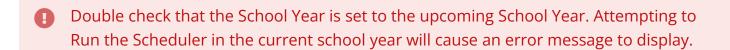
Running the Scheduler

Running the Scheduler creates student schedules based on the entered requests and available sections in the Master schedule.

Before Running the Scheduler

Run Scheduler uses the Master Schedule that was created and combines it with the Student Requests to generate the highest percentage of filled requests resulting in complete schedules. To maximize scheduler output, ensure the following steps are completed prior to running:

- Ensure all requests have been properly entered.
- Ensure all sections have an assigned Teacher.
- Ensure all sections have a Period.
- Ensure all sections within the same Course have a unique Section #.
- Ensure all sections have a Room assigned. (Not required to run the scheduler.)
- Verify/Tweak Total Seats for each section.
- Ensure all sections have a Marking Period defined.
- Ensure all sections have a Bell Schedule assigned.
- Ensure all sections have a Calendar assigned.
- For schools using Rotation Days, ensure all sections have a Rotation day.
- Ensure all sections Take/do not Take Attendance. (Not required to run the scheduler.)
- Ensure all sections are/not Graded for all sections. (Not required to run the scheduler.)
- Ensure all sections have Class Weekly Minutes filled in accurately. (Not required to run the scheduler.)
- Review Co-Teacher, Linked, or Inclusion sections built on the respective tabs. (Not required to run the scheduler.)



Running the Scheduler

The Scheduler can be run multiple times after making tweaks to the Master Schedule to improve the percentage of students fully scheduled. As you get higher percentages of

students FULLY scheduled, it is advisable to take a Master Schedule Snapshot in the event a succeeding change to the setup results in a lower percentage of fully scheduled students. This will enable the ability to restore the master schedule to a previous setup.

- 1. In the Scheduling menu, click Run Scheduler.
- **2.** Select the desired Scheduler options:

Confirm Scheduler Run				
Are you sure you want to run the scheduler?				
Delete Current Schedules Delete the schedules already in the system so that the scheduler can start from scratch. Locked sections on the student's schedule are not deleted.				
Gradelevel				
Override Period Links between Semesters Allow students to be scheduled into a different period semester 2 than semester 1. The scheduler will only choose sections taught by the same teacher. Override Period & Teacher Links between Semesters				
Allow students to be scheduled into 2 totally different sections in semester 1 and semester 2. Override Team Allow students to be scheduled into courses outside their team.				
Override Seat Counts Fill any number of students into sections. This is useful to determine which periods might need additional sections and where sections should be dissolved or moved to a different period. But, it is not recommended for your final scheduler run.				
Schedule into sections meeting within these semesters: ☑ S1 ☑ S2 ☑ S				
OK Cancel				

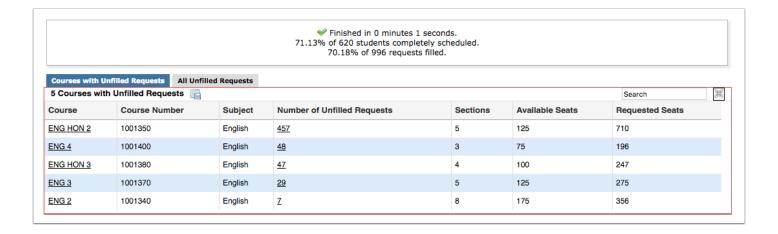
- Delete Current Schedules: This option overrides existing student schedules that have not been locked. This option should be selected when running the Scheduler to allow schedules to be shifted to improve the overall percentage of students scheduled.
- Gradelevel: Select the grade level to schedule. For example, you may only want to schedule grade 12 students. One or multiple grade levels can be selected.
- Override Period Links between Semesters: This option allows students to be scheduled into different periods but still have the same teacher from semester 1 to semester 2. This option should be used after other options to resolve scheduling conflicts have been tried. *Note: This option is available when the system preference Enable the options for splitting sections in the Scheduler is enabled in Setup > System Preferences > Scheduling tab.*
- Override Period & Teacher Links between Semesters: This option allows students to be scheduled into different periods and teachers from semester 1 to semester 2. This option should be used after other options to resolve scheduling conflicts have been tried. Note: This option is available when the system preference Enable the options for splitting sections in the Scheduler is enabled in Setup > System Preferences > Scheduling tab.
- Override Team: If the school uses team scheduling, this option allows students to be scheduled into sections that are assigned to a team other than the one the student is assigned to.

