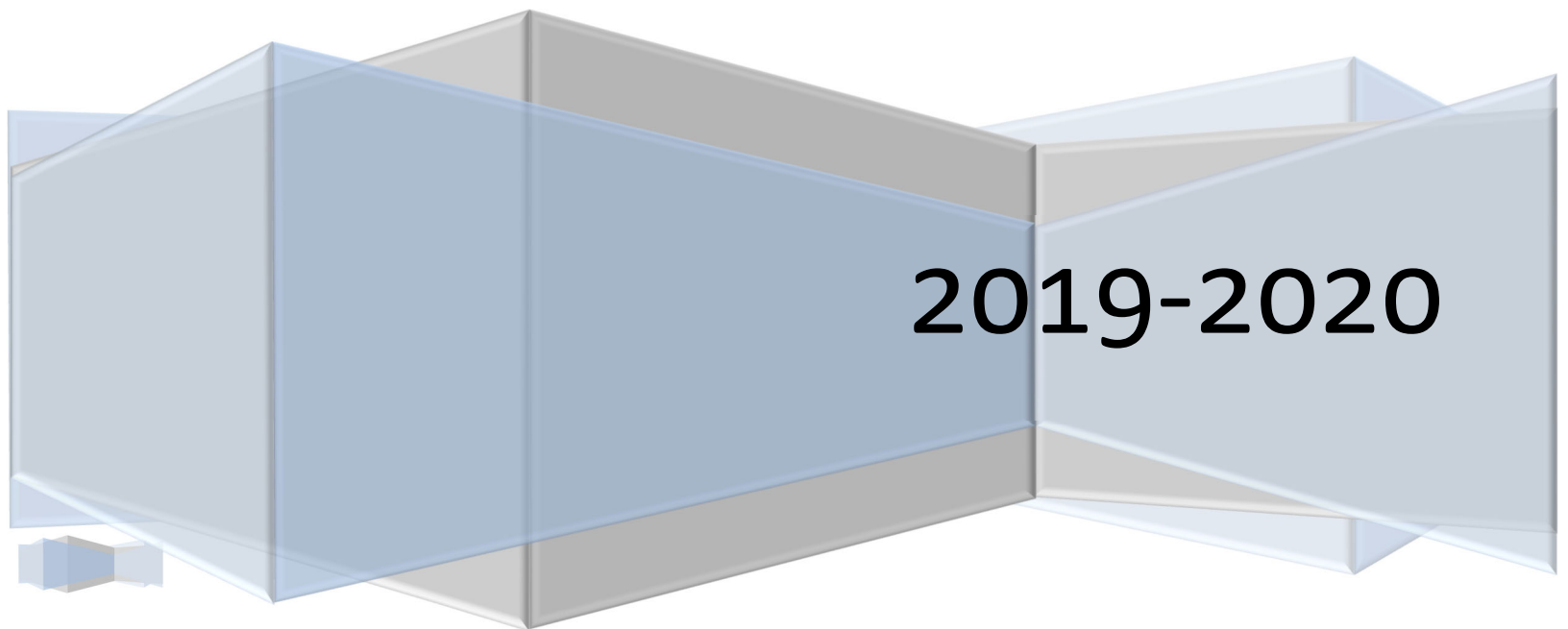


**Miami-Dade County Public Schools
Information Technology Services
Technology Learning Center**

Building the Master Schedule

X2 Aspen 10th Edition



2019-2020

Contents

Introduction	4
STARTING THE NEW BUILD YEAR	5
DATA SHARED ACROSS SCENARIOS	8
Defining Schedule Days	9
Defining Periods	9
Defining Schedule Patterns	10
Creating Pattern Sets	11
CREATING TEAMS.....	12
Rooms	13
Clone Rooms	14
Staff	15
Adding a TBA	16
Courses.....	18
Adding Departments	18
Working with Alternates	19
Facilitating the Batch Entry Process.....	20
Defining Course Scheduling Parameters.....	21
Mass Assigning a Pattern Set to Courses	23
Course Load Priorities	23
Defining a Course Package	24
Expanding Packages	24
Batch "Mass" Entry of Student Requests.....	26
Alternate Method for Entering Student Requests.....	27
Entering Alternative Requests	27
Mass Moving Requests	28
Removing Requests from a Group	28
Multi-Adding Student Requests.....	29
Filtering Student Requests	29
Reports.....	30
Calculating Section Counts.....	30

Building the Master Schedule

Students	32
Scheduling Parameters	32
Unavailable Schedule for Part-Time or Shared Students.....	32
Student Scheduling Priorities.....	33
Assigning Team Codes to Sections.....	34
Coding Sections for Teams.....	34
Coding Sections for Inclusion.....	35
Scheduling Rules	36
Defining a Rule	36
Deleting a Rule	36
Rule Examples	37
Schedule Rule Summary Report	38
Calc. Section Count	43
Initializing the Workspace.....	43
Assign. Teacher & Term	44
Validating Your Data	46
Correcting Validation Errors.....	46
Running the Build.....	48
Running the Schedule Feedback Report.....	48
Analyzing The Build	49
Fatal Error Identifier.....	50
Locking Specific Sections.....	51
Master Schedule Review.....	52
Drag & Drop Changes.....	52
Loading Students.....	54
Matrix View Reschedule	55
Rescheduling a course from the Matrix View.....	55
Checking for Conflicts	57
Committing the Schedule	59
Appendix A.....	60
Copy a Build Scenario (Optional)	60
Appendix B	61

Building the Master Schedule	
Creating a Snapshot	61
Appendix C	63
Query Function	63
Appendix D.....	64
Troubleshooting your Internet Settings.....	64
Appendix E	65
The PUSH/PULL Method	65
Appendix F	67
Creating Duties.....	67
Using Duties	67
Appendix G.....	69
Adding a Co-teacher or Inclusion Teacher	69
Appendix H.....	69
Adding a Section to a Course	69
Appendix I	70
Copying Students from One Section to Another	70
Additional Resources	71
Using Field Sets	71
Choosing & Managing Filters	73
Queries.....	74
Appendix J.....	76
Frequently Used Reports	76

Aspen Build Manual 9.0 (Revision): February 9, 2018



Introduction

This tutorial is designed specifically for Miami-Dade County Public Schools. It provides a logical sequence for building a master schedule.

Rights and permissions are granted through the QUAD A system. Administrators must issue only the highest single authorization.

Permissions

RIGHTS	DESCRIPTION	SV	BV	MASTER	SUB. SELECT
WSHA	Administrator; Full rights	YES	YES	YES	YES
WSHB	Registration/ Scheduler; Posted Sched. Control; Print/View Reports	YES	NO	NO	NO
WSHR	Batch Student Request Entry Only*	NO	YES*	NO	YES
WSHO	View Only	YES	NO	NO	NO
WSHX	Student Schedule; Edit	NO	YES	NO	NO

Logging on to Aspen Navigation

Access Aspen through the employee portal under the Applications and Sites tab.

The School view, color coded blue, is designed for the maintenance of the schedule once it is built. (See the Appendix.) The Build view is used to build a schedule for the new school year.

Aspen uses a combination of menus and tabs to move to different parts of the program.

A Settings bar at the top right corner of every screen allows users to Change View, Set Preferences, and Log Off.

This book uses a shortcut key for accuracy and conciseness. For example, **BV**, **TT: Student**, **ST: Requests** means switch to

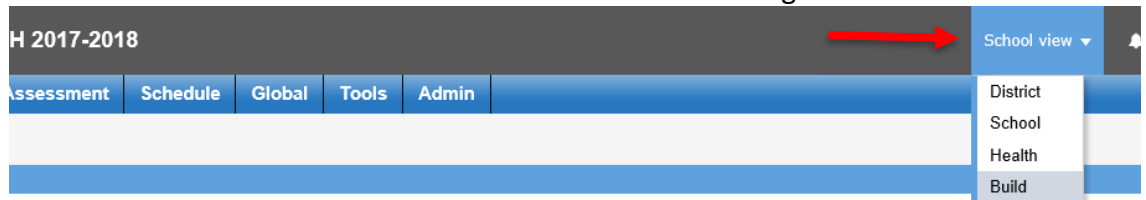
Tab Abbreviations

Shortcut KEY	BV	BUILD VIEW
	SV	SCHOOL VIEW
	TT	TOP TAB
	ST	SIDE TAB
	SbT	Sub Side Tab

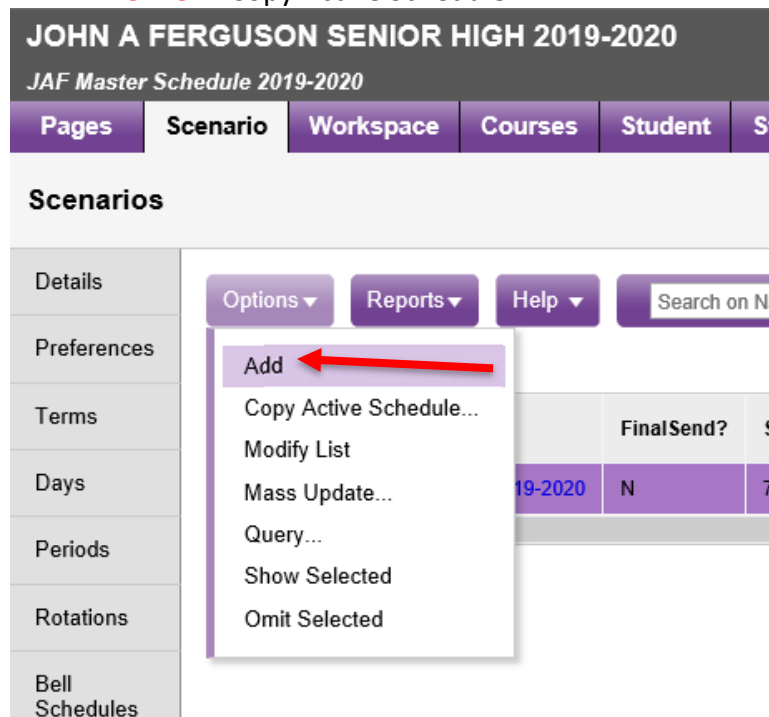
The following are instructions for starting the new build year. These instructions do not eliminate the need to use the full Aspen Build Manual. Access the full manual from the Resource Library on the Aspen homepage.

STARTING THE NEW BUILD YEAR

- **STEP 1:** Build View: Select the *Build* from the Settings Bar.



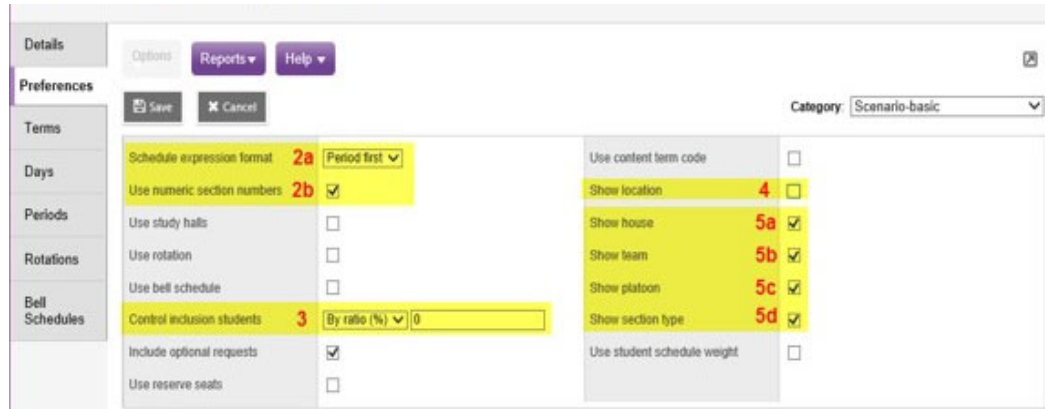
- **STEP 2:** Verify that the top left title in the Build View (BV) contains your school name and the **next school year, (2019-2020)**. (If no tabs appear, your Build View has not yet been activated. Submit a HEAT incident to have your Build View activated if your future courses have been added to DSIS.)
- **STEP 3A:** Add a new scenario: *TT Scenario / Options* -> *Add*.
IMPORTANT: **DO NOT** "Copy Active Schedule."



- **STEP 3B:** A "New Schedule" window will open that requires the following information:
 - Enter the name for the new scenario:
Master Schedule 2019-2020
 - The Start and End dates should already be populated based on Aspen's District Calendar and contain the entire year (including non-school days). **Do not enter start and end dates for the 180-day school year.** You will enter the Term Dates in Step #8 below. The Start and End dates are as follows:
 - Start: 08/01/2019

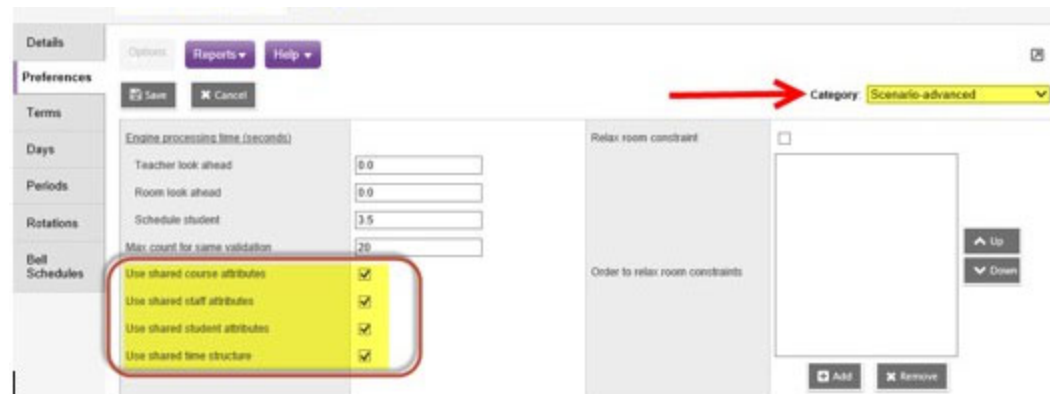
- End: 07/31/2020
- Optional: Use the comment sections to make notes about the scenario.
- Click **SAVE**. The application will initialize the course, student, and staff attributes.

- **STEP 4:** Complete the scenario detail: *TT Scenario / ST Preferences*.
 1. The Category drop-down list on the right defaults to *Scenario-basic*.
 2. On the left side, you **must select** the following:
 - a. Schedule expression format: **Period first**
 - b. **“Use numeric section numbers”** must be checked
 3. On the bottom left, leave the Inclusion ratio % field set to 0 (zero).
 4. De-Select “Location.”
 5. The following items are optional and are not used in all schools. Select only the items your school plans to use. Uncheck all unused items on the right column to eliminate unnecessary columns on your screens.
NOTE: These options can be changed at any time during the scheduling process.
 - a. Show house
 - b. Show team
 - c. Show platoon
 - d. Show section type
 6. Click SAVE before leaving the screen to save your new scenario.



7. Change the Category drop-down to Scenario-Advanced. Check all the “shared” attributes flags (flags on) **before** you begin working on the scenario. These must remain checked for the duration of the scheduling process. Leave all “Engine processing times” at the pre-set values. Click **SAVE**.

Note: The shared options may be changed in copies of this original scenario as needed. See the X2 Aspen Build Manual for details on copying scenarios and “data shared across scenarios.”



8. Continue the build process using the Aspen Build Manual available from e-handbooks and Aspen Resource Library located on the Aspen homepage to complete the following actions:
 - a. Secondary school scenarios must have three Terms (Annual, Term 1, and Term 2).
 - b. Elementary school scenarios must have one Term (Annual).
 - c. Set Term Dates:
 - i. Annual 08/19/2019- 06/03/2020
 - ii. Term1 08/19/2019 – 01/16/2020
 - iii. Term2 01/17/2020 – 06/03/2020
 - d. Set Days (one day)
 - e. Set Periods

**DATA
SHARED
ACROSS
SCENARIOS**

NEVER SHARED:

- The entire Workspace (all sections, when they are offered/prescheduled, teacher assignments, etc.)
- Rules

When you create a new scenario, you may copy any of the items above into the new scenario, but thereafter they are completely separate and changes in one scenario do not affect any other scenario.

