/>										
Room	<input type="text" value="315"/>										
Grade Level	<input type="text"/>										
Teacher	<input type="text" value="Berndt, Gordie E"/>										
Close Section at Max	<input type="checkbox"/>										
Locked Section	<input type="checkbox"/>										
Section Type	<input type="text"/>										
House	<input type="text"/>										
Team	<input type="text"/>										
School Where Taught	<input type="text"/>										
<input type="button" value="Delete"/> <input type="button" value="Cancel"/> <input type="button" value="Save"/>											

Class List: If you have loaded the students into classes, then delete the Section from the Visual Scheduler, all the enrollment records will be permanently deleted. To get the list of students in this class hold your CTRL key down while clicking on the Section and the list of the students scheduled into this class will display. Make them your selection or print them (just click the PowerSchool printer icon ) so they can be re-scheduled into another class.

Class Roster - Ballard, Peter E Exp. 1(A) Art 6		
1. Alfred, Kathleen N	3. Crando, Justin L	5. Goringe, Caci H
2. Bleazard, Cody J	4. Escamilla, Kari C	6. Hansen, Austin B
<input type="button" value="Make this the current selection of students"/>		
<input type="button" value="Add these students to the current selection of students"/>		

The **Seats Available Chart** is near the top right of the screen. Click the little  arrow and the window will display:



Seats Available Chart				
	Grade 9	Grade 10	Grade 11	Grade 12
1 - 0	75	136	122	179
1 - 0	171	122	129	116
2 - 0	171	121	81	90
2 - 0	122	173	81	112
2 - 0	136	213	127	90
3 - 0	124	94	114	207
3 - 0	96	123	176	147
5 - 0	134	115	155	145
5 - 0	174	71	203	116

Remember, the Visual Scheduler is a real-time feature, therefore changes made are displayed immediately.

Beginning Acting
THR1000
Seats Available per Grade Level: 0/11/14/0
Optimal Number of Students: 24
Maximum Enrollment: 35
Unscheduled Sections: 5
Scheduled Sections: 4
Target # of Sections to Offer: 9
Teacher Assignments: 0

In the screen above, as you hover over **Beginning Acting**, not only did the pop up information on the Course appear, but a yellow line appeared on the far right indicating there are Sections of that Course further over on the screen. The yellow line can appear on the right or left depending on where the class is on the grid.

Known Issue: When moving sections PS may remove the room number, max enrollment, and/or uncheck close section at max.

The screenshot shows a Visual Scheduler interface with a grid of course sections. A tooltip for 'Beginning Acting THR1000' is displayed over a section, showing details like 'Seats Available per Grade Level: 0/11/14/0', 'Optimal Number of Students: 24', and 'Maximum Enrollment: 35'. Red arrows point from the tooltip to the corresponding section in the grid.

In the example above, if you hover over the Course and the Sections are in view, they will be highlighted in yellow.

Creating additional Sections

You can create additional Sections in the Visual Scheduler simply by dragging & dropping the Course onto the Sections grid. When you hover over the Course now, you will see that you have more Scheduled Sections than the Target # of Sections to Offer:

The screenshot shows a Visual Scheduler interface with a grid of course sections. A tooltip for 'World History SOC2100' is displayed over a section, showing details like 'Seats Available per Grade Level: 0/1/0/30', 'Optimal Number of Students: 30', and 'Maximum Enrollment: 35'. The tooltip also shows 'Scheduled Sections: 7' and 'Target # of Sections to Offer: 6'.

For more information reference Pearson's document "Visual Scheduler User Guide" which can be found on the Pearson website or on the MISD website: <http://powerschool.misd.net> > from the **PowerSchool Admin** dropdown select **Scheduling > PowerScheduler** and the link to the document is toward the bottom of the page.

Course Filters
 Filter is set. Icon color changes to green if filter is set.

Course Sort Options
 Sort By: Course Name. Sort Direction: Ascending. Icon color changes to green if sort is set.

Class Enrollment Dates
 Once the students are scheduled, hold CTRL and click on the Section to see a Class Roster.

Section Filters
 Filter changes to green if set.

Undo and Redo buttons will work while in the screen. Once you refresh the page or navigate to another page, actions cannot be undone or redone. If you delete a section with undo, the enrollment records are also deleted, if you redo the enrollment records will not return.