- Override Seat Counts: This option allows the Scheduler to fill any number of students into sections. This may be useful to determine which periods might need additional sections and where sections should be deleted or moved to a different period. It is not recommended to use this option for the final Scheduler run.
- Schedule into sections meeting within these semesters: Select the semesters to schedule. Summer marking periods should be deselected.

3. Click OK to run the Scheduler.

After the Scheduler finishes running, the Scheduler displays the amount of time it took to run (the more restrictions or singleton sections, the longer the Scheduler will take to run), the percentage of students completely scheduled, and the percentage of requests filled. For a student to be considered completely scheduled, 100% of their non-alternate course requests must be filled. If a student has too many requests, they will not be included in this percentage. The percentage of requests filled indicates how many total non-alternate course requests were scheduled across the school. The Scheduler also displays a list of courses with unfilled requests in the Courses with Unfilled Requests tab, and a list of all unfilled requests in the All Unfilled Requests tab.

The percentage of students scheduled in the **Loading Reports** indicates how many students are fully scheduled (all periods are filled for the semester or year) based on the periods marked as "Required for Scheduling" and that have Length (minutes) set in Setup > Periods.



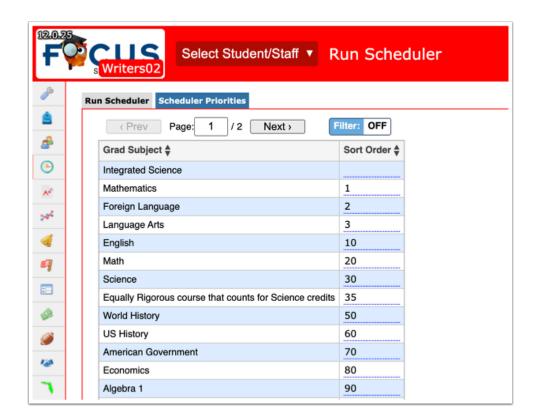
Changing any information from the Scheduler results screen will re-run the Scheduler.

Scheduler Priorities

The Scheduler Priorities tab is school-specific and may be beneficial for schools such as a Fine Arts Magnet, e.g., where it is important that the Fine Art courses take precedence over core courses when running the Scheduler. By default, the Scheduler will schedule based on the sort order of the **Graduation Subjects** setup in the **Graduation Requirements**. This option for Scheduler Priorities allows a school to override those settings and assign a priority to a Graduation Subject.

This arrangement will stay each time the scheduler is run unless it is manually re-ordered.

- 1. In the Scheduling menu, click Run Scheduler.
- 2. Click the Scheduler Priorities tab.



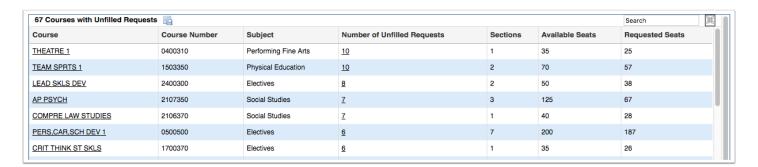
- **3.** Enter or edit the **Sort Order**, as needed.
- **4.** Click the **Run Scheduler** tab, then click **OK** to run the scheduler.

Run Scheduler Results

Each time Run Scheduler is used, the elapsed time for the run, percentage of students with all requests filled, percentage of students with full schedules, and percentage of total

requests filled displays. A list of Courses with Unfilled Requests are also displayed. (This report will be seen again in the Loading Reports.)

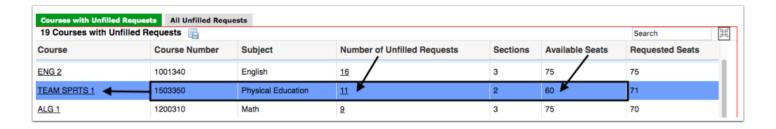
The Courses with Unfilled Requests report displays the course name, course number, subject, number of unfilled requests, number of sections, number of available seats, and number of requested seats. If the number of unfilled requests equals the difference between the number of requested seats and available seats, that is expected. If there are enough seats, but a lot of requests are still not filled, this indicates an issue with the master schedule. If the number of requested seats is greater than the number of available seats, then the scheduling team needs to determine if more sections are needed or if seat counts should be increased. If there are just a few students with unfilled requests, then their schedules need to be looked at by the scheduling team.