ALWAYS SHARED:

Any change to any of the following *will* impact ALL scenarios.

- Patterns & Pattern Sets
- Student requests
- Rooms (the settings for each room such as department & max capacity)

OPTIONALLY SHARED:

When you create a new scenario, **by default** the following attributes are set to be shared. **You must specifically uncheck these boxes** to be able to change something in one scenario only.

- Course Attributes (include in scheduling, max enrollment, base terms, etc.)
- Staff Attributes (include in scheduling, preferred room, max-in-a-row, etc.)
- Student Attributes (include in scheduling, team, unavailable schedule)
- Time Structure (terms, days, periods)

BE ADVISED: We suggest that you request assistance for the first scenario copy.

Defining Schedule Days

NOTE:
Information will come forward next year.

While Aspen can support schedules with multiple days, DSIS cannot. We will create a one-day schedule.

- Step 1: Go to **BV, TT: Scenario**. The list of scenarios appears.
- Step 2: Select the scenario you want to work with, and click the *Days Side Tab*. (**ST: Days**)
- Step 3: Pull down the *Options* menu to click *Add*. The Add Day dialog box appears
- Step 4: At the *Day count* field, type the number one (1) in the schedule scenario, and then press the Tab key. The dialog box displays the appropriate number of rows, with each row representing one day.
- Step 5: Type the letter “A” in both the *Identifier* and *Name* boxes.
- Step 6: Click *Save*.

Day count			1
Number	Identifier	Name	
1	A	Day A	

Defining Periods

HINT:
Middle schools can identify their HR as Period 00 and place it at the end of the number order to preserve the consecutive nature of the periods.
Senior High Schools may use 09 at the end for the same purpose.

Define the number of periods in your schedule.

- Step 1: Go to **BV, TT: Scenario**. The list of scenarios appears.
- Step 2: Select the scenario for which you want to define periods.
- Step 3: Click **ST: Periods**.
- Step 4: Pull the *Options* menu to *Add*. The *Add Period* dialog appears.
- Step 5: In the *Period count* field, type the number of periods in this schedule scenario, and then press the Tab key. The dialog box displays the appropriate number of rows, with each row representing a period.
- Step 6: For each period, type an identifier* (period number, e.g. 01) in the *Identifier* column.
- *Period identifiers must not contain any letters; DSIS will reject period identifiers that contain letters.

Period count			7
Number	Identifier	Name	
1	00	Homeroom	
2	01	P1	
3	02	P2	
4	03	P3	
5	04	P4	
6	05	P5	
7	06	P6	

NOTE:
Do not use the *Rotations* or the *Bell Schedules* side tabs.

Defining Schedule Patterns

- Step 7: For each period, type a name (period name, e.g. 01) in the *Name* column.
- Step 8: Click *Save*.
- Step 9: Select the period number from the Period side-tab and click *Details*. Then, select the *Is scheduled* check box to make each period available for scheduling purposes.

Middle schools should create a *period 00* (period number) to use as their Homeroom (period name) in addition to their six academic class periods.

In Aspen, schedule patterns represent the different ways course sections meet in your school’s schedule. Schedule patterns include homeroom classes, normal classes, and classes that use multiple periods (e.g. work experience and Project Victory).

- Step 1: Go to **BV, TT: Global, ST: Pattern Library**
- Step 2: Pull the *Options* menu down to *Add*. The New Schedule Pattern page appears. In the area at the top of the page, you define the shape of this pattern.

- Step 3: On the top right, below *Explode pattern on save*, select the *By period* and *By day* checkboxes if you want the system to create every possible pattern based on the pattern you create in the grid.

• Field	• Data Entry
• Days	• 1 (already entered)
• Periods	• total number of periods in your school day (already there)
• Terms	• Select: Do not use
• Schedule Pattern Type	• Flat (Choose “Flat” from the dropdown menu.)

- Step 4: In the grid, click the boxes that represent Day 1 and Period 1 of this schedule pattern.
- Step 5: After you identify the pattern, click *Save*. If you selected to explode the pattern, the system uses the one period/day combination that you map on the grid to create every possible matching pattern within the schedule.
- Step 6: Click *Save*.

Creating Pattern Sets

NOTE:
After completing your first schedule, another scenario can be started. Copying a completed schedule lets you take advantage of work already completed.

- Step 7: Click the **Pattern Library** side-tab to view all the patterns. The total number of periods defined should match the number of periods you specified on **BV, TT: Scenario, ST: Periods**.

Group your patterns into pattern sets that apply to the different meeting shapes of courses.

- Step 1: Go to **BV, TT: Global, ST: Pattern Sets**.
- Step 2: Pull the *Options* menu to *Add*. The *New Schedule Pattern Set* page appears.
- Step 3: Define the name of the pattern set(s) for your school. See the chart below for suggested Pattern Set names. Repeat as needed.

- Step 4: Click *Save*.
- Step 5: After naming your pattern sets, you must tell the scheduler, what patterns are in each set. On the *Pattern Sets* side-tab, click the first *Pattern Set* name.

Pattern Set Name	Periods/Patterns Used
Homeroom	Period 00 for Primary or 09 for Secondary
Class	Periods 1- n (n=number of periods in your day)
AM Class	Periods 1-3 (Project Victory and OJT)
PM Class	Periods 4-6 (Project Victory and OJT)

- Step 6: Click the Sub-Tab *Patterns*. (**SbT: Patterns**)
- Step 7: Pull the *Options* menu to *Add*. The *Schedule Pattern Pick List* appears.
- Step 8: Change the *Pattern Type* to *Flat*. **NOTE:** Ignore *PPC*; leave it blank
- Step 9: Select the patterns you want to add to the pattern set, and click *OK*. **Be careful!** If you are in a middle school, the first pattern in this list is for your Homeroom (00) period. (See I. C. 3. above.)
- Step 10: Click *Save*.

CREATING TEAMS

NOTE:

Teaming is a highly restrictive scheduling methodology and often reduces a student elective choice.

Teams group students together while building the master schedule, and later when loading students into the classes. We recommend allowing the system to randomly assign students to teams, but you can pre-assign each student to a team if desired.

At this time only create team reference codes (team names) to be used later in the scheduling process.

- Step 1: Go to **BV**, **TT: Global**, **ST: Reference**.
- Step 2: Select the checkbox next to **Team Codes**.
- Step 3: Click **SbT: Codes** (under the Side tab **Reference**).
- Step 4: Under the *Options* menu click *Add*.
- Step 5: Define the team code.
- Step 6: Click *Save*.
- Step 7: Repeat steps 4—6 for each team code you want to create.

NOTE:

After you have created sections, these codes will appear as a dropdown list in the *Team* field for each section of a sequence.

<input type="checkbox"/>	Code	Description
<input type="checkbox"/>	AOAE	Academy of Arts and Entertainment
<input type="checkbox"/>	AOBS	Academy of Biomedical Sciences
<input type="checkbox"/>	AOE	Academy of Engineering
<input type="checkbox"/>	AOED	Academy of Education
<input type="checkbox"/>	AOHT	Academy of Hospitality and Tourism
<input type="checkbox"/>	AOIF	Academy of International Finance
<input type="checkbox"/>	AOIT	Academy of Information Technology
<input type="checkbox"/>	AOLS	Academy of Law Studies

Rooms

Before you build a master schedule, you must verify your room numbers and set scheduling parameters, using the chart below for reference.

- Step 1: Go to **BV, TT: Rooms**. The list of rooms appears.

Num	FISHNum	Max	Type	Dipt	SchdType	Schd7	POD7
1101	00001-1101	200	Classroom			Y	Y
1112	00001-1112	90				Y	N
1113	00001-1113	100	Classroom			Y	N
1114	00001-1114	25				Y	N

NOTE:

FISH numbers come from DSIS. FISH room numbers that are matched to an DSIS room number will appear in the room list.

- Step 2: Click on the room to be defined. The Details dialog opens.
- Step 3: Set the parameters using the table below
- Step 4: Click on the *Save* button.

You may add rooms, but only valid FISH room numbers will be exported to DSIS. Before adding a room, switch the filter to “All Room” and avoid duplicating rooms. Duplicate rooms will generate validation errors in the last phases of the scheduling process.

Details dialog box showing fields for: Number (1101), FISH Number (00001-1101), Type (Classroom), Department, Building, Max capacity (200), Include in scheduling (checked), and Schedule use type.



ALERT:

When using the Modify List, do not display more than 20 records per page.

- Step 1: Go to **BV, TT: Rooms**. The list of rooms appears.
- Step 2: Pull down the *Options* menu to *Modify List*. The pencil icons appear.
- Step 3: Click on the “pencil” icon to activate the data entry cells within the selected column.
- Step 4: Once you have entered the data into the open cells, click on the green check mark to save any changes to the column.

Field	Data
Number	Room number
Department	Department that uses it (Optional).
Building	Building number it is in (Optional).
Max Capacity	Maximum number the room can hold (per period).
Include in Scheduling	Checkmark. NOTE: Take off rooms you will not or cannot use.
Schedule Use Type	<ul style="list-style-type: none"> • Blank (default – preferred setting) • Department Only • Always Free (i.e.; gym, cafeteria, field, library, etc.)

NOTE:

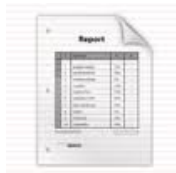
You can modify the information in any column where the pencil appears.

Modify List

Dept

Max

*Classroom
 Schedule
 Attributes Report*



Clone Rooms

NOTE:

Clone rooms will be rejected by DSIS. Prior to sending the schedule to DSIS, you must change the room numbers back to the original matched DSIS room number.

Otherwise, any data entry will be lost upon exiting this page. If you wish to cancel the changes, click on the X at the top of the column.

When you have finished entering data on your rooms, run the Room Attributes report.

Options	Reports	Help	Search on Num	Y	Y	Y	Y	Y
Add	00001-1101	200	Classroom					
Delete	00001-1112	50						
Mass Update...	00001-1113	100	Classroom					
Query	00001-1114	25						
Snapshots	00002-2107	50						
Show Selected	00002-2108	10	Classroom	Electives				
Omit Selected	00002-2109	50						
	00002-2110	35						

Options	Reports	Help	Search on Dept	Y	Y	Y	Y	Y
1:Mathematics [3328]	Num	FISHNum	Max	Type	Dept	SchdType		
<input type="checkbox"/>	3328	00003-3328	<input type="text" value="100"/>	Classroom	Mathematics			
<input type="checkbox"/>	2133	00002-2133	<input type="text" value="28"/>	Classroom	Language Arts			
<input type="checkbox"/>	2108	00002-2108	<input type="text" value="10"/>	Classroom	Electives			
<input type="checkbox"/>	4105A	Clone	<input type="text" value="100"/>	Classroom	Electives			

Go to **BV, TT: Rooms**. Pull down the *Reports* menu to *Classroom Schedule Attributes* to check your work.

Since the scheduler will only schedule one teacher in one room with one section, you may need to create clone rooms temporarily to accommodate more than one section in the same room at the same time, e.g. a locker room or a gym or auditorium.

- Step 1: Go to **BV, TT: Rooms**.
- Step 2: Pull the *Options* menu down to *Add*.
- Step 3: Create a room number that reflects the room's clone status, e.g. for a locker room labeled 600, create clones 600A, 600B, and 600C.
- Step 4: Enter the room information following the table on Page 10 above.
- Step 5: Use the room in your schedule as needed.

Staff Verify that all your teachers came in correctly, and then set scheduling parameters for teachers.

- Step 1: Go to **BV, TT: Staff**. The list of staff members appears

Name	Classroom > Num	LocalID	TeacherNum	Department	Schd?	UsePrefRoomOnly?	MaxRoom	MaxInARow
Abay, Nancy	3202	245178	ABA	Social Studies	Y	Y	0	8
Abesada, Michelle	2126	234108	ABE	Student Services	Y	Y	0	8
Acosta, Jimmy	3130	277895	ACO	Mathematics	Y	Y	0	8
Aguila, Elizabeth	4105	249121	AGU	Electives	Y	Y	0	8

- Step 2: Select the teacher and click on the name **or** click on **ST: Details**.

Staff :: Abay, Nancy

Details

Options: Reports Help

Search on Name

0 of 127 selected

Staff To Schedule

Assignments: Save Cancel

Default Template

Schedule: First name: Nancy, Middle name: , Last name: Abay, Local ID: 245178, Teacher Number: ABA, Type: , Department: Social Studies

Rules: School - School Name: HALEAH GARDENS SENIOR, Homeroom: ABA, Status: Active

Snapshot: Includes in scheduling: , Classroom > Number: 3202, Use preferred room only?: , Max in a row: 8, Max rooms: 0, Is active here?:

Save Cancel

REMINDER:

Modify List is another alternative method to enter data as previously shown.

- Step 3: Enter each parameter (use the reference table below):
- Step 4: Click *Save* before exiting the screen.

Field	Data
Included in Scheduling	Checkbox if you want the system to schedule this staff member
Classroom Number	The staff member's preferred classroom
Use Preferred Room Only	Checkmark if the system must assign this teacher to the room you select at the Classroom number field.
Max-In-A-Row	Maximum number of classes a teacher can teach in a row without a planning period.
Teacher Num	Teacher's 3-letter code.

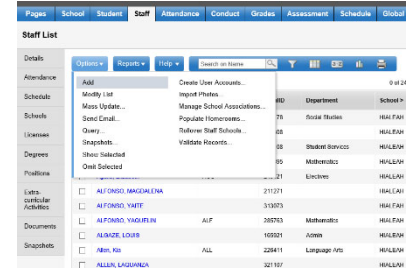
When you have finished entering data on your staff, run the Teacher Attribute Report. Go to **BV, TT: Staff**. Pull down the *Reports* menu to *Teacher Schedule Attributes* to check your work.

Teacher Schedule Attributes Report

Adding a TBA

Create TBA teachers as necessary **only for vacant, authorized open** positions. Only under these conditions may a TBA be scheduled. The TBA's last name **must** include the Position Control number, for example "TBA Alg #53036668. Or TBA Rdg #53036668"

- Step 1: Switch to School view
- Step 2: **SV/TT: Staff**
- Step 3: Menu, Options > Add
- Step 4: In the last name field, enter the subject area for the TBA. Add a number after the subject in the event that more than one is needed:

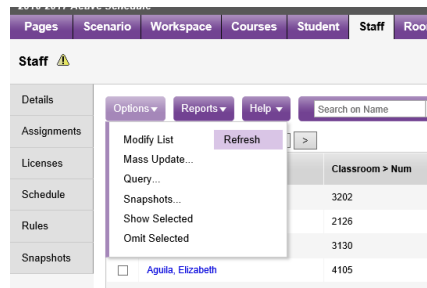


Example: TBA,Science2

- Step 5: Enter TBA on the space provided for the Last Name and in the space for the Teacher Number.
- Step 6: Select the department that will receive the TBA
- Step 7: Click on the save button on the top or bottom of this window

Repeat as needed to create additional TBAs.

- Step 7: Switch to the Build View and click on the Staff (TT)
- Step 8: On the Options menu, click on "Refresh."



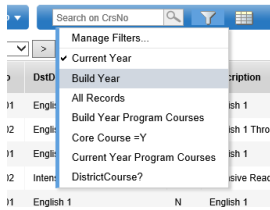
Any TBA(s) created in School View become part of your Staff list in Build View and can be assigned to sections, after the BV Staff list is “refreshed.” TT Staff / Options -> Refresh.



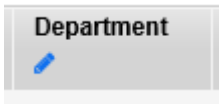
Warning!

WARNING: No actual teacher’s name should be manually added to the database. Newly hired teachers are added automatically to Aspen via nightly updates. If the staff member you are searching for does not appear in your Staff list, please change your filter to “All Records” to be sure he/she is not in your list. Create a TBA if necessary and substitute the proper teacher after they have appeared in your list. If you are going to schedule a teacher who will join your staff *next* year, please submit a Self-Service request to have ITS add the teacher to your staff list.