Zoom In or Zoom Out

Select this arrow to expand the Seats Available Chart.

Use these arrow icons to expand the screen up and to the left.

Departments are listed on the top row. Teachers are listed on the second row.

Diagonal lines means teacher free.

Pink denotes a singleton. Green denotes a doubleton.

The triangle with the exclamation point in the upper right corner denotes a problem with valid terms or periods per meeting.

Click on the graph icon in the lower left corner of the tile to display the Course Requests in Common screen. Click arrow to display all course requests in common.

When you click on a Course, all the sections of that Course hilite. If the sections are not visible, a yellow line will appear on the side of the screen.

Hover over a Course to display seats available per grade, max enrollment, target, scheduled & unscheduled sections & teacher assignments.

Visual Scheduler
 In
PowerScheduler
 Created by mteffes 4/2013

Seats Available Chart

	Grade 9	Grade 10	Grade 11	Grade 12
Grade 9	111	121	131	141
Grade 10	112	122	132	142
Grade 11	113	123	133	143
Grade 12	114	124	134	144

Schedule Board

Put your Master Schedule on a Schedule Board and evaluate. Run the Post Build Reports. Additional information on the Post Build Reports can be found in the handout from: <http://powerschool.misd.net> PowerSchool Admin/Scheduling/Scheduling Reports

Loading the Master Schedule

When you have completed the Master Schedule, you can begin the load process. You may schedule each student by hand or you can use PowerScheduler Load to schedule each student.

If you are loading the student schedules into your new Master Schedule using the PowerSchool Load:

a. Prepare to Load by reviewing constraints/relationships/max room size.

Constraints: enter any student Load Constraints needed. Detailed explanations of the Load Constraints can be found in the hand out document "Load Constraints" from the PowerScheduler User Guide.

Balance Adjustment - reserve seats.

Section Link - needs a higher load priority, for trimester use A-B, A-C.

Student Preference - Forces student into a particular class.

Load Constraints		
Build: 2012 - 2013 TB Catalog: 2011-2012 Course Catalog		
Load Constraint	Description	Count
Balance Adjustment	Pre-load a section with n students before calculating assigned.	0
Student/Student Avoid	Keep two students from being scheduled together.	0
Student/Teacher Avoid	Keep an individual student and teacher from being scheduled together.	0
Student Free	Schedule a free period for a student.	0
Section Link	Link the sections of two courses with the same students.	0
Student Preference	Force a student to schedule in a specific teacher's section.	0

Ask Liaison to backup Section Link Constraints for you.

Be aware that **Section Link Constraints will be deleted if you go back and run a Build again**, therefore, print your Section Link Constraints and export them so they can be simply imported if you lose them. Complete instructions on export procedures can be found at <http://powerschool.misd.net> PowerSchool Admin/Scheduling/PowerScheduler/Backing up Section Link Constraints.

If using Section Link Constraints for trimesters, link T1 to T2 and T1 to T3. If using Section Links these courses should have a high load priority (low number).

Also, evaluate if Teaming would be a better option than Section Link Constraints. Teaming may aid in scheduling the students with the same teacher for each term but not necessarily

the same period and will not herd students. Although Pearson suggests that teams must contain 3 or more teachers.

Relationships: refer back to the Course Relationships document in Step 21 for a more detailed explanation.

Max Room Size: Confirm that your max room size for **Courses, Sections, & Rooms** is correct. The system will use the largest max size from these 3 areas when loading students. To change max size on rooms, in Functions > Update Selections > ScheduleRooms table > Select all xx records in this school > Modify Records > make sure the number of records is correct on this page > select Maximum = xx (enter your number) > Modify Selected Records. Now open Rooms from the menu on the left and verify the Max and make any singleton changes needed here.

Ask Liaison to mass change Max Room Size and/or Max Enrollment for Sections if needed.

To change Maximum Enrollment or Close at Max in Courses, from Functions select Auto Fill Course Information.

Review Load Priorities by running the Course List report. Teams & Constraints should have the lowest numbers which are the highest priority.