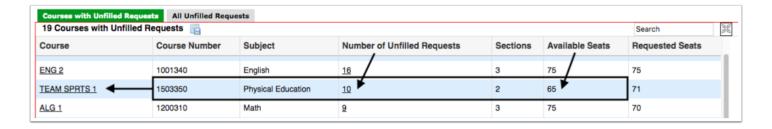
- Elapsed Time for the Run: Time it took to process the requests into schedules (the more restrictions or singleton sections, the longer the Scheduler will take to run).
- Percentage of Students with all requests filled: This number does not consider whether the students have sufficient requests to fill a schedule.
- Percentage of Students with Full Schedules reflects the rate of students who have a scheduled course for each period of the day.
- Percentage of Requests Filled reflects the rate of filled requests compared to the total number of requests that have been entered.

While viewing **Courses with Unfilled Requests** in **Run Scheduler**, if a course is selected and the seat count is increased on one or more sections, the system will AUTO-RUN the scheduler and any unscheduled students with requests for that course, may be scheduled. The course may drop off the report if all requests are filled as a result.

Before seat counts were increased:



After seat counts were increased:



Stay on this report and do as much clean up as possible then re-run the Scheduler to see how your percentage of COMPLETELY SCHEDULED students increases, decreases, or doesn't change.

Activity

- 1. Select the necessary options and click **Run Schedule**r.
- 2. View the results on the **Courses with Unfilled Requests** tab.

Loading Reports: Building/Tweaking Process

The Loading Reports provide the scheduling team with reports to evaluate the student requests compared to students scheduled. These reports are used during the building process to tweak the location of sections to accommodate unfilled requests and then used during the clean-up process to ensure all students are completely scheduled without conflict.

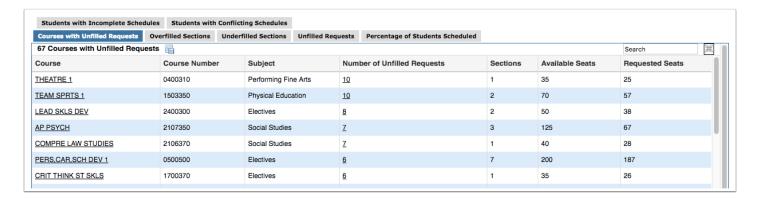
During the Building process, use the next three reports to continue to tweak the Master Schedule to improve the percentage of students fully scheduled.

Courses with Unfilled Requests Report

The Courses with Unfilled Requests report displays a list of courses that have unfilled requests.

1. In the Scheduling menu, click Loading Reports.

The **Courses with Unfilled Requests** tab is opened by default. This report displays the course name, course number, subject, number of unfilled requests, number of sections, number of available seats, and number of requested seats. If the number of unfilled requests equals the difference between the number of requested seats and available seats, that is expected. If there are enough seats, but a lot of requests are still not filled, this indicates an issue with the master schedule. If the number of requested seats is greater than the number of available seats, then the scheduling team needs to determine if more sections are needed or if seat counts should be increased. If there are just a few students with unfilled requests, then their schedules need to be looked at by the scheduling team.



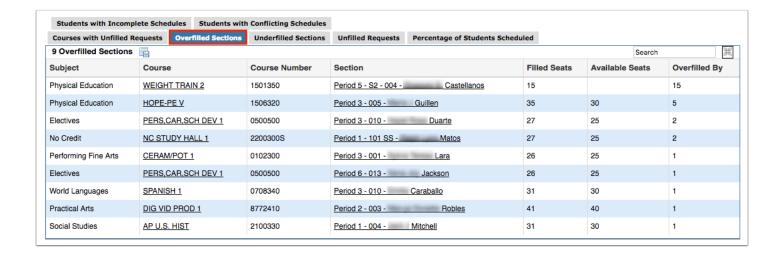
2. Click on the course name link to view the course information in the Courses & Sections screen, opened in a new tab. Add or adjust sections as needed. Close the tab when finished.