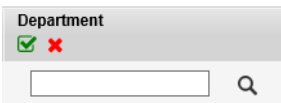
Courses



Adding Departments



HINT: Use Ctrl + F



Updating Additional Course Details

NOTE: This is *not* the place to limit enrollment for individual sections; this entry is *only* for the entire course. (To place a max on the sections, see below.)

SbT: Details

All courses are created in DSIS first and transfer into Aspen overnight. The nightly update does not include term indicators. The morning after the course creation, verify that the courses transferred correctly and then add the information that the scheduler will need to create your master schedule.

Again, use the “Refresh” command (TT Course/ Options -> Refresh) to refresh in courses newly added to DSIS.

WARNING: DO NOT “REFRESH” THE COURSE CATALOG.

SV, TT: Schedule, ST: Courses

This table is the list of all the courses in your school.

NOTE: If you intend to work on your courses for the next school year, make sure you change the filter to the *Build Year*.

After you check that the list contains all the courses you need, add the additional data you will need to create a schedule. You can add data on the main list by pulling down the Options menu to Modify List.

- Step 1: Click on the pencil at the top of the “Department” field. The field immediately shows text boxes and a magnifying glass indicating that a pick list is available to choose a department.
- Step 2: Click on the magnifying glass to open the pick list.
- Step 3: Navigate to the proper department and select it by clicking its radio button. (You can use Ctrl + F to find a department quickly.)
- Step 4: Click OK at the bottom of the dialog.
- Step 5: Repeat steps 2—4 for all courses.
- Step 6: When finished entering data in the field, click the green checkmark at the top of that column to save your work
- Step 7: Click on the *Details* Sub Tab
- Step 8: Verify that the Master Type for each *academic* sequence is “Class.” This is the only type that will be sent back to DSIS. [If your school has them, other choices that can be scheduled are “Duty” and “Package.”]
- Step 9: *Optional:* Enter the “max requests” (on the top right) if desired. This limits the number of students who can request a course on a first-come, first served basis.

This is *not* the place to limit enrollment for individual sections; this entry is *only* for the entire course. (To place a max on the sections, see below.)

- Step 10: Click the save button.
- Step 11: Repeat steps 8—10 for all courses.

The following set up must be completed before you attempt to load students into your completed master schedule.

Working with Alternates

New Field Set

NOTE:

To reduce the incidence of conflicts, determine which courses will be considered "Alternates" prior to initiating the process.



ALERT:

The "Alternate group" selection is essential in ensuring that the scheduling engine recognizes a course as an "Alternate."

The batch entry screen for student requests eliminates the need to enter one-to-one course-to-alternate course matching on individual students. Students' requests are applied automatically based on course information. The following set up the configuration of courses and control how substitutions are made. For example, you will want to ensure that Fabrics and Fibers is not substituted for an English class.

Defining Course Information

- Step 1: Set courses to allow substitutions (or prevent) substitutions: **In BV / TT Courses / ST Details: Are subs allowed?**
- Step 2: Select the field set called Alternate Courses to set up alternate courses.
- Step 3: Check the box to allow substitutions for this course
- Step 4: Un-check the box to prevent substitutions for this course
- Step 5: This field can be mass updated.

Once a course is set to allow substitutions, you must set its Alternate Group code. The grouping determines which courses are exchangeable. For example, you may want Fabrics and Fibers to be substituted for Ceramics; if so, they must both have the same Alternate Group code (e.g. elective).

Code	SeqNo	Description
E		Elective course
EA		Arts (performing or practical)
EV		Vocational course
RC		Core

(There are four Alternate Groups.)

Set the Alternate Group code for courses that may be exchanged or substituted for others, to **SV / TT Schedule / ST Courses / subT Details** and select one of the options from the dropdown list.

Three filters have been created to help you set up your courses using the Alternate Courses field set:

- Are Subs Allowed? (wildcard filter to show courses set to either true or false)
- Alternate Group Code? (wildcard filter with drop down list to choose specific Alternate Group code)

New Student Course Request Field

- Alt Courses w/out AltGrp Codes (finds courses set to allow subs that are missing a group code)

Additionally, the student request screen has been altered to include a new field (*Alternate?*). This field shows which courses are alternates. Courses entered in the Alternate columns on the batch entry screen will show with a Y in this field.

<input type="checkbox"/>	SchoolCourse > CrsNo	School > SchoolName	SchoolCourse > Description	Alt 1 > CrsNo	Alt 2 > CrsNo	Alternate?	AltType	SchoolCourse > Credit
<input type="checkbox"/>	A10	HIALEAH GARDENS SENIOR	English Honors 1			N		1.0
<input type="checkbox"/>	B13	HIALEAH GARDENS SENIOR	Algebra 2			N		1.0
<input type="checkbox"/>	C17	HIALEAH GARDENS SENIOR	Research 1 (Local Honors)			N		0.5
<input type="checkbox"/>	C18	HIALEAH GARDENS SENIOR	Chemistry 1 Honors			N		1.0
<input type="checkbox"/>	D07	HIALEAH GARDENS SENIOR	AICE International History 1 AS Level			N		1.0
<input type="checkbox"/>	I07	HIALEAH GARDENS SENIOR	Personal Fitness			N		0.5
<input type="checkbox"/>	M01	HIALEAH GARDENS SENIOR	Health Science Anatomy & Physiology/Level 3			N		1.0
<input type="checkbox"/>	M41	HIALEAH GARDENS SENIOR	Veterinary Assisting 1/Level 3			N		1.0
<input type="checkbox"/>	N03	HIALEAH GARDENS SENIOR	Spanish for Spanish Speakers 3 Honors			N		1.0
<input type="checkbox"/>	P03	HIALEAH GARDENS SENIOR	Fitness Lifestyle Design			N		0.5

- When alternates are entered through the batch entry screen (in BV), they will appear in this column with a Y. There is no need to enter anything in the Alt1/Alt2 columns because the Alternate Course codes will trigger substitutions if required.
- When entering student individually you may enter one-to-one alternates, using the columns labeled Alt1 and Alt2 if desired.
- Only one method of entering the alternates is required.

Facilitating the Batch Entry Process

In SV, you may have set your courses to “*Allow requested as sub.*” This does not facilitate the use of alternate courses when you load students into a completed master schedule. It allows the entry of alternate requests via the batch.

Courses

- Details
- Build
- Request
- Sections

Department Codes

Rooms

Structure

Schedule Attributes

Master type * Class ▾

CrsNumber * A01 x

DstDescription English 1

Short description English 1

Summary

Department Language Arts 🔍

Allow requested as sub

Allow recommendation

Max requests 0

Defining Course Scheduling Parameters

NOTE: Make sure you change the filter to show courses for the next school year, i.e. the *Courses to Schedule*.



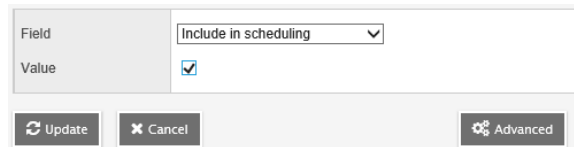
NOTE: Setting *Base* and *Covered* Terms determines if a course is an annual or a semester course, but it does not specify the term indicator (term in which the course is taught). Term indicators are set at the section (class) level.

BV, TT: Courses

This is a list of all the courses you entered into DSIS for the next school year. Add the data you will need to create a schedule. You can add data here on the main list by pulling down the *Options* menu to *Modify List*.

- Step 1: Click on the pencil at the top of the *Schd?* field. Check boxes appear in this field for each course.
- Step 2: Click the checkbox for each course you are going to use in your schedule.
- Step 3: When you are finished, click the green checkmark at the top of the column to save your entries.

- Since you will use all or most of the courses in this list for your new schedule, you can mass update this field to “Y” by pulling the *Options* menu down to *Mass Update*. In the dialog that appears, select *Include in Scheduling?* from the dropdown menu and place a check in the checkbox. When you click the *Update* button, all courses will have a “Y” in this field.



- Step 4: Click on the first sequence number in the list. The sequence number is a link that opens the *Details* Side Tab. In the bottom half of the dialog, note that the course already has a checkmark in the *Include in Scheduling?* field from the first three steps above. The “Sections Scheduled” will be zero at this stage since you have not set sections yet.
- Step 5: Leave the *Load Priority* at zero. This is the highest priority.

COURSE	BASE	COVERED
A	1	1
T1	2	1
T2	2	1

In the next section, you will learn more about prioritizing courses.

- Step 6: Set *Base terms per year* 1 for an annual courses, 2 for a semester course.
- Step 7: Set *Covered terms per year* to 1.
- Step 8: Set *Periods per cycle* to 1 since you will be creating a “flat” schedule where every day looks like Monday. Courses that take up more than one period will have a larger number here.
- Step 9: Choose a *Schedule Pattern Set* from the dropdown list. (These *Pattern Sets* you created when you set up your Scenario earlier. [BV, TT: Global](#), [ST: Reference](#) > Master Schedule Type,

SbT: Codes). Your choice will determine how and when the build is allowed to schedule this class.

- Step 10: If a course must be followed by another particular course, e.g. government/economics, choose the next course's sequence number from the list in the *Course Bind Next* field. **NOTE:** course to follow must have the same teacher and the same number of sections.
- Step 11: In the right column of the dialog, set the *Section Enrollment Max* to the right class size.
- Step 12: Repeat steps 4—11 for all your courses. You can move to the next sequence by using the navigation (VCR) buttons at the top right side of the dialog.
- Step 13: Click the *Save* Button to keep your changes.



Mass Assigning a Pattern Set to Courses

NOTE:

Remember to change the filter back to *Courses to Schedule*.

- Step 1: Go to **BV, TT: Courses**.
- Step 2: Select the courses to which you want to assign a pattern set
- Step 3: Pull down the *Options* menu to *Show Selected*. The window shows only the courses you selected.
- Step 4: Pull down the *Options* menu to *Mass Update*. The *Mass Update* dialog appears.
- Step 5: Using the dropdown menu, change the *Field* setting to *Schedule Pattern Set*.
- Step 6: At the Value field, click on the magnifying glass to bring up the pick list for the schedule patterns.
- Step 7: Click on the button of the appropriate schedule pattern.
- Step 8: Click *OK*. You return to the Mass update dialog.
- Step 9: Click the *Update* button on the Mass update dialog.
- Step 10: Click *OK* to confirm the update action.
- Step 11: Read the confirmation message. If it is accurate, click the *OK* button. The update of the selected courses occurs. Your list is now showing your custom selection.

Course Load Priorities



HIGHLY RECOMMENDED

Course Load Priorities allow you to specify which courses should be considered first by the scheduling engine. Suggested course load priorities are as follows, but can be modified to suit individual school needs.

Course Load Priorities can be updated individually through the **BV, TT: Courses, ST: Details**, but it will be easier to select all courses in a particular group and mass update them.

Course Type	Load Priority
Core Courses	1
CRRP Language Arts & Reading	5
AP, AICE, IB	10
Honors	20
Academics	30
Electives	40

WARNING: Always read any warning screens when using Mass Updates. There is no “UNDO!”



- Step 1: Go to **BV, TT Courses** and Select desired courses.
- Step 2: Pull down the *Options* menu to *Show selected*. Verify the number of courses selected is correct.
- Step 3: Pull down the *Options* menu to *Mass Update*.
- Step 4: Use the dropdowns to select *Course Load Priority* See chart at right for suggested load priority values.
- Step 5: Enter the desired priority number.
- Step 6: Press *OK*.

Defining a Course Package

A package contains a pre-determined set of requests that can be added to a student, using a single sequence. The system administrator has defined nine generic packages. Each school defines the course content of selected package(s). The package is used to speed data entry of student requests. To use a package, it must first be added to your list of courses from the district catalogue.

- Step 1: To add a package to your school, go to **SV, TT: Schedule, ST: Courses**.
- Step 2: Pull the *Options* menu to *Add*. The Course Pick List appears.
- Step 3: Change the *Course Catalog* field to display the correct dates for the next school year.
- Step 4: Change the *School Level* to “All” to display a list of all district courses.
- Step 5: Use Ctrl+ F to find the packages. (E.g. Package PK2.)
- Step 6: Checkmark the package(s) you wish to add to your school course list.
- Step 7: Click the *OK* button.

The screenshot shows the 'School Courses' application window for the 2016-2017 school year, A01 - English 1. The 'General' tab is active, displaying various fields for course configuration. The 'Master type' is set to 'Class', 'CrsNumber' is 'A01', and 'DslDescription' is 'English 1'. The 'Department' is 'Language Arts'. There are checkboxes for 'Allow requested as sub' (checked) and 'Allow recommendation' (unchecked). The 'Max requests' field is set to 0. There are 'Save' and 'Cancel' buttons at the bottom of the form.

Expanding Packages

- Step 1: Go to **SV, TT: Schedule, ST: Courses**.
- Step 2: Switch the filter to the next year (build year).
- Step 3: Use Ctrl F to find the package(s) available in your list.
- Step 4: Click on the name of the package you wish to define.
- Step 5: The *Details* Sub-Tab opens.
- Step 6: Click in the *Course Package* field.
- Step 7: Type the Sequence numbers of all the sequences you want this package to hold separated by commas. (See example.)
- Step 8: Click the *Save* button.
- Step 9: Repeat steps 4—8 for all packages required at your school.

This screenshot shows a close-up of the 'Course Package' field in the application. The field contains the text 'A61, B61, C61, D61, Z61'. There is a 'Bank name' field below it, which is currently empty. 'Save' and 'Cancel' buttons are visible at the bottom.

IMPORTANT: When you have entered ALL student requests, you must expand all the packages by going to **BV, TT: Global, ST: Requests**. Pull down the *Options* menu to *Expand Packages*.

NOTE: You must collapse all packages before making a change to any package.

NOTE: When you have finishing entering parameters for all your courses, run the *Course Schedule Attributes* report. Go to **BV, TT: Courses** and pull down the *Reports* menu to *Course Schedule Attributes*.



Batch “Mass” Entry of Student Requests

X2 Aspen student scheduler now accepts the mass entry of student requests a batch at a time. This feature allows you to enter multiple requests for multiple students at one time including their alternate requests.

BV / TT Global / ST Requests / subT Batch Entry

Set the form preferences for your school. Edit the following in the top of the Batch entry window:

- Set the number of students per batch (recommend no more than 20)
- Set the number of primary requests (total number of requests that will be scheduled)
- Set the number of alternate requests (maximum number students may specify)

Batch entry

Options: Reports Help

Students per Batch: 10

Number of Primary Requests: 7

Number of Alternate Requests: 4

Use these boxes to edit the following:
 Number of students per batch (recommend no more than 20)
 Number of primary requests (total number of requests that will be scheduled)
 Number of alternate requests

Student		Primary Requests							Alternate Requests			
ID	Name	1	2	3	4	5	6	7	1	2	3	4

- Step 1: Click the student ID cell to enter the student ID number and press TAB

Batch Entry

Options: Reports Help

Students per Batch: 10

Number of Primary Requests: 7

Number of Alternate Requests: 4

New Batch

Student		Primary Requests							Alternate Requests		
ID	Name	1	2	3	4	5	6	7	1	2	3
0214447	ABAD, DIEGO	A09	A10	B13	C16	C18	D07	H07			

- Step 2: Type the first request sequence. Tab to subsequent cells to enter the rest of the student’s requests.
- Step 3: Enter the student’s alternate requests in priority order. Each request is saved automatically when you tab to the next cell. There is no save button for this feature.

Continue until the batch window is full of students and their requests. When the window is full of students and their requests, press the “New Batch” button to display an empty grid.

Alternate Method for Entering Student Requests

Enter several requests for a student at one time. This method allows for 1-to-1 direct substitution of student requests, but must be done for each student but is quite labor intensive.

If entering requests for next year, go to **SV, TT: Schedule, ST: Courses** and switch the filter to the Build year. Or go to **BV, TT: Student, ST: Requests.**

HINT: Change the filter

- Step 1: Click the *Student* tab and select the student.
- Step 2: Click the *Requests* side-tab. The requests page for that student appears.
- Step 3: Type the sequence numbers in the *Course number* field for the courses the student is requesting, separated by commas. (See example below.)