To change Max Enrollment for Sections, from Functions > Update Selection > select ScheduleSections table > Select all xxxx records in this school > Modify Records > confirm number of records is correct. **Select Max Enrollment = and key the number of max students or to check the box to Close Section at Max, select MaxCut = 1** (this will check the box)

Schedule This Student should have been checked for all students. Functions > Auto Fill Student Information > Schedule This Student

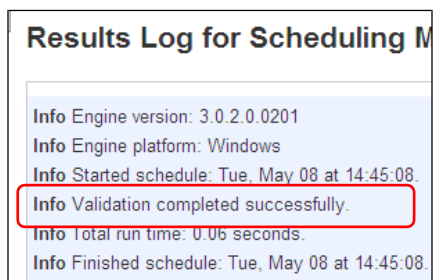
- b. **Validate the Load** and correct the errors until there are no validation errors, then Import (you can have info & warnings). This process is very much like the Build process.

Select Load from the menu and check the box to Validate. You don't need to check any other boxes except Validate. Execute. Once it runs you will go to the "Q" and find the Load you just ran, keeping in mind that they may not be listed sequentially. Select View under Results Log.

Load Student Schedules Queue						
Type	Started	Success	Completed	Results Log	Results	Load Log
Load	True	True	5/9/12 09:59:13 AM	View	Import	View
Load	True	True	5/8/12 02:48:27 PM	View	Import	View
Load	True	True	5/8/12 02:45:09 PM	View		View
Load	True	True	5/8/12 02:43:16 PM	View		View
reschedule	True	True	10/1/07 10:05:08 AM	View	Import	View

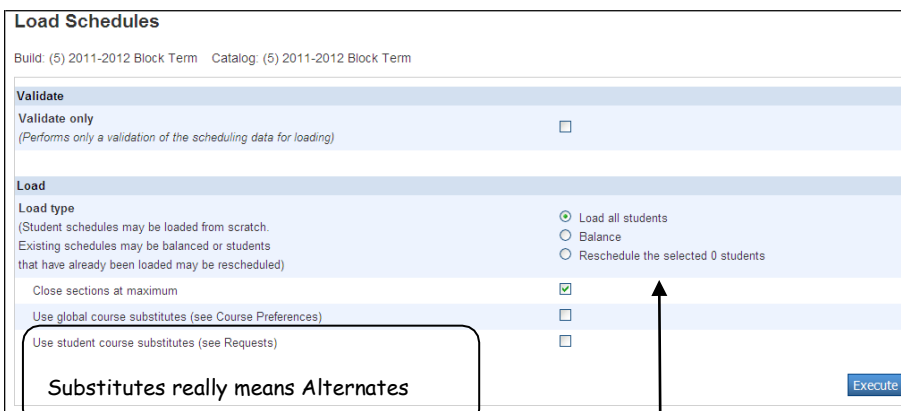
Correct all Validation Errors. You do not have to correct Warnings or Info but we recommend that you do correct Warnings if you can.

Continue to Validate and correct errors/warnings/re-validate until you receive **Validation completed successfully**.



- c. **Load Schedules:** Once Validation is complete there are options to consider when loading the student schedules.

You may want to begin by leaving the Load all Students box checked, and Execute. This process may take several minutes depending on the size of your school (I have seen them run for 45 minutes or more). You then may want to run with Close Section at Max checked and compare the two. Right now there is a glitch in the system and once you select Import you may see bars at the bottom and you may not - it may seem like nothing is happening. Please do not hit Import a second time.



NOTE: PS support confirmed that close at max does not work when you check reschedule the selected xx students.

Options for Loading Schedules:
 After your first general load and after you have imported and evaluated the schedule, you may want to run the loader using:
 - **Balance** - the system should try to automatically balance the schedule, however we have seen improvement with this checked.
 - **Reschedule a selected group of students** - select your students first, open Load and check the Reschedule the selected (and the correct number of students will display here) students. It may not honor 'close section at max' unless all students have been loaded first.
 - **Global course substitutes** which only works if you have them selected at the bottom of the Course Preferences screen.
 - **Student course substitutes are Alternates**; if students have alternates in their requests try checking this box and evaluate the load.