Overfilled Sections Report

The Overfilled Sections report displays sections where the number of filled seats exceeds the number of available seats. This report helps determine if more sections are needed or if seat counts need to be adjusted within sections. The Scheduler will not overfill sections, so the overfilled seats are as a result of a manual override of a seat limit (students manually scheduled into a section that is full) or the seat count was changed on the section after running the Scheduler.

- 1. In the **Scheduling** menu, click **Loading Reports**.
- 2. Click the Overfilled Sections tab.

The report displays the subject, course name, course number, section name, number of filled seats, number of available seats, and number of overfilled seats for each overfilled section.



- **3.** Click the course name link to open the course information in the Courses & Sections screen, opened in a new tab. Add additional sections or seats to sections as needed. Close the tab when finished.
- **4.** Click the section name link to open the section information in the Courses & Sections screen, opened in a new tab. Add additional seats as needed. Close the tab when finished.
- **3.** Click the number of unfilled requests link to view a list of the students with unfilled requests for the course in a new tab.

If the list has more students than the number displayed on the report, this indicates that some of the students entered this request as an alternate. Review the Priority column to determine which requests are alternate requests (priority greater than 1).

- **4.** Click a student's name to view his/her requests.
- **5.** Click **Schedule** at the top of the screen to view the student's schedule. Reviewing the student's schedule may be helpful in determining possible reasons why the request was unfulfilled.



If you make a change to a student's schedule and then re-run the Scheduler, this will undo the change.

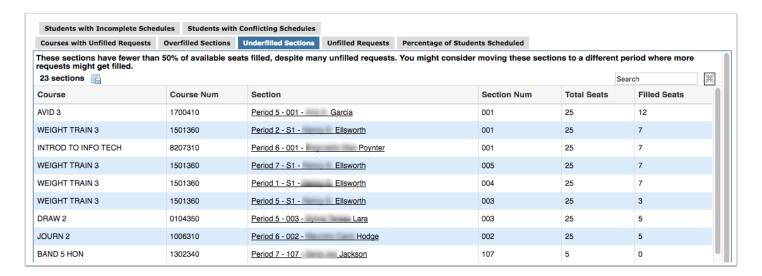
Underfilled Sections Report

The Underfilled Sections report displays sections that have fewer than 50% of available seats filled. This report helps determine if the section may need to be moved to a different period in the day or combined with another section of the same course. Students must be

removed from a section before deleting a section. The report will not accurately reflect underfilled sections if all requests were not entered when the Scheduler was run.

- 1. In the Scheduling menu, click Loading Reports.
- 2. Click the Underfilled Sections tab.

The report displays the course name, course number, section name, section number, total seats, and filled seats.



3. Click a section name link to view the section information in the Courses & Sections screen, opened in a new tab. Modify the period of the section or make any other changes as needed. Close the tab when finished.

If there are students scheduled into the section and the period is changed, this may cause conflicts in the student schedules. The Scheduler will need to be rerun or student schedules manually adjusted.

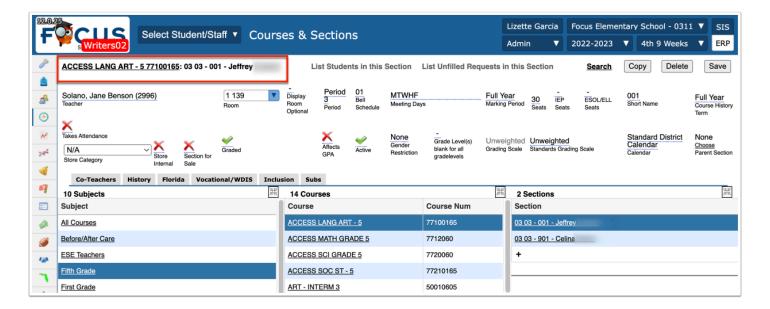
Other Tweaking Options Before Re-Running the Scheduler

If the percentage of fully scheduled students was unsatisfactory, you have options in addition to the three Loading Reports discussed above, for making minor adjustments to the Master Schedule before re-running the scheduler.