School Course > Number

If you have created a Package, you can type in its sequence and the system will add all the sequences in the package when you click the *Add* button.

- Step 4: Press the *Add* button. The system adds the course requests for the student.

X2 allows the entry of alternate course requests. These alternates are a one-to-one substitution for the original request.

- Step 1: Enter all of the student's requests.

Entering Alternative Requests

SchoolCourse > CrsNo	SchoolCourse > Description	Alt 1 > CrsNo	Alt 2 > CrsNo	SchoolCourse > Credit	SecType	SecNo	LA SID	TPYView	Periods per cycle	Include in scheduling?
<input type="checkbox"/> A13	M/J Language Arts 2, Advanced			1.0			1262328	1/1	1.0000	Y
<input type="checkbox"/> Advance-7	Package AVID			0.0			1262328	0/0	1.0000	N
<input type="checkbox"/> B12	M/J Mathematics 3, (Pre-Algebra)			1.0			1262328	1/1	1.0000	Y
<input type="checkbox"/> C12	M/J Comprehensive Science 2, Advanced			1.0			1262328	1/1	1.0000	Y
<input type="checkbox"/> D12	M/J Civics, Advanced & Career Planning			1.0			1262328	1/1	1.0000	Y
<input type="checkbox"/> F01	M/J Spanish, Beginning			0.5			1262328	1/2	1.0000	Y
<input type="checkbox"/> H11	Orientation to Nursing			1.0			1262328	1/1	1.0000	Y
<input type="checkbox"/> P11	M/J Comprehensive Physical Education 3			0.5			1262328	1/2	1.0000	Y

NOTE: You can enter two semester classes as alternates for an annual class. Just enter the first semester course into the first alternate field and the second semester class into the second alternate field.

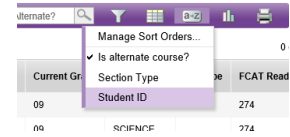
- Step 2: Pull down the *Options* menu to *Modify list*. The pencils appear above the columns that may be modified. (See image on the opposite page.)
- Step 3: Click the pencil above the *Alt 1 > CrsNo* column. The column fills with fill able boxes.
- Step 4: Click in the box opposite the course for which you want to enter an alternative course.

Mass Moving Requests



ALERT: Read warning messages. "Undo" is not an option.

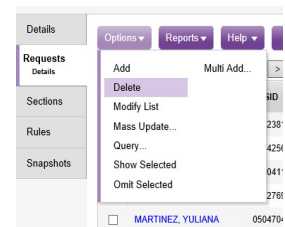
Use this process to mass move students from one course request to another (Gov/Economics to Economics/Government or to split the wheel requests).



- Step 1: Go to **BV, TT: Courses**.
- Step 2: Select the course from which students are to be removed.
- Step 3: Click **ST: Requests**.
- Step 4: Use the Sort Order button to sort student by "Student ID" to avoid a straight-alphabetical selection.
- Step 5: Select the students to be removed.
- Step 6: Pull the *Options* to *Show Selected*.
- Step 7: Verify that you have selected the correct number of students.
- Step 8: Pull the *Options* menu to *Mass Update* using these fields:
Field: *School Course*
Value: *Sequence number of the course to be added to the students' requests.*
- Step 9: Click *OK*.

To Remove Student Requests as a Group from a Specific Sequence:

- Step 1: Go to **BV, TT: Courses**.
- Step 2: Select the course from which students are to be removed.
- Step 3: Click **ST: Requests**. The list of all students requesting that sequence will appear.
- Step 4: Select the students to be removed.
- Step 5: Pull the *Options* menu to *Show Selected*.
- Step 6: Pull the *Options* menu to *Delete*.
- **NOTE:** READ ALL MESSAGES. There is **no** "undo."
- Step 7: Click *OK*.



Removing Requests from a Group

Multi-Adding Student Requests

- Step 1: go to **BV, TT: Global, ST: Request** and pull the *Options* menu to *Multi-Add*. The Multi-Add Requests window allows you to add one or more course requests to students as follows:
 1. Selection – to a hand-picked list of students
 2. Grade level— to all students in a specific grade level
 3. Snapshots – to students in a previously created static snapshot
 4. Another course – to all students that have a request for another specified course
 5. Section – to all students in a particular class/section (available only after the master schedule is built)
- Step 2: When the Multi-Add pick list appears, select the option you wish to use.
- Step 3: Click the *Select* button.
- Step 4: Select the student group you wish to use from the pick list.
- Step 5: Click *OK*. Note the number of selected students to whom you will be adding the request(s).
- Step 6: In the Course Numbers box, fill in the sequence number of the course request you wish to add to the students
- Step 7: Click *OK*. To print a copy of student requests, pull down the *Reports* menu to *Student Requests*.

This is a nice way to obtain a list of students who have requested a particular course.

Filtering Student Requests

- Step 1: Go to **BV, TT: Global, ST: Request** and pull the *Options* menu to *Filter Requests*
- Step 2: Select *Scheduled students only*.
- Step 3: Enter the sequence course number for which you wish to see a wait list.
- Step 4: In the course portion of the window, enter the previously entered course number.

Filtering
(Continued)

STEP 5: Click **OK**.

IMPORTANT: Run the following reports after you have completed the entry of all student course requests.

Reports



Running the *Course Request Verification* Report

After you enter student course requests, run the *Course Request Verification* report to verify that students have requested the appropriate number of courses. This report is helpful for schools that have different flavors of the same course number by selecting the sub-code feature.

BV, TT: Global, ST: Requests: Reports > Course Request Verification (too many/too few)

You specify the print format.

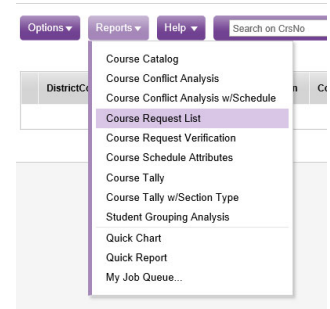
To calculate section counts for courses (Set Sections):

- Step 1: Go to **BV, TT: Courses**. The list of courses appears.
- Step 2: Pull down the *Options* menu to *Calculate Section Counts*.

Running the *Course Request List* Report (Wait List)

BV, TT: Courses: Reports > Course Request List:

Report a list of students who request each course organized by sequence number; containing name, ID, year of graduation, and gender.



Running the *Course Tally* Report

BV, TT: Courses: Reports > Course Tally: Report shows the number of student requests entered for each course; contains: sequence number, description, department, level, number of primary requests, alternate requests, inclusion, total requests, enrollment max, and section count (if selected on the report formatting window).

Calculating Section Counts

NOTE:

The system calculated number shows in the *Sections Scheduled* field on the Courses tab.

Manual adjustments of section numbers are erased by performing a system's calculation.

My Job Queue

X2 Aspen keeps track of all the reports you have requested per log-on. There is no need to recreate the report parameters if you wish to see the report again. Action: *Reports* menu down to *My Job Queue* to see all the reports in memory. To see the report again, simply click on its link in the *Status* column of the dialog.

0 of 3 selected

<input type="checkbox"/>	Job	Format	Run Time	Status
<input type="checkbox"/>	Course Request List	PDF	7:39 AM	Running
<input type="checkbox"/>	Course Tally	PDF	7:39 AM	Finished (click to view)
<input type="checkbox"/>	Course Request List	PDF	7:38 AM	No Data

Refresh Delete Close

Depending on current use, the reports may take a few minutes to generate and display on your monitor. Also, all reports can be exported in Excel format.

Course Tally

Courses to include: Current selection

Search value: []

Scheduled students only:

Show inclusion counts:

Show calculated section counts:

Sort results by: Course Number

Format:

- Adobe Acrobat (PDF)
- Web Page (HTML)
- Microsoft Excel (XLS)
- Comma-separated values (CSV)

Run Cancel

Students

All student demographics are updated nightly from DSIS. However, student scheduling attributes must be updated in X2 Aspen.

BV, TT: Students, ST: Details

Scheduling Parameters

The required field in this section is *Include in scheduling?* All students that you plan to schedule must have a “Y” in this field. You may mass update this field.

Note: Can't find students?
Change the filter to “All Students” and search again.

Unavailable Schedule for Part-Time or Shared Students

NOTE:
If a student only attends classes at your school for part of the day, you can ensure that the scheduler will place the student during the correct periods by marking the student unavailable in the periods they do not attend your school.

- Step 1: Go to **SV, TT: Student** and select the student for whom you wish to define scheduling parameters.
- Step 2: Click on **ST: Details** and verify the information that came in from DSIS.
- Step 3: Go to **ST: Schedule, SbT: Attributes**. The *Attributes* dialog opens.
- Step 4: Check the box for *Include in Scheduling*.
- Step 5: Change the *Schedule Priority* only if you wish to give certain students priority in scheduling, e.g. upperclassmen over lowerclassmen, special needs students, etc. Otherwise leave this field at zero (0) as zero is the highest priority.
- Step 6: Choose a team *only* if you wish to schedule a student on a certain team by hand. Otherwise the scheduler will randomly assign the student to a team.
- Step 7: Click on *Edit Schedule* opposite the *Unavailable schedule* label. The schedule dialog appears. (See right).
- Step 8: Click the term boxes that apply and the periods of your schedule when the student is unavailable. E.g. the student is at a shared school such as Baker Aviation.
- Step 9: Click *OK*.
- Step 10: Click *Save* in the dialog to save your entries.

There are several optional fields:

- Student Scheduling Priority
- Lock Schedule
- Static Team
- Unavailable Student

Student Scheduling Priorities



Lock Schedule

Static Team

Student Load Priorities allow you to specify which students should be given priority when the scheduling engine fills classes. Suggested Student Scheduling Priorities are as follows, but can be modified to suit individual school needs. Student Load Priorities can be updated individually through **BV, TT: Student, ST Details**, but it will be easier to select all students in a particular group and mass update them.

Student Group	Scheduling Priority
AP Students	5
Seniors	10
Honors	15
Juniors	20
Sophomores	30
Freshman	40

This feature may be used after students have been scheduled to prevent some students from being rescheduled if you decide to re-do your scheduling run. It is recommended that you unlock all schedules prior to committing your schedule for final transfer.

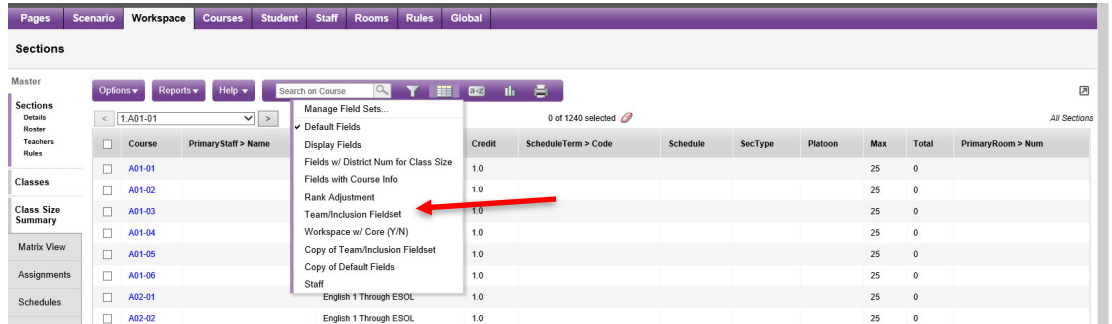
By opting to include teaming in your schedule, X2 Aspen will dynamically assign students to teams. However, if a student *must* be on a specific team, you may select the desired team from the drop-down list. As you do this, the system will automatically place a check-mark on the Static Team Box.

Assigning Team Codes to Sections

Coding Sections for Teams

Entering team codes: Required if all teams share the same course sequence numbers. Skip this if control your team is controlled by sequence number or if you do not have any teams.

- Step 1: Change the Field Set to *Team/Inclusion Field Set*.
- Step 2: Make sure your filter is showing *All Sections*.



- Step 3: Go to the *Options* menu to *Modify List*. The pencils appear.



Plan you teams (teachers & sections) on paper before assigning sections to teams.



- Step 4: Click on the pencil above the *Team* column. The drop-down fields appear
- Step 5: Use the drop-down lists to code the proper sections with the proper team code.
- Step 6: Click on the green checkmark to save your entries.
- Step 7: Click on the pencil at the top of the *TeamScheduleMode* column.



- Step 8: Use the drop-down fields to select the Team Schedule Mode. See table for illustrations of each mode.

Exclusive	Strictly Red team members only
Open	Red or no team membership at all
Mixed	Red team or Blue team
Unrestricted	Red preferred, but anyone else can get in

**Coding
Sections
for
Inclusion**

Entering inclusion section types

Leave blank unless you set a percentage on the scenario preferences. This will group the students that have the same sequence number.

- Step 9: Click on the pencil over the *Inclusion?* column. The checkbox fields appear. (See below.)

1.A01-01		0 of 1240 selected							All Sections
<input type="checkbox"/>	Course	Description	Primary Staff > Name	Team	Description	TeamScheduleMode	Platoon	PlatoonScheduleMode	Inclusion?
<input type="checkbox"/>	A01-01	English 1			English 1	0		0	<input checked="" type="checkbox"/>
<input type="checkbox"/>	A01-02	English 1			English 1	0		0	<input type="checkbox"/>
<input type="checkbox"/>	A01-03	English 1			English 1	0		0	<input checked="" type="checkbox"/>

- Step 10: Check the boxes of the sections that are to have inclusion.
- Step 11: Click on the green checkmark to save your entries.

Scheduling Rules

Defining a Rule



Advice:

Careful planning of your rules will save you time during the validation phase.

Deleting a Rule

NOTE:

Although you can create an unlimited number of each scheduling rule, be aware that these rules constrict the options X2 Aspen has to place students in the courses they request.



Use scheduling rules to alert the system to any constraints it must follow when building your master schedule. In general, to define a scheduling rule:

- Step 1: Go to **BV, TT: Rules**. The list of rule definitions appears.
- Step 2: Click the name of rule of the rule type you wish to define. The Rule Definitions page for that rule appears.
- Step 3: Pull the *Options* menu down to *Add*. The New Schedule Rule page appears.
- Step 4: Fill out the parameters for the rule you wish to create.
- Step 5: Click *Save*.

Step 1: Go to **BV, TT: Rules**.

Step 2: Choose a type of rule from the list and click its link. The list of rules appears.

Step 3: Select with a checkmark the rule or rule(s) you wish to delete.

Step 4: Pull the *Options* menu down to *Delete*.

Step 5: Read the confirmation message

Step 6: Click the *OK* button.

Use the **Schedule Rule Worksheet** found in the Appendix to plan your rules **before** entering them into X2 Aspen

Rule Examples

Rules for Teachers

Rule*	Explanation
Teacher Common Planning	Tells the system which teachers need a common planning period together.
Teacher Unavailable	Tells the system which periods teachers cannot be scheduled. E.g. Head Coach, Athletic Director, Department Head, Testing Chairman, etc.
Teacher Reserve Time Block	Use this to ensure that teachers receive a planning period on both odd and even period days of their block schedule.

Rules for Courses

Rule*	Explanation
Course Alternate	To specify an alternate for a course. E.g. When the Art 2-D classes are filled, students are automatically redirected to Drawing and Painting.
Course Blocking: Consecutive	To schedule periods in back-to-back periods. E.g. CRRP Language Arts and Reading classes.
Course Blocking: Simultaneous	To create combination classes.
Course Blocking: Terms	To block courses across terms in the same periods with different teachers and different number of sections. Can specify same teacher. Can specify platoons (exact same students). E.g. one section of Personal Fitness taught in Term 1 must split into two sections of Health for Term 2.
Course Bind Next	To block courses across terms when the courses have the same number of sections, the same teachers, and the same periods. The order in which you place the courses when you create this rule determines which course will be taught in Term 1 and which in Term 2.

Rules for Rooms

Rule*	Explanation
Room Reservations	To ensure that specific courses are scheduled into single-purpose rooms. E.g. weight rooms, shop rooms, dance studios, etc. cannot be used as general purpose classrooms.
Room Unavailable	To make a room unavailable for a specific period.
Room-Teacher Restriction	To specify multiple rooms for one teacher.