Load Student Schedules Queue

Type	Started	Success	Completed	Results Log	Results	Load Log	Comment	Delete
Load	True	True	5/9/12 09:59:13 AM	View	Import	View	<input type="text"/>	<input type="checkbox"/>
Load	True	True	5/8/12 02:48:27 PM	View	Import	View	<input type="text"/>	<input type="checkbox"/>

Once it has run, click on the "Q" and you will now see the word "Import" under Results, to view your Results log. In the example below we see that 297 students were fully satisfied, total students loaded is 389 and students fully satisfied is 76%. We recommend that you have at least 80% fully satisfied before you commit this schedule. Once the schedule is committed, correcting schedules on the Live side is much more tedious than on the PowerScheduler side. Macomb school districts commit their schedules and run End of Year in July, therefore you must plan to have your schedule complete by the end of June.

Results Log for Scheduling Master School

```
Info Engine version: 3.0.2.0.0201
Info Engine platform: Windows
Info Started schedule: Wed, May 09 at 09:58:53.
Info Students fully satisfied: 297
Info Total students to load: 389
Info Students fully satisfied: 76%
Info Load completed successfully.
Info Total run time: 19.31 seconds.
Info Finished schedule: Wed, May 09 at 09:59:12.
```

In order to see this schedule you will need to select Import. (Right now there is a glitch in the system and once you select Import you may see bars at the bottom and you may not. Please do not hit Import a second time.) Once imported, you can select your Master Schedule List Report to assess the results. Remember to select All periods, All days, All Rooms, All Teachers and sorting by Course Name is often easier for assessing the results.

Master Schedule List

Build: (5) 2011-2012 Block Term Catalog: (5) 2011-2012 Block Term

Number.Section	Course Name	Expression	Term	Teacher Name	Teacher Dept.	Room	Students	Max Seats
14005.1	A+ Certification	3(A)	12-13	Berndt, Gordie E	CS	7	17	22
14005.2	A+ Certification	5(A)	12-13	Berndt, Gordie E	CS	7	22	22
14005.3	A+ Certification	8(A)	12-13	Berndt, Gordie E	CS	7	20	22
19005.1	Advanced Cabinetry I	3(A)	S1	Higgins, Theodore X	FA	14	20	22
19006.1	Advanced Cabinetry II	3(A)	S2	Higgins, Theodore X	FA	14	20	22
22011.1	Advanced Ceramics I	2(A)	S1	Kimball, John I	ART	3	22	22
22012.1	Advanced Ceramics II	2(A)	S2	Kimball, John I	ART	3	20	22
21005.1	Advanced Foods I	1(A)	S1	Bryant, Renata L	FA	13	21	22
21006.1	Advanced Foods II	1(A)	S2	Bryant, Renata L	FA	13	21	22
22019.1	Advanced sculpting I	1(A)	S1	Oram, Christopher Y	ART	4	19	22
22020.1	Advanced Sculpting II	1(A)	S2	Oram, Christopher Y	ART	4	19	22
10003A.1	Algebra	2(A)	S1	Derringer, Malcom B	MATH	202	7	22
10003A.2	Algebra	3(A)	S1	Derringer, Malcom B	MATH	202	16	22
10003A.3	Algebra	4(A)	S1	Derringer, Malcom B	MATH	202	10	22

The Master Schedule List by Course Name makes it easy to assess your student schedules. It is easy to assess your counts in this view.

We can quickly run down the column of Students and compare to the Max Seats. You can see that when we get down to Algebra the numbers are really off so we know we will need to re-evaluate Algebra, re-run the Load, Import, run this report again and assess. In this particular case, some of the 9th graders from feeder schools Algebra request has the incorrect SchoolID on it (known issue) therefore, it is not scheduling for them, resulting in the low numbers.

In this screen below you can see the word reschedule where we have selected a student or group of students and rescheduled just those students. From the Comment keyed onto this line we know that the 9th grade was rescheduled. The system locks the other students and their schedules will not change.

NOTE: You cannot lock a class(es) for a student or group of students, include them on the Load and expect them to stay in that class. If they are included in the Load, their entire schedule will tumble and they will very likely be scheduled out of that class. **Other than giving each student a Load Constraint of Student Preference, there is no way to lock a student into a specific class at this time.** We have an Enhancement Request into Pearson to allow locking in Mass Schedule and for each class on the Schedule tab of the Student screen. To vote for this Enhancement Request, login to <https://PowerSchool.PearsonSchoolSystems.com> and from the **Community** tab (the blue line just below it) select **Enhancement Requests**. **Keywords: PowerScheduler Lock Scheduled Classes** and hit **Enter** - the request will display. **Click on the title** which will open the request. Once the request is open, on the right side you can **select the + sign** to vote for this enhancement request.