**HIGHLY
RESTRICTIVE**

This rule reduces the flexibility for scheduling students during a specific period.

Rule: Teacher Common Planning

1. Use the **Add** button to select the teachers you want to have common planning.

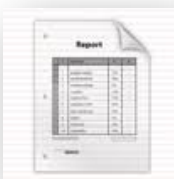
2. Use the **Add** button to select the block of time for the common planning.

3. In the dialog that appears, highlight the block of time within which the common planning can occur. Repeat the **Add** for each period in which common planning can occur.

4. Click the **OK**

5. Click the **Save** button to save your changes.

**Schedule Rule
Summary
Report**



To print a list of the scheduling rules you create, run the Schedule Rule Summary report.

Step 1: Go to **BV, TT: Rules**.

Step 2: Pull the *Reports* menu down to *Schedule Rule Summary*.

Step 3: Use the magnifying glass to pick the rule for which you want a summary.

Step 4: Pick a format for the report.

Step 5: Click *Run*

Building the Master Schedule

Teacher Unavailable

HINT: Use for department chairs, business managers, UTD steward, reading coaches, test chairs, SCS, special assignment, etc.

Rule: Teacher Unavailable

1. Use the **Add** button to select the teachers who will be unavailable for various reasons.

2. Click on the period block(s) when the teachers will be unavailable.

3. Click on the **Save** button.

Teacher – Reserve Time Block

HINT: Use to guarantee a planning period on both days of an odd-even school schedule.

NOTE: You may need two rules: one for the odd day and another for the even day.

1. Type the number of periods you wish to reserve.

2. Use the **Add** button to bring up the period list. Select the periods that will be reserved.

3. Use the **Add** button to bring up the teacher list below. Select the teachers for whom this rule will apply.

Building the Master Schedule

Course Alternates

NOTE: This is a global rule affecting everyone who requests the primary course.

1. Click on the magnifying glass to choose from a pick list the course for which you wish to define alternates.

2. Click on the **Add** button to choose the alternate course (s) from a pick list.

3. Click on the **Save** button

WARNING: To allow this load rule to work, you must go to the course you chose in step one at **TT: Courses, ST: Details** and place a check in the box next to "Are subs allowed?"

Course Blocking Consecutive

NOTE: Use the Teams tab to specify a pair (or pairs) of teachers who are teaching these consecutive courses.

1. Select the type of blocking where one course must follow another.

2. Check **Use platoons** if you need the same students.

3. Check **Use same teacher** if you need the same teacher.

4. Click **Add** to list the two courses. The second will follow the first.

Course Blocking Simultaneous

WARNING! Unlike other schedulers, this rule does not bind the courses together. They must be rescheduled separately.

1. Select the type of blocking where courses are taught in the same period at the same time.

2. Check **Use classes**. Give the combo a name and set the class size.

3. Check **Use same teacher** if you need the same teacher.

4. Use the **Add** button to choose the courses.

5. Click the **Save** button

Building the Master Schedule

Course Blocking Term

NOTE: Use the Teams tab to specify a pair (or pairs) of teachers who are teaching these Term 1/Term 2 courses.

Rule Definitions :: Course - Blocking :: New Schedule Rule

Rules > Details

Options Reports Help

Save Cancel

General Patterns Teams

Rule priority: Hard

Name: Economics and Government

Type: Terms

of section blocks: []

Use platoons:

Use same teacher:

Courses

ID	CrsNumber	Description	SeqNo	
<input type="checkbox"/>	1	D24	Economics with Financial Literacy	1
<input type="checkbox"/>	2	D23	United States Government	2

Save Cancel Add Delete

1. Select the **Term** type of blocking from the drop-down list. This is used where a first semester class has to be followed in the same period by a second semester class.

2. Check these boxes as they apply.

3. Use the **Add** button to select the courses

5. Click the **Save** button

Use the Course Bind Next feature to link a semester course with another course in the second semester if the second course shares the same conditions for:

- 1 - same group of students,
- 2 - same teacher,
- 3 - remains in the same period,
- 4 - and if both courses contain the same amount of sections.

This feature makes the two semester courses appear as an annual course. **If all 4 conditions cannot be satisfied, a course term BLOCKING rule must be created.**

- Step 1: Go to **BV, TT: Courses.**
- Step 2: Click on the appropriate course.

Course Bind Next

NOTE: This field must remain blank for all T2 courses to avoid validation errors.

Courses :: D23 - United States Government

Details

Options Reports Help

Save Cancel

Default Template

Requests

Sections

Rules

Snapshot

Master type: Class

CrsNumber: D23

Description: United States Government

Department: Social Studies

Academic level: R

Credits: 0.5

Weight: 0.0

Repeat rule type: []

Sections scheduled: 14

Include in scheduling:

Lead priority: 1

Class times per year: 2

Covered terms per year: 1

Periods per cycle: 1.0

Reschedule Patterns list: []

Course Bind Next - CrsNumber: D24

Misc requests: 0

Teacher preparation code: []

Alternate group: []

Course package: []

Balance by term:

Preferred room external?:

Section assessment plan: []

Section balance type: []

Term balance type: []

Are notes allowed?:

Repeat type: None

Save Cancel

- Step 3: At the bottom of the Details window, use the Magnifying glass to find the second semester course sequence that will follow.
- Step 4: Click on the **Save** button.

Building the Master Schedule

Room Reservations

NOTE: This rule is seldom used since each teacher is assigned a room number.

1. Click these checkboxes as appropriate if the course(s) can only be taught in the room and no other rooms

2. Click the **Add** button to choose the room or rooms.

3. Click the **Add** button to select the courses.

Room Unavailable

NOTE: Always click **Save** after creating a rule.

1. Use the **Add** button to choose the room or rooms that will be unavailable during a certain period.

2. Click on the periods when the room will be unavailable for class scheduling.

Room-Teacher Restriction

This rule allows you to specify multiple rooms for one teacher.

- Step 1: Use the magnifying glass to pick the teacher.
- Step 2: Use the **Add** button to select the rooms.
- Step 3: Use the magnifying glass to pick the courses affected.
- Step 4: Enter how many sections of each course will be affected.
- Step 5: Enter which room has what priority.
- Step 6: Click the **Save** button to save the rule.

Calc. Section Count

NOTE:
Repeating the section count after manual section count adjustments will override the manual counts.

Initializing the Workspace



WARNING:
Initialize the workspace only once. The process does not delete sections, but adds new sections, or warns you that you have too many sections for a course. Manually add or delete to reduce the chance of error.

Once you have entered your student subject selections into the scheduling engine, you are ready to generate the amount of sections each of the active courses must be initialized. This system generated number is based on the total number of request divided by the total number of available seats.

Follow these steps to instruct Aspen to generate a section count:

Step 1: Go to **BV, TT: Courses**. The list of courses appears.

Step 2: Pull down the *Options* menu to *Calculate Section Counts*.

NOTE: The number that the system calculates appears in the *Sections Scheduled* field on the *Courses* tab.

After you determine the number of sections you need to offer for each course, you must initialize the workspace to include a separate record for each section of each course.

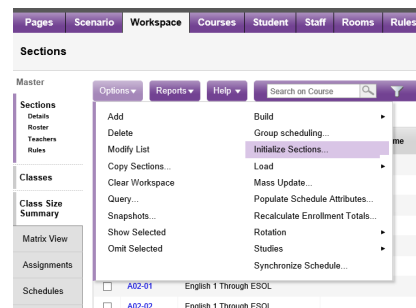
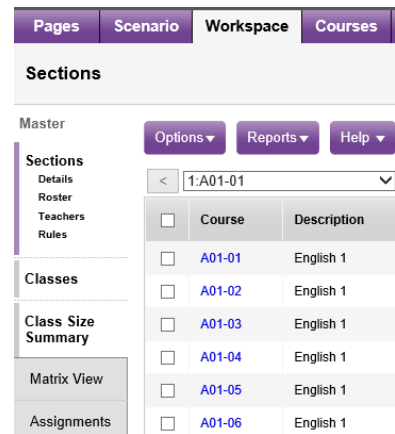
Step 1: Go to **BV, TT: Workspace**.

Step 2: Pull the *Options* menu down to *Initialize Sections...*

The system creates a row on the workspace for every section of each course that you identified when you entered your course scheduling attributes. *After* you initialize the workspace, you can assign information such as teachers, terms, rooms, and even specific schedules to course sections.

Step 3: In the dialog that appears, select the courses for which you wish to initialize sections. You can select *All* or a selection, or the courses of a department, or a grade level, or a snapshot of courses you have created.

Step 4: Click *OK*.



After initializing the sections, the *Workspace* tab is now populated by the number of sections (total amount of courses X number of calculated sections).

Assign Teacher & Term

NOTE:
Assign terms only to the sections corresponding to semesterized courses only.

Teachers and the terms must be assigned to each section. The two most commonly used options are:

OPTION 1: Using the side tab on the Workspace screen: ASSIGNMENTS

Step 1: On the Course Filter, select the department that includes the courses that will be assigned to the necessary sections.

Step 2: On the Teacher Filter, select the teacher’s department to generate the list of teachers that will receive the sections that will become their teaching schedules.

Step 3: If the courses are semesterized, click on the box next to Course Term under the “Specify Term” (circled above in red) to enter a “1” for the first semester, or a “2” for the second semester on the Term Offered line (see green box above).

DO NOT FORGET TO SAVE PRIOR TO EXITING THIS WINDOW!

OPTION 2: On the Workspace tab, activate the **Modify List** command found in the Options menu.

Pages Scenario **Workspace** Courses Student Staff Rooms Rules Global

Sections

Master

Options Reports Help Search on Course

Sections
Details
Roster
Teachers
Rules

Classes

Class Size Summary

Matrix View

Assignments

Schedules

Feedback

Analysis

< 1:A01-01 >

<input type="checkbox"/>	Course	Description	Primary Staff > Name		
<input type="checkbox"/>	A01-01	English 1	BACKS, STEPHEN	Q	X
<input type="checkbox"/>	A01-02	English 1	Benitez, Michael	Q	X
<input type="checkbox"/>	A01-03	English 1	BRENES, MANUEL	Q	X
<input type="checkbox"/>	A01-04	English 1		Q	X
<input type="checkbox"/>	A01-05	English 1		Q	X
<input type="checkbox"/>	A01-06	English 1		Q	X
<input type="checkbox"/>	A02-01	English 1 Through ESOL		Q	X
<input type="checkbox"/>	A02-02	English 1 Through ESOL		Q	X
<input type="checkbox"/>	A02-03	English 1 Through ESOL		Q	X

After activation of the Modify List option, select the pencil on the column header you wish to work on. For the teacher assignment column, type or click on the magnifying glass to select a teacher from the general teacher roster. Upon completion of the records in view, click on the green boxed check mark to save your selection.

Repeat the same functions for allocating the correct semester designation for all semesterized courses.

DO NOT FORGET TO SAVE PRIOR TO EXITING THIS WINDOW!

NOTE: Keep the number of displayed records at no greater than 25 to avoid data conflicts.



WARNING! Do not begin to build your master schedule, until all the student requests, all scheduling parameters for your courses, students, staff and rooms, and all the rules the system needs to follow to build your school’s schedule are complete.

Validating Your Data

X2 Aspen allows you to check or validate all the information you entered up to this point. If the system finds any errors that would prevent it from creating a master schedule, it will give you a message stating that you have validation errors. Anticipate this message many times as you validate your data. Most

schools have validation errors. Simply fix the errors and validate again until you get a validation success message.

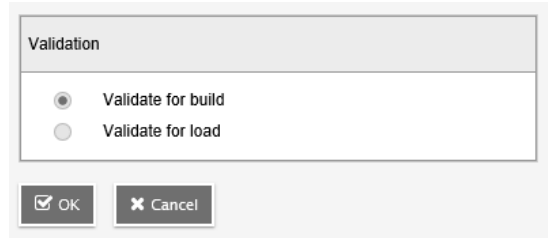
NOTE: You can fix many errors easily using the *Mass Update* option.



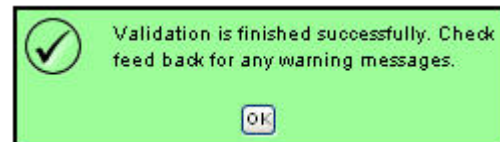
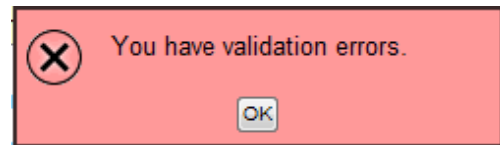
ALERT: Always read your warning messages. "Undo" is not an option!

Correcting Validation Errors

- Step 1: Go to **BV, TT: Workspace**. The Workspace displays all the sections you prepared.
- Step 2: Pull down the *Options* menu to *Build*, and then slide over to *Validate*. The dialog at right appears.
- Step 3: Select *Validate for build*.



- Step 4: Click *OK*. The system displays a progress meter while it validates your information. If you have errors, the message at right appears. Otherwise the green message at the right appears.
- Step 5: Click *OK*.
- Step 6: Click the **ST: Feedback** to view validation errors.
- Step 7: Fix the fatal errors and evaluate the warning errors that you may also want to fix.



After you validate the information you entered when preparing to build the master schedule, the system alerts you if you have errors. You need to know what the errors are, fix the ones you need to, and then validate until the errors no longer exist.

- Step 1: Go to **BV, TT: Workspace, ST: Feedback**. (See Below.)
The system has three kinds of errors:
 1. **Fatal:** You must fix these errors (REQUIRED).
 2. **Warning:** You probably want to fix these errors (OPTIONAL).
 3. **Informational:** Gives you the number of errors found and the time the system took to complete the validation.

Building the Master Schedule

Feedback category

Master: Options Reports Help

Matrix View: 0 of 4 selected

Level	RunType	Feedback Instances
<input type="checkbox"/> Info		0
<input type="checkbox"/> Fatal		0
<input type="checkbox"/> Warning		0
<input type="checkbox"/> All		0

- Step 2: Click on the *Fatal* category to see the fatal errors that would stop the build. The list of fatal errors is shown below.

Feedback category :: Fatal

Master: Options Reports Help Search on Timestamp

Matrix View: 1:2/8/2017 10:00 [Build] 0 of 36 selected

RunType	Data Type	Level	Message
<input type="checkbox"/> Fix... Build	Course	Fatal	Field Course > sections must be greater than 0 (record: L13, 0, value: 0).
<input type="checkbox"/> Fix... Build	Course	Fatal	Field Course > sections must be greater than 0 (record: L11, 0, value: 0).
<input type="checkbox"/> Fix... Build	Course	Fatal	Field Course > sections must be greater than 0 (record: L12, 0, value: 0).
<input type="checkbox"/> Fix... Build	Course	Fatal	Field Course > sections must be greater than 0 (record: L17, 0, value: 0).
<input type="checkbox"/> Fix... Build	Course	Fatal	Field Course > sections must be greater than 0 (record: L18, 0, value: 0).
<input type="checkbox"/> Fix... Build	Course	Fatal	Field Course > sections must be greater than 0 (record: L15, 0, value: 0).

- Step 3: Click on the *Fix* button and make the correction on the screen that appears. In this case, you would need to fix the *Max-in-A-Row* column to read something more than zero.
- Step 4: Fix all the fatal errors, and then run the Build Validation again. When there are no more fatal errors, you are ready to build the master schedule.

You are finally ready to begin the Build of your master schedule.

Pull down the *Options* menu to *Build*, and slide across to *Build* in the submenu that appears.

Master: Options Reports Help Search on Course

Section	Class	Class Size	Matrix View	Assignments	Schedules
Build	English 1	124			
Group scheduling...	English 1				
Initialize Sections...	English 1				
Load	English 1				
Mass Update...	English 1				
Populate Schedule Attributes...	English 1				
Recalculate Enrollment Totals...	English 1				
Rotation	English 1				
Studies	English 1				
Synchronize Schedule...	English 1				
A02-01	English 1 Through ESOL				
A02-02	English 1 Through ESOL				

Running the Build

When you build the master schedule, the system attempts to fill in the period and room for each of the sections you have prepared on the Workspace tab. While abiding by your parameters and rules, the system might reach a section that it cannot schedule due to conflicts with previously scheduled sections, or scheduling rules you created. When this happens, the system attempts to reschedule previously scheduled sections to make room for the current section.

Running the Schedule Feedback Report

If the system still cannot schedule the section, the scheduler will stop and, tell you which section cannot be scheduled. You can use the **ST:Analysis** on the **TT: Workspace** to figure out what needs to be fixed for that section to schedule. You can also click **SbT: Rules** on the **ST: Details** to view any rules associated with this section. The rules are the restrictions that you placed on a section and might be the reason the system is having trouble scheduling the section. *Do not hand-schedule the section – Use the tools to figure out why the section will not schedule. Fix the trouble spot and begin the build sequence once more.*



DO NOT HAND-SCHEDULE SECTIONS THAT PRESENT WITH ERRORS.

TIP: Each time you build the schedule, you have the option of locking the sections that are already scheduled, or unlocking them to be rescheduled.

When the system builds a schedule you are happy with, you can load students into the schedule to maximize section balances and requests satisfied.

You might want to save the workspace as it is, but continue to build the scenario to attempt to satisfy more requests or rules. To do so, copy the scenario and rebuild the new copy.

Analyzing The Build

NOTE: Make sure you have validated the information before you build, and that you have fixed all fatal validation errors. If you have not, the build will not run and will alert you to fix the validation errors.

- Step 1: Go to **BV, TT: Workspace**.
- Step 2: Pull the *Options* menu to *Build*, and then down again to *Build*. The Build Schedule dialog box appears.
- Step 3: Check the *Maintain Scheduled Sections* checkbox if you are happy with how X2 Aspen scheduled them in the previous build and you do not want X2 to reschedule them.

If you uncheck this box, X2 Aspen will reschedule all sections from the beginning again. Check the *Automatically import* checkbox to save you a step later.

- Step 4: Click *OK*.

X2 Aspen displays the progress meter which tells you which section it is currently scheduling. When X2 Aspen has trouble scheduling a section or finishes the build, the build stops.

- Step 5: X2 Aspen automatically displays the schedule by sections on the **TT: Workspace** and tells you which section failed, if any.
- Step 6: Do one of the following:

1. Click the **ST: Analysis** to determine why X2 Aspen cannot schedule the failed section. This tab contains four sub-tabs: **SbT: Sections**, **SbT: Teachers**, **SbT: Rooms**, and **SbT: Patterns**.

Analysis	
Last run type	Build
Status of last run	Failed
Validation Errors	36
Validation Warnings	64
Build failure reason	
Total run time	12 sec.

NOTE: Click *Printer Friendly Version* at the top of the **ST: Analysis** to print the analysis information.

2. Click each sub-tab to determine what you need to update for the system to schedule this section. Make the changes you need and repeat the Build process.

Under the Analysis menu (*see the above screen shot*), use the *Patterns* sub-menu to identify where the potential issue or series of issues that are preventing the scheduling engine from completing the build.

The screen shot below displays how this feature identifies the specific conflicts (top portion of the screen shot) and also provides the user with suggestions as to where the problem may be found and corrected.

Analysis ::

Printer Friendly Version

Failed section: D20-02 Advanced Placement Studio Art Two-Dimensional

Eliminated patterns for course D20 with teacher ZACHER, MELINDA

Schedule	Term	Eliminated Reason
01(A)	A	The teacher is booked.
02(A)	A	The teacher is booked.
03(A)	A	Violation of teacher reserved period rule.
04(A)	A	The teacher is booked.
05(A)	A	The teacher is booked.
06(A)	A	The teacher is booked.
07(A)	A	The teacher is booked.
		Violation of teacher reserved period rule.

Scheduler feedback analysis for patterns

Follow the suggestions below to resolve the issue.

1. Check the list of sections scheduled to the teacher.
2. Check the teacher's assignment and pattern set for courses.

Fatal Error Identifier

To extract more information that may assist with resolving the error, the Teacher sub-tab under the Analysis side tab is often helpful since it reveals a number of conflicts like an overscheduled teacher (oversubscribed) and issues related to incorrectly written rules.

Analysis ::

Printer Friendly Version

Assigned teacher: ZACHER, MELINDA

Assigned Sections

Course	Description	Schedule term	Schedule	Classroom
D20-01	Advanced Placement Studio Art Two-Dimensional	A		2151
D20-02	Advanced Placement Studio Art Two-Dimensional	A		2151
E66-02	Drawing 3	T1	01(A)	2151
E66-02	Painting 3	T2	01(A)	2151
D13-02	Advanced Placement Art-Drawing Portfolio	A	02(A)	2151
D13-01	Advanced Placement Art-Drawing Portfolio	A	04(A)	2151
E66-01	Drawing 3	T1	05(A)	2151
E66-01	Painting 3	T2	05(A)	2151
D13-03	Advanced Placement Art-Drawing Portfolio	A	06(A)	2151
D20-03	Advanced Placement Studio Art Two-Dimensional	A	07(A)	2151

Locking Specific Sections

HINT:
You can use the Mass Update to lock several sections at one time.

Every time you click *Build* on the *Options* menu, X2 Aspen shuffles the sections to try to achieve the best possible schedule for your school. If, after running a Build, you are happy with where some sections are scheduled and do not want the system to reschedule them the next time you click *Build*, you can lock those sections. The sections remain scheduled where they are as of the last build.

- Step 1: Go to **BV, TT: Workspace**.
- Step 2: Select the section.
- Step 3: Click the **ST: Details**.
- Step 4: Check the *Is section locked* checkbox.
- Step 5: Click the *Save* button to save your entry.

Manually Checking the Build

Manually Check the Built Master Schedule for Structural Problems

To check the built master schedule manually, print the Master Workspace.

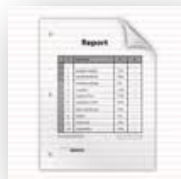
- Step 1: Go to **BV, TT: Workspace**.
- Step 2: Pull the *Reports* menu down to *Workspace Master Schedule*. The dialog box appears.
- Step 3: Enter the report parameters you desire.
- Step 4: Click the *Run* button.

Master Schedule Review



Note:
This procedure will take a few minutes to display.

Drag & Drop Changes



Before you load the students, review the master schedule you have so far.

Teacher	Periods						Status
	01	02	03	04	05	06	
Acosta, Jimmy	B17-01 ALICE Maths/Prob&Stat1 3130 (18)	B16-02 Prob and Stat w Appl 3130 (28)	B14-03 Adv Topics in Math 3130 (21)	B16-01 Prob and Stat w Appl 3130 (23)	B14-01 Adv Topics in Math 3130 (26)	B14-02 Adv Topics in Math 3130 (26)	Assignments: 6 Max in a row: 6 Periods scheduled: 6 Periods free: 0 Rooms: 1
			T21-01 Multimed Found 2 7108 (22)		Q28-01 CPOB Design Tec1 7108 (17)		Assignments: 12 Max in a row: 6 Periods scheduled: 6 Periods free: 0 Rooms: 1
			T22-01 Multimed Found 3 7108 (22)	T20-01		Q21-01 CPOBstrative 2 7108 (22)	

Step 1: Go to **TT: Workspace, ST: Matrix View**. (See above.)

Step 2: Views can be adjusted to see the master schedule by Course, Teacher, Room, or Department.

X2 now allows for a selected course to be changed by selecting the section and dragging it to the desired slot. This is not recommended when students already populate the Master Schedule.

Running Reports to Analyze the Built Master Schedule

X2 Aspen has five reports you can run to help you analyze the schedule you have built.

With the **TT: Workspace** selected, the following reports appear under the *Reports* menu.

- Requests Not Scheduled Report:**
 Display the courses each student requested, but did not get into when you built the master schedule. View these unsatisfied requests by student name or by course, and use the results to determine if you need to change any section and rebuild those to satisfy more requests.
- Course Schedule Summary Report:**
 Summary of Courses, their Descriptions, the Sections, Total Requests, Total Seats, Average Seats, Open Seats, Requests Scheduled Percent Scheduled, and Conflicts.
- Teacher Utilization Report:**
 Compiles a list of teachers and all the courses they are scheduled to teach each period. The system sorts teachers by department. Use the results to determine if a teacher is over- or under-utilized.
- Room Utilization Report**
 Run this report to view a list of room and all the courses that are

scheduled to meet there each period. You can sort the report by course number, building, or department. Use the results to determine if a room is *over- or under-utilized*.

- **Student Schedule Summary Report**

Run this report to view each student's number of requests (primary and alternate), number of requests satisfied, number of alternate requests used, and percent scheduled. Use this report to determine where the holes are in a student's schedule.

- **Unscheduled Teachers Report**

Run this report to view the periods that a teacher is not teaching. The report displays in landscape orientation and lists the teachers by period. Use this report to tell which periods the teachers are free.

Loading Students

NOTE: the system alerts you if you have to fix validation errors

NOTE: X2 suggests you select this checkbox the first time you load students. This action helps you see the real problems with the schedule, such as if students cannot be scheduled into a course section for a structural reason rather than because sections are closed.

Loading Students into the Master Schedule

After you build your master schedule on the Workspace tab, load students into the finished master schedule. Loading students into the schedule maximizes section balances and requests satisfied.

- Step 1: Go to **BV, TT: Workspace.**
- Step 2: Pull the *Options* menu to *Load* and then down to *Load* again. The Load Students dialog box appears.

- Step 3: Check the *Allow over max* checkbox if you want the system to ignore the maximum enrollment numbers you defined for sections.
- Step 4: Enter the percentage over the maximum you want to allow the system to schedule students. If you leave this field blank, the system uses no limit.
- Step 5: Check the *Use alternates* checkbox if you want the system to attempt to schedule students into their alternate requests if primary requests are not available.
- Step 6: Click *OK*. The progress meter displays the name of the student whom it is currently scheduling and the number of students remaining to be scheduled.

Requests	
Total	4946
Satisfied	4725
Percent satisfied	95%
Students	
Total	725
Satisfied	551
Percent satisfied	76%

When the system finishes scheduling students, the following Load Students results appear.

Under the Students section, the *Percent satisfied* means the percentage of students fully scheduled. However, since you loaded allowing the computers to go over the maximum class size, you need to discover where you students are over filling the classes to judge where you might have to open another section or move a section.

Once you load the students, use the *Course Schedule Summary* to be sure that you have enough seats for everyone. You can also determine if there are any courses that are showing a lot of conflicts (last column).

NOTE: You should have at least 85 percent of your students fully scheduled to declare that you have a workable schedule. A *percent fully satisfied* below this benchmark would indicate that you may have major issues with your Build.

NOTE: This view may take several minutes to load since it will show you the entire master schedule.

Course Schedule Summary									
2									
June									
Course	Description	Sections	Total Requests	Total Seats	Average Seats	Open Seats	Requests Scheduled	Percent Scheduled	Conflicts
B71	M/J Mathematics 2	6	116	150	18	34	111	96	5
B72	M/J Mathematics 2, Advanced	2	45	50	22	5	45	100	0
B75	M/J Mathematics 2	2	10	50	4	40	9	90	1

If you like the results, then you need to re-load the students, this time with a cap on the section size.

Upon student “re-load,” the scheduler will create a new course combination for all students with “unlocked” schedules by going to **TT:Workspace**. Pull the *Options to Load*, and then choose *Load* on the submenu.

Allow over max

Percentage over max x (blank for unlimited)

Use alternates

Automatically import

On this second load, you **MUST** enter a percentage over max. The ideal target is 10-15%. This will give you a truer picture of your schedule, but a higher number of students whom have incomplete or empty schedules.

X2 Aspen has many reports that analyze what has happened in the build and loading processes. Some of these have been moved into the application so that they are now available on screen.

To access this screen, go to **TT: Workspace, ST: Matrix View**.

You can use this Matrix View to check student load and load balance, percent scheduled per class, and highly conflicted classes. From here, you can make adjustments to the schedule. (See below.)

Matrix View Reschedule

Rescheduling a course from the Matrix View

Course	Periods						Status
	01	02	03	04	05	06	
B01 Algebra 1	B01-01 HERNANDEZ, D 3410	B01-02 HERNANDEZ, D 3410	B01-03 JEAN JACQUES, J 3405	B01-04 JEAN JACQUES, J 3405	B01-05 JEAN JACQUES, J 3405	B01-06 JEAN JACQUES, J 3405	Requested: 20 Teachers: 4 Capacity: 120 Requests: 40 Scheduled: 160 (133%) Conflicts: -43 Balance: Excellent
	B01-04 JEAN JACQUES, J 3405	B01-05 JEAN JACQUES, J 3405	B01-06 TOLEDO, C 3430	B01-07 TOLEDO, C 3430	B01-08 TOLEDO, C 3430	B01-09 TOLEDO, C 3430	
	B01-10 SILVERMAN, T 3400	B01-11 SILVERMAN, T 3400	B01-12 SILVERMAN, T 3400	B01-13 SILVERMAN, T 3400	B01-14 SILVERMAN, T 3400	B01-15 SILVERMAN, T 3400	
	B01-16 SILVERMAN, T 3400	B01-17 SILVERMAN, T 3400	B01-18 SILVERMAN, T 3400	B01-19 SILVERMAN, T 3400	B01-20 SILVERMAN, T 3400	B01-21 SILVERMAN, T 3400	

- Step 1: Click on the blue link of the course/section numbers. This action brings up the dialog below (next page).
- Step 2: The circle will tell you the available slot for both the teacher and the room.
- Step 3: Reschedule the section by clicking on the circle in the *Change* column and clicking *OK*.

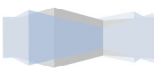


Warning!

Pattern	Teacher: Merlin, David Carter	Room:	Change
FY 1(A)	O	S: 011-001	
FY 2(A)	S: 011-009	O	
FY 3(A)	S: 012-004	S: 011-008	
FY 4(A)	S: 012-005	S: 011-007	
FY 5(A)	S: 011-004	S: 013-001	
FY 6(A)	S: 012-003	S: 012-003	
FY 7(A)	O	O	

OK Cancel

After you make changes, RELOAD THE STUDENTS! But, Lock all student schedules that are complete (100%) prior to reload.



Checking for Conflicts

You can also use this Matrix View to check for highly conflicted courses and low scheduling percentages by using the filters at the top of the dialog at the extreme right side. For example, you can enter a high number in the *Minimum conflicts* field so that the view shows you only your most highly conflicted sections. (See below.)

Minimum Conflicts

The screenshot shows the 'Matrix' dialog box with the 'Matrix View' tab selected. On the right side, the 'Minimum conflicts' field is highlighted with a red circle and set to the value '20'. Below the filter settings is a table with columns for 'Course' and 'Periods' (01-06), and a 'Status' column. The 'B08 Algebra 2 Honors' course is highlighted in purple. The table shows various section numbers and their respective counts and statuses.

Course	01	02	03	04	05	06	Status
B08 Algebra 2 Honors	B08-05 Valdes, Y 3204 (26)	B08-03 Valdes, Y 3204 (24) B08-07 Cruz, A 3205 (25)	B08-02 Valdes, Y 3204 (21) B08-08 Cruz, A 3205 (20)	B08-01 Valdes, Y 3204 (23)	B08-06 Valdes, Y 3204 (26)	B08-04 Valdes, Y 3204 (25)	Sections: 8 Teachers: 2 Capacity: 200 Requests: 217 Scheduled: 190 (87%) Conflicts: 27 Balance: Excellent

Or you can enter a low number in the *Scheduled percentage* field to see only those sections with a low number of students scheduled into them.

Scheduled Percentage

The screenshot shows the 'Matrix' dialog box with the 'Matrix View' tab selected. On the right side, the 'Scheduled percentage' field is highlighted with a red circle and set to the value '50'. The table below shows the same data as the previous screenshot, but with a different filter applied.