Load	True	True	5/8/12 02:43:16 PM	View	View		
reschedule	True	True	10/1/07 10:05:08 AM	View	Import	View	rescheduled 9th grad

We suggest that you continue trying to improve your Load % until you see it is not improving any longer. You can Import any run at any time, so if you have a run that gave you better results previously, you can Import that run to use. **Note that if you have made any manual changes to the student schedules or setup, they will not be included in that import so be careful not to overwrite your work.**

Once you have determined the schedule is the best the Loader can do, begin fixing schedules by hand. Use the Post Build Reports to help determine what students need fixing.

Post Build Reports

Use Reports to assist reviewing student's schedules after the Load and Import. Compare these reports to your Schedule Board. The hand out PowerScheduler User Guide for Load Constraints contains a section explaining the "Build the Master Schedule Reports" beginning on page 158. You can also reference document "Post Build Reports in PowerScheduler" which can be found on our web site under Documents > Scheduling.

Suggestions, Reminders, & Helpful Info:

- Compare your Master Schedule List Report with the Course Request Tally Report to help find where you need to adjust your schedule. Where are the holes?

Your Liaison will Commit your Master Schedule. Do not open "Commit".

You may re-Build* or re-Load (remember to Import) as many times as necessary until the Commit and End of Year process is run during the summer (end of June to end of July). Check with your liaison for that date. After the schedule is committed you will be scheduling each student separately on the Live side - do not use the PowerScheduler side. **Liaisons should lock schedulers out of PowerScheduler once the schedule is committed.**

***Note:** If you have Loaded the student schedules and want to go back to re-Build you will lose all Section Link Constraints. We suggest you export Section Link Constraints so you can re-import them without having to hand key again. Instructions are on our web site.

To **select a group of teachers or courses** to use in Auto-Fill info, from Functions select Update Selections. For courses select the SchedulecourseCatalogs table. If you see duplicate courses you will need to find your BuildID and sort by BuildID. For teachers, select the Teachers table. Select all xxx records in this school. Select Records by Hand. Hold down your Ctrl key, make your selections and Submit. You can now go back to Auto-Fill Course Info or Auto-Fill Teacher Info; you can toggle the selected xx courses or teachers. Be careful when using Update Selection that you don't grab all the schools in your district's data, only your own school.

Two-Day Rotation:

(A-B) means BOTH A and B Days.

(A,B) means EITHER A or B Day.

(A) means only A Day.

(B) means only B Day.

Priority & Rank:

The **Load Priority on the Course Preferences** page tells the scheduling engine what courses to **load** first.

The **Priority on the Student Preferences** page tells the scheduling engine which students to **load** first.

Course Rank tells the engine which courses to **build** first when Building the Master Schedule. If you are not building a new master schedule you will not need to use Course Rank.

Close Section at Max will only be honored if it is checked in the **Room, Course, & Section**. The highest number is what the system will allow to schedule. This is also true on the live side.

---Original Pearson Case Description---

I am wondering what the "Locked" column on the Student List report in PowerScheduler refers to? Is this for locked schedule and if so, how do you lock a student schedule? Thanks...mjs

---Conclusion---

Advised client **there is not a way to lock the students into their sections.**

Middle school seeing high school students on the non-scheduled student requests report - those student's requests listed have the wrong school ID on it. They have the ms school ID and not the hs ID so they showed on the ms report.

Also, could not run AWI on the live side after Commit & EOY. One of the requests had 0 as schoolID.

Manually Schedule on the live side had requests listed that the student didn't make. Caching problem, logout of PS, get out of IE, open IE & PS again and the list was correct.

You will find all the MISD PowerSchool Scheduling documents and information at:

<http://powerschool.misd.net>

Select PowerSchool Admin at the top, then down to Scheduling, and over to select PowerScheduler, Scheduling Reports, or Walk-In Scheduling.