Course	01	02	03	04	05	06	Status
B08 Algebra 2 Honors	B08-05 Valdes, Y 3204 (26)	B08-03 Valdes, Y 3204 (24) B08-07 Cruz, A 3205 (24)	B08-02 Valdes, Y 3204 (21) B08-08 Cruz, A 3205 (20)	B08-01 Valdes, Y 3204 (23)	B08-06 Valdes, Y 3204 (26)	B08-04 Valdes, Y 3204 (25)	Sections: 8 Teachers: 2 Capacity: 200 Requests: 217 Scheduled: 190 (87%) Conflicts: 27 Balance: Excellent

Now that you have found the highly conflicted courses which have a poor percentage of students scheduled into them, address the problem from the students' side.

- Step 1: Go to **TT: Student**.
- Step 2: Pull down the *Options* menu to *Filter Students*.
- Step 3: Enter the sequence number of the course the student requested.
- Step 4: Enter the course schedule status.
- Step 5: Click *OK*. The window below appears showing the list of students who did not get into the course.

The screenshot shows the 'Students' dialog box. The 'Scheduled Students Only' checkbox is checked. The 'Course List' field contains 'A05'. The 'Schedule Status' dropdown is set to 'Conflicts Only'. The 'Courses with conflicts' field also contains 'A05'. There are 'OK' and 'Cancel' buttons at the bottom.

Building the Master Schedule

Students

Options Reports Help Search on Name

0 of 4 selected

Name	LASID	Current Grade	Next Grade	Cohort Yr	Schd?	SchdPvt	LockSchd?	Team	SpecialEdStatus	ESOL Level	FCAT ReadLvl	FCAT Reading SSS	FCAT MathLvl	FCAT Math SSS
<input type="checkbox"/> HERNANDEZ, ANA	0161100			1213	Y	40	Y	AOAE	N	5	5	283		
<input type="checkbox"/> LOZANO, SYDNEY	0102040			1213	Y	40	Y	AOAE	N	5	3	247	4	257
<input type="checkbox"/> RODRIGUEZ, ALISON	0240842	12		1011	Y	20	Y	AOAE	N	5	F	238		
<input type="checkbox"/> SOTO-MEDINA, CARLOS	0043831			1213	Y	0	Y	AOIT	N		5	283	3	254

- Step 6: Select the student and click on **ST: Schedule**, **SbT: Conflicts**.

Options Reports Help

Show alternate requests Include courses without scheduled sections House: All Team: All Hide section number Hide course description

S: Scheduled O: Open C: No seats available U: Unavailable Scheduled request only

Student Schedule (100% scheduled - Class credits: 6.0)

Course	01	02	03	04	05	06	Comment
A04 English Honors 1	O:03	C:01 O:06	C:08	O:05	C:09 O:04	C:02...	Request not scheduled
A05 English Honors 1 Gifted	C:01	C:02		C:01			Request not scheduled
B01 Algebra 1	C:01 O:04	C:02 O:05	S:08	C:06...	C:03 O:13	C:07...	S:01-08 A:03(1)
C01 Physical Science	O:03	S:01	O:04	O:02...	C:13 O:09	C:14...	S:C01-01 A:02(1)
C01 Physical Science	O:03	S:01	O:04	O:02...	C:13 O:09	C:14...	S:C01-01 A:02(1)
D01 World History	C:04		C:03	S:01	C:02		S:D01-01 A:04(1)

- Step 7: Review the conflicts and make changes on **TT: Workspace**.

Committing the Schedule

After you complete the building and re-working your master schedule, you commit to that schedule. This is the schedule that appears in the School View next school year.

NOTE: Before you commit to a scenario (master schedule), be sure to change the number on your clone rooms back to the original room number.

NOTE: The details and procedure such as committing your final Master Schedule are provided each year with necessary due dates.

Appendix A

Warning! The primary scenario, i.e. the one you are copying, should have all of these items checked; the copy should have them unchecked.

NOTE: Use this copy function only after you have created a master schedule.

Warning! The primary scenario, i.e. the one you are copying, should have all of these items checked; the copy should have them unchecked. For further explanation of this, please refer to the section entitled “Date Shared Across Scenarios,” found on page 10 of this guide.

Copy a Build Scenario (Optional)

ONLY COMPLETED SCENERIOS SHOULD BE COPIED.

Several build scenarios can be created to maximize scheduling results or to attempt different versions of your schedule. To be safe, always copy the scenario and experiment with the copy.

NOTE: If you copy a scenario from a different schedule build year, the system does not copy the term dates from that year.

- Step 1: Go to **BV, TT: Scenario**,
- Step 2: Select the scenario you wish to copy and click on **ST: Details**.
- Step 3: On the *Options* menu, click *Copy Scenario*. The Copy Scenario dialog box appears.
- Step 4: Type a name for the new scenario.
- Step 5: Once you have the copy of the scenario, deselect the attributes before you begin to work within this copy.
- Step 6: Click *OK*. The screen changes to the copy of the scenario.

NOTE: If you do not deselect an attribute and you make a change that attribute, the system will change all the scenarios.

NOTE: Use the *Scenario Data* below to guide you in making your selections.


- Step 7: Click the **ST: Preferences**. The Preferences dialog appears.
- Step 8: Switch the Category to Scenario-advanced (on the right side of the dialog.)
- Step 9: Deselect those attributes that you wish to be unique to this scenario.
- Step 10: Click *Save*

Appendix B

Creating a Snapshot

NOTE: Be Careful!


These Snapshots are *static* and will not automatically adjust for students moving in and out of your school.

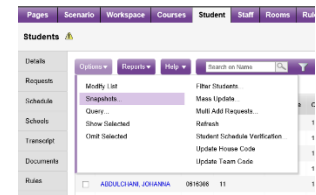
In the future, use the Filter menu  on the Scenarios page to view scenarios of both the current build year and any previous years.

Think of a snapshot as a picture of a particular group of students, staff members, courses, or rooms that you can file and easily retrieve. For example, assume you manage the Math Club and want to be able to quickly access all of the students who are members. You can use a query to find the students initially, and then create a snapshot of these students. This way, each time you want to work with students in the Math Club, you need only refer to your snapshot

- Step 1: Click on one of the following tabs:
 1. To create student snapshots, click the **Student** tab.
 2. To create staff snapshots, click the **Staff** tab.
 3. To create course snapshots, log on to the Build view, and click the **Courses** tab.
 4. To create room snapshots, log on to the Build view, and click the **Rooms** tab.
- 5. Step 2: Search for or select the records you want to include in your snapshot. You might select these records individually, or use a query to find them.

Note: Be sure to select the checkbox next to each record you want to include in your snapshot, pull the *Options* menu down to *Show Selected*.

- Step 3: Pull the *Options* menu down to *Snapshots*.
- Step 4: In the *Manage Snapshots* dialog box, click *New*. The Snapshot Definition dialog box appears
- Step 5: Type a name for this snapshot.
- Step 6: At the *Owner* field, select the user, the school, or the district as the owner. This determines which other users, if any, can use this snapshot.
- Step 7: If you would like to make this snapshot an option on your *Filter* menu , select the *Save as favorite* checkbox.



NOTE: If you would like this snapshot to be your default filter (for example, whenever you open the Student List, these are the records you'd like to see), select the *Move to top* checkbox.

- Step 8: In the *Records to Include* box, select one of the following:
 - **Current List** to include only those records you selected checkboxes for on the list page.
 - **Snapshot Combination** to combine two existing snapshots. (This option is only available if you have already defined at least two snapshots.)

Name

Owner

Save as filter

Move to top of my list

Records to Include

Current List

Snapshot Combination

Then, use the following table to determine how you want to assemble the two snapshots you select:

Select	To include the following in the snapshot:
Union	Any records that appear in the first snapshot you select or the second snapshot you select. For example, if you want to create a snapshot of students who appear on either or both the first term and second term honor roll, select Union .
Intersect	Only records that appear in both the first and second snapshot you select. For example, if you want to create a snapshot of students who appear on both the first and second term honor rolls, select Intersect .
Difference	Any record that appears in the first snapshot you select, but not in the second. For example, if you want to create a snapshot of students who appear on the first term honor roll, but not on the second term honor roll, select Difference .

- Step 9: Click **Save**. The Manage Snapshots dialog box displays the snapshot you created.
- Step 10: Select the snapshot you created, and click **Use**. The list page displays the records in the snapshot selected.

Appendix C

Query Function

Query Function

Queries can be written in either simple or advanced mode. When using the simply mode, you can write one query to show students in eighth grade and another query to show students in seventh grade. In the advanced mode, you can write a single query which includes a “wildcard” that will allow you to specify the grade level you wish to query each time the query is run. So you can create one grade level query for your entire school.

Queries can be run on students, staff, courses, or rooms.

- Step 1: Select the desired **TT** for the item you wish to query. From the *Options* menu, select *Query*. The New Query window appears.
- Step 2: Select Advanced Mode from the drop-down.
- Step 3: Select the desired parameters.
- Step 4: Place the check mark on *Prompt for Value*—this is the wildcard that will ask you to provide a value when you run the query again.

- Step 5: Click the *Add* button to add your parameters to create your query.
- Step 6: Check the *Search On* drop-down to verify what list you are querying on.
- Step 7: Click the *Save As* button if you wish to save this query for future use.
- Step 8: Name your Query.
- Step 9: Select *Save as Filter* to move this query to your filter list.
- Step 10: Select *Move to Top* if you wish this query to be first on your filter list.

Appendix D Troubleshooting your Internet Settings

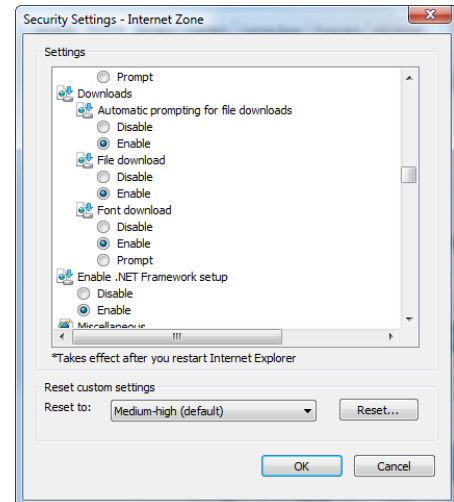
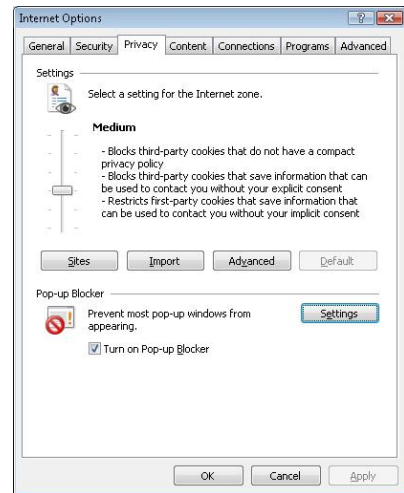
Once you access the Internet Explorer Options in the menu tab Click on the *Privacy* tab.

Click on the *Settings* button.

Type in <https://schd.dadeschools.net/aspn>

- Step 1: click the *Add* button.
- Step 2: Click on the *Close* button.
- Step 3: Click on the *Security* tab.
- Step 4: Click on the *Internet* icon if necessary.
- Step 5: Click on the *Custom level...* button. This action brings up the *Security Settings* dialog at the bottom right.
- Step 6: Scroll down to the *Downloads* section (almost half way down).
- Step 7: Under *Automatic prompting for the downloads*, click on the *Enable* setting.
- Step 8: Click *OK* to close the *Security Settings* dialog.
- Step 9: Click *OK* to close the *Internet Options* dialog.

Now, in the **TT: Workspace**, when you pull the *Options* menu down to *Build*, the server will download the scheduling engine to your computer and build the schedule locally.



Appendix E

The PUSH/PULL Method

This method is to move a student or whole groups of students from one section to another. There are two options in this method. The first is the “PUSH” method. This involves the identifying of the exact section a student(s) are located in, selecting the correct student(s) and “pushing” them to another section that has been selected by you, the scheduler.

The second method is called “PULL” since you first access the section you would like your student(s) to transfer to and then locate the student(s) in the section in which the student is currently scheduled. Then you will execute the “PULL” command and the student will be brought in to the desired section.

The following example shows the “PUSH” method:

- Step 1: Locate the correct section number and click on the correct corresponding box to the left of the section number.
- Step 2: Once the precise course number has been identified, click on the “Roster” sub tab.

Master Schedule

Master

Options Reports Help Search on Course

1 of 1185 selected

Course	Description	CoreCourse?	Schedule	Total	PrimaryRoom > Num	Primary Staff > LocalID	Teacher
<input type="checkbox"/> A01-01	English 1	Y	07(A)	25	3107	127730	McCollister, Yolanda
<input type="checkbox"/> A01-02	English 1	Y	04(A)	29	3402	313838	COSTA, EDEN
<input checked="" type="checkbox"/> A01-03	English 1	Y	01(A)	28	3402	313838	COSTA, EDEN
<input type="checkbox"/> A02-01	English 1 Through ESOL	Y	06(A)	24	3231	259962	MITJANS, ALEJANDRO
<input type="checkbox"/> A02-02	English 1 Through ESOL	Y	02(A)	21	3103	286745	ESTRADA, CLAUDIA, GILER, MARI
<input type="checkbox"/> A02-03	English 1 Through ESOL	Y	08(A)	18	3103	286745	GILER, MARISELA
<input type="checkbox"/> A05-01	English 1	Y	05(A)	27	3402	313838	COSTA, EDEN

- Step 3: Now that the student class roster is available, select the students that need to be “pushed” out of the selected section. Then In the “Options” menu, use the “Show Selected” to isolate and move only those student(s). If all students are being transferred out, simply select them all.
- Step 4: Upon selecting and isolating the correct student(s), return to the “Options” menu and select the first choice “Add.”
- Step 5: Select the “Push” function in the first option for “Schedule Mode.” If you require that the student(s) be removed entirely from the section, check the box to the right of “Remove from current section.” Otherwise, the student(s) being pushed remains in this roster and scheduled for this section.
- Step 6: Click on the radio button to the left of “Current selection.” A total number of students that will be pushed will show next to the “Selected students” line and this number needs to correspond with the number you have intended to move out of this section.

- Step 7: Enter the correct section number that the student(s) will be sent to. Please take the time to ensure that the selected student(s) are going to the correct section. If you are unsure of the section number, click on the “Select” button and pick from the list of active sections.

Finally, click on OK to finalize your transaction.

For the “Pull” version, the same procedures are needed, but the section the student(s) will eventually land in must be identified first and then sequence will closely mirror the “Push” version.



Remember, UNDO is not an option.

Please gather your facts and plan of action before using any version of this method.

Appendix F Creating Duties

You can create and assign duties to teachers in your school. To use duties, you copy the courses for them from the district catalog to your course catalog. Then, in the Workspace, assign them to teachers so that the duties appear in the teachers' schedules. The District has created 18 duties for you. To add all or any of these Duties to you course catalog,

Step 1: Go to **BV TT:Courses**.

Step 2: Pull the *Options* menu down to *Add*. The Course Pick List window appears.

Step 3: Switch the Course Catalog to the highest school year and *School Level (S*)* to *Admin*. In a few seconds you will see a list of all the duties in the district. (See Below.)

Step 4: Check the duties you wish to bring into your course catalog. **NOTE: You may only import a duty once.**

Step 5: Click *OK*.

Step 6: Open each duty and fill in the appropriate data i.e., Include in scheduling, Base Terms, Cover Terms, Periods per cycle, and at least one section.

Step 7: Do not forget to *Save* your entries for each Duty.

Warning!
If you do not fill in these data, you will get a validation error.

Using Duties

- Duty 01..... Dept Head
- Duty 02..... Test Chair
- Duty 03..... Lead Teacher
- Duty 04..... Co-Teacher
- Duty 05... Support Facilitation
- Duty 06..... Business Manager
- Duty 07..... Head Coach
- Duty 08..... Athletic Director
- Duty 09..... Activities Director
- Duty 10..... SCSJ
- Duty 11..... Reading Coach
- Duty 12..... Math Coach
- Duty 13..... GBM
- Duty 14..... H-Lab
- Duty 15... Special Assignment
- Duty 16..... Planning
- Duty 17..... Counselor
- Duty 18..... Media Specialist

Duties Available

<input type="checkbox"/>	DstCrsNo	DstDescription	Level
<input type="checkbox"/>	Duty 01 Dept Head	Dept Head	
<input type="checkbox"/>	Duty 02 Test Chair	Test Chair	
<input type="checkbox"/>	Duty 03 Lead Teacher	Lead Teacher	
<input type="checkbox"/>	Duty 04 Co-Teacher	Co-Teacher	
<input type="checkbox"/>	Duty 05 SuppFacil	Duty 05 SuppFacil	
<input type="checkbox"/>	Duty 06 BusMan	Business Manager	
<input type="checkbox"/>	Duty 07 Head Coach	Head Coach	
<input type="checkbox"/>	Duty 08 Athletic Di	Athletic Director	
<input type="checkbox"/>	Duty 09 Act Dir	Activities Director	
<input type="checkbox"/>	Duty 10 SCSJ	SCSJ	

After you have imported the duties you wish to use, you will find them in your Build View under the Courses tab. To assign a Duty to a teacher, follow the steps below.

Step 1: Go to **BV; TT:Workspace**.

Step 2: Pull down the *Options* menu to *Add*.

Step 3: When the blank dialog appears, use the magnifying glass to choose the Duty you wish to assign. The dialog will automatically pick the next section number.

Step 4: Fill in the following data. (See the picture and table below.)

Field	Information
1. Staff > Name	Use the pick list to choose the desired teacher.
2. Schedule Term > Code	Use the pick list to select A for annual.
3. Schedule	Click the Edit Schedule link, and then pick the period.

Step 5: Click the *Save* button. The Duty should now appear in the teacher’s schedule at the designated period.

Step 6: Repeat Steps 1—5 for each duty you wish to assign.

Appendix G

Adding a Co-teacher or Inclusion Teacher

Adding a Co-teacher or Inclusion Teacher

- Step 1: Go to **BV, TT:Workspace**. (Also available in **SV, TT:Schedule, ST: Sections**.)
- Step 2: Select the section to which you wish to add a Co-teacher or Inclusion teacher.
- Step 3: Click on the **SbT:Teachers**. This action opens a dialog showing the Gen-Ed teacher.
- Step 4: Pull the *Options* menu down to *Add*. This action brings up a new teacher dialog.
- Step 5: Select the Teacher's **Name** from the magnifying glass pick list.
- Step 6: Select the **Term code** from the magnifying glass pick list.
- Step 7: Use the dropdown list to select the **Role** for the co-teacher or inclusion teacher.
- Step 8: Click the *Save* button to add the teacher.

Appendix H

Adding a Section to a Course

Adding a Section to a Course (Before the next school year starts)

- Step 1: Go to **BV, TT:Workspace**. The Sections will display.
- Step 2: Pull the *Options* menu down to *Add*.
- Step 3: Use the magnifying glass to select the Sequence for which you wish to add a section. The computer will automatically add a section with the next highest number.
- Step 4: Use the magnifying glasses to pick the Teacher, the Room, and the Term code.
- Step 5: Click on the blue *Edit Schedule* link to pick a period to schedule the new section, and click *OK*.
- Step 6: If you are using Houses or Teams, tag this section with the proper code.
- Step 7: Enter the Enrollment Maximum.
- Step 8: Check the box for "Is section closed at max enrollment?"
- Step 9: Click the *Save* button to make this section part of your master schedule.

Appendix I

**Copying Students
from One Section
to Another**

Directions for copying the students from one section to another

- Step 1: Open the section out of which you want to move students. (**BV, TT: Workspace, ST: Sections**)
- Step 2: Go to BV, TT: Workspace, ST: Sections, **SbT:Roster** to see a list of the students in that section.
- Step 3: Select the students you wish to move out of the section.
- Step 4: Pull the *Options* menu down to *Add*. (The Multi-Add Students window appears.)
- Step 5: Use the dropdown menu to change the schedule mode from *Pull* to *Push*.
- Step 6: Under Students, click *Current Selection*.
- Step 7: At the bottom of the dialog, use the *Select* button or type in the sequence ***and section*** (to which you wish to move the students. **NOTE:** Use the checkbox if you want to remove the students from the previous section.
- Step 8: Click the *OK* button to add the students to the other section.

REMINDER!

In the course of using X2 Aspen, you will be viewing courses, teachers, students, and rooms that have come over from DSIS. The first time you go to view this data in X2 Aspen, you will find an empty list until you pull the Options menu down to Refresh. In addition, if you add new students or rooms or courses in DSIS throughout the year, you will need to refresh those lists the next time you open X2 Aspen.

Using Field Sets

Throughout X2 Aspen, you can use field sets to customize the columns that appear in a list. When you create field sets, you define the columns of information you want for every record on the page.

Manage your field sets in the upper right-hand corner of each page by clicking on the Field Set menu.

From this area of the page, you can modify an existing field set. To edit an existing field set, select **Default Fields** from the drop down list.

Course	Description	CoreCourse?	Schedule	Total	PrimaryRoom > Num	Primary Staff > LocalID	Teacher
A01-01	English 1	Y	07(A)	25	3107	127730	McCollister, Yolanda
A01-02	English 1	Y	04(A)	29	3402	313838	COSTA, EDEN
A01-03	English 1	Y	01(A)	28	3402	313838	COSTA, EDEN
A02-01	English 1 Through ESOL	Y	06(A)	24	3231	259602	MITJANS, ALEJANDRO
A02-02	English 1 Through ESOL	Y	02(A)	21	3103	298745	ESTRADA, CLAUDIA, OILER,
A02-03	English 1 Through ESOL	Y	06(A)	18	3103	298745	OILER, MARISELA
A05-01	English 1	Y	06(A)	27	3402	313838	COSTA, EDEN
A05-02	English 1	Y	02(A)	18	3210	307971	IGLESIAS, JESSICA
A05-03	English 1	Y	07(A)	22	3402	313838	COSTA, EDEN
A05-04	English 1	Y	07(A)	25	3431	275206	FOSTER, TACOMA
A05-05	English 1	Y	06(A)	26	3431	275206	FOSTER, TACOMA
A05-06	English 1	Y	04(A)	20	3107	127730	McCollister, Yolanda
A06-01	Intensive Reading	Y	06(A)	23	3431	275206	FOSTER, TACOMA

Manage Field Sets

- Class Size Field Set [District]
- Copy of Default [School]
- Copy of Summary [School]
- Default [District]
- ITS Default Fields [District]
- Master w/ Team Fields [District]
- Summary [District]

Buttons: Up, Down, Show/Hide, Show All, New, Edit, Copy, Delete, Save

The Manage Field Sets dialog box will appear. Make a copy for yourself as a starting point for the new field set by selecting Default [district], then click *Copy*.

- In the **Name** field, type a Name of the New Field Sets.
- At the **Type** field select User from the drop-down list.
- Click *Save*.

Name: Course Credits

Owner: []

Type: User

Name: PRIDA, ANNABEL

Buttons: Save, Cancel

To Edit the Copied Field Set

Building the Master Schedule

NOTE:

If you wish to make this new Field Set to be the default set, open the Manager again and move you new set to the top of the list.

Manage Field Sets

- Class Size Field Set [District]
- Copy of Default [School]
- Copy of Summary [School]
- Default [District]
- ITS Default Fields [District]
- Master w/ Team Fields [District]
- Summary [District]
- Course Credits [User]

Show/Hide Show All

+ New Edit Copy Delete

Save

Select copied field set (e.g. your user name) and click *edit*.

To Add/Remove fields from the Selected Field list, do one of the following:

- Hold the CTRL button and select the fields you want in your selection, click **Add/Remove**.
- Click each field one at a time, click **Add/Remove**.

Click the **Up/Down** buttons to move the fields into the order that you want them displayed on your page. Click **Save** when the Selected Fields list contains all of the

fields you want on your page, in the order in which you want them to appear.

Name: Course Credits
Owner: PRIDA, ANNABEL

Available Fields: Course, DstDescription, Short description, Master type, Summary, Department, Globally Unique Identifier, School level, Academic level, Grade level, Credit, Weight, Flavor, Include in GPA, Hide from grade input, Hide on transcript

Selected Fields: Course, School Course > Course > DstDescription, Schedule Term > Code, Schedule, Primary Room > Number, Primary Staff > Name, Enrollment maximum, Enrollment total, Is section closed at max enrollment?, Course > Credit

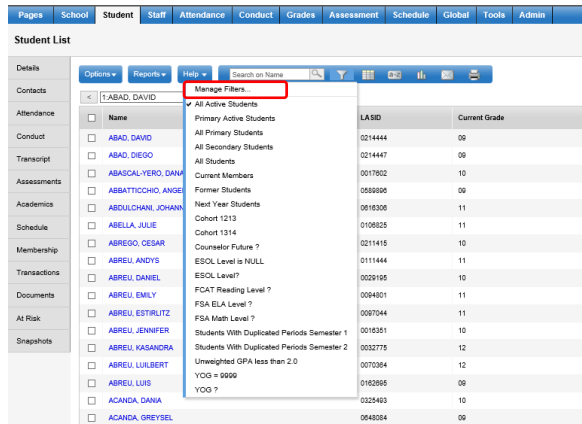
Add > < Remove

Save Cancel

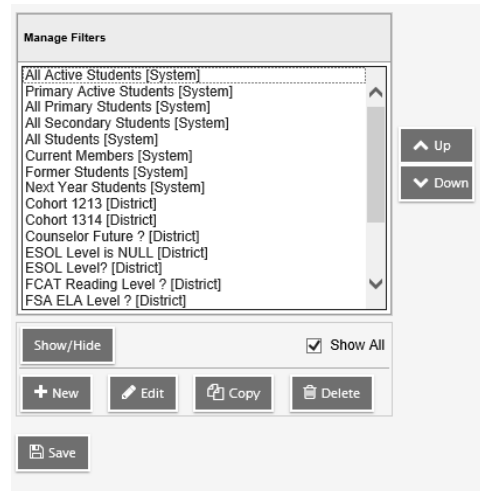
Choosing & Managing Filters

Use filters to search your school’s Master Schedule for individual teacher or student schedules.

- Filters are available on all *tabs*. The list displays according to the filter that is first in the list.



- Select the tab you wish and click on the Filter icon to see the list of filters.
- Select the filter you want to use. The list changes to reflect your choice.
- If you wish your list to *default* to this filter, click on the filter icon and choose *Manage Filters*.
- The Filter Manager appears.
- Highlight the filter you want to use as the default.
- Click the *Up* button until that filter moves to the top of the list.
- Click the *OK* button to confirm your choice.
- Now your list will open every time you navigate to it and display according to your default filter.

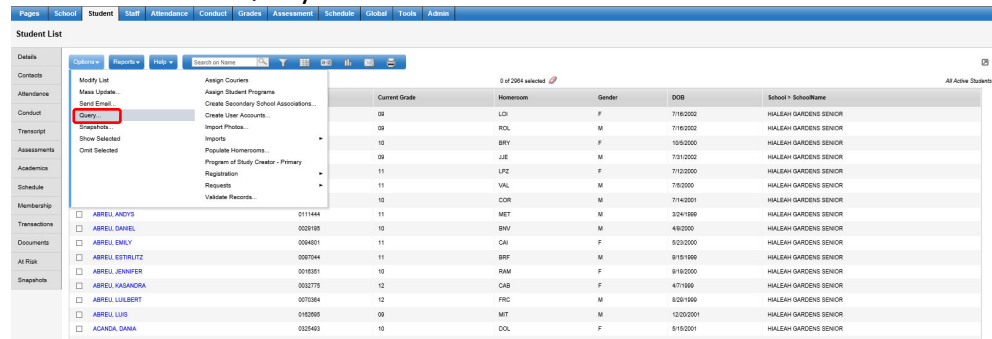


Queries

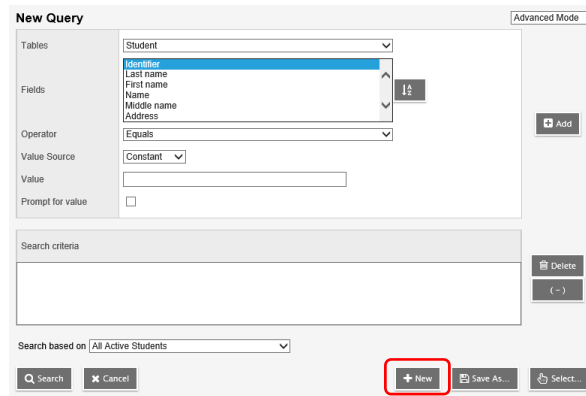
You use queries to find a group of records that match specific criteria at a particular time from a list page. For example, you can perform a general search for a group of students with the same year of graduation, or a more specific search for students in the same graduating class in a particular homeroom.

The Query search tool is accessed from the Student, Staff and Schedule tabs in the blue School View mode.

To perform a Query search, select the tab you require, and in the Options menu and select Query.



A “New Query” search window appears and is ready for your input. Once you have selected the Table, Field, Operator, and Value, click on the Add button to see your search in the bottom of the window.



Click the *Search* button to generate the information requested. You will also have the choice of saving your search for faster access at a later time.

ALERT:
Note that the filter now says “Custom Selection”. To return to the full list, change the filter back to the regular default filter.

Your search will generate a new list based on all parameters given to the database. This process can be repeated as often as you require new data sorts.

Name	LASID	Current Grade	Homeroom	Gender	DOB	School > SchoolName
GARCIA, AARON	0047048	09	YNZ	M	7/11/2001	HIALEAH GARDENS SENIOR
GARCIA, ALEJANDRA	0657558	11		F	8/11/2000	HIALEAH GARDENS SENIOR
GARCIA, ALLISSA	0141727	09	ANT	F	3/12/2002	HIALEAH GARDENS SENIOR
GARCIA, AMBAR	0040506	10	VAE	F	2/29/2000	HIALEAH GARDENS SENIOR
GARCIA, ANA	0500511	12	FZV	F	10/1/1997	HIALEAH GARDENS SENIOR
GARCIA, ANDREA	0545183	10	YNZ	F	3/16/2001	HIALEAH GARDENS SENIOR

Appendix J

Frequently Used X2 Reports

Desired Data	Report Name	Report Menu Location
List of Classrooms	Classroom Schedule Attributes	BV, TT:Rooms
Teacher List	Teacher Schedule Attributes	BV, TT:Staff
Assignments by Teacher	Teacher Assignments	BV, TT:Workspace
Teacher not scheduled by period (Periods teachers are free)	Unscheduled Teacher	BV, TT:Staff BV, TT:Workspace
Student Requests by Sequence	Course Request Verification	BV, TT:Student, BV, TT:Courses
Student Requests by sequence and course name (Proof list by Pupil)	Student Request (Landscape)	BV, TT:Student
Schedule (Matrix)	Student Schedule (Matrix)	BV, TT:Student BV, TT:Workspace
Schedule (Sheet)	Student Schedule (Sheet)	BV, TT:Student BV, TT:Workspace
Too Many, Too Few, or No Requests	Course Request Verification	BV, TT:Student, BV, TT:Courses
List of requests by course (Proof list by course)	Course Request List	BV, TT:Courses
Requests by Sequence	Course Request Verification	BV, TT:Student, BV, TT:Courses
Number of students requesting a course	Course Tally	BV, TT:Courses
Course Tally with Section Count	Course Tally with Section Type	BV, TT:Courses
Student Schedule Breakdown (Under/Over/Unscheduled)	Student Schedule Breakdown	BV, TT:Workspace
Schedule Statistics	Course Schedule Summary	BV, TT:Workspace
Master Schedule	Master Schedule	BV, TT:Workspace
Teacher Utilization	Teacher Utilization (8 Periods)	BV, TT:Workspace
Teacher Schedule	Teacher Schedule	BV, TT:Workspace
List of rules created under each type	Schedule Rule Summary	BV, TT:Rules