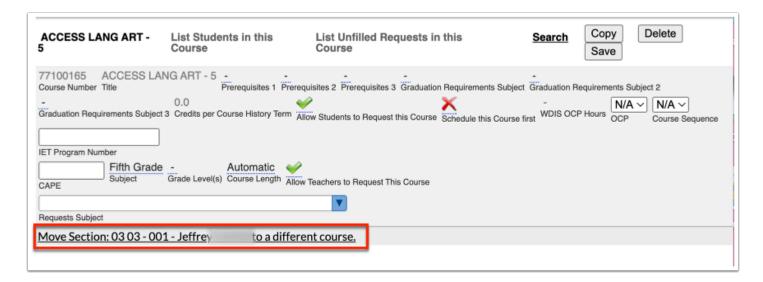
Move Section, with the Teacher, to a Different Course

There are several scenarios when scheduling teams may want to take an existing section and move it to another course entirely:

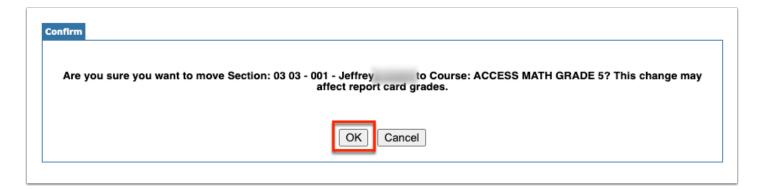
- A course has no sections at all and extra sections are available in a different course
- A course is being dissolved but the section is needed in a different course
- 1. In the Scheduling menu, select Courses & Sections.
- 2. Select the **Subject**, **Course**, and the **Section** to be moved.
- **3.** Click on the Course Name and Number in the top left corner. A pop-up window displays.



4. Click Move Section.



- **5.** The pop-up window will expand. Select the new **Subject** and **Course** to which the section is being moved.
- **6.** Click **OK** to confirm moving the section.



The section will now appear in the new selected Subject and Course area. The teacher (and if the term has begun, students, grades, and attendance) will be moved to the new course number.

Move Sections via the Teacher Schedules Report

Sections can be moved to a different period or teacher by clicking and dragging the blue cross next to the section on the report. Sections should only be moved prior to building packages or scheduling students. If a section is moved to a different period or teacher after you have run the Scheduler, you will need to re-run the Scheduler in order to re-distribute the students. Co-teacher sections cannot be moved to a different period or teacher by dragging and dropping. Changes to co-teacher sections must be made in **Courses & Sections**.

Click the blue cross next to the section and drag the section to a different period or teacher.

Packaging Sections from the Teacher Schedules Report

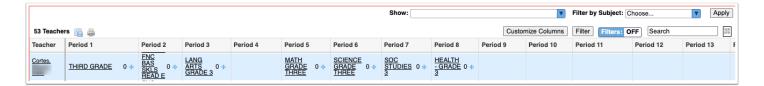
Sections are packaged for the purpose of linking the sections together for scheduling. This is most often used in elementary scheduling when sections for language arts, math, science, art, music, etc. are packaged together with the homeroom section as the parent section. This can also be done at the secondary level to link two sections together, such as Economics semester 1 section with Government semester 2 section. When scheduling

students, students scheduled into the parent section will automatically be scheduled into the linked child sections.

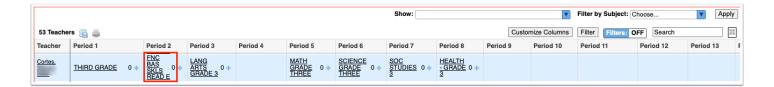


Sections can also be packaged together on the **Create Packages** or the **Courses & Sections** screen.

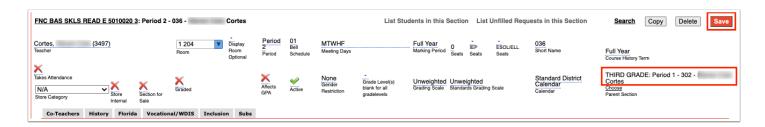
1. Locate the teacher to create a package for on the Teacher Schedules Report.



2. Click the first "child" section.



- 3. In the Courses & Sections tab, click the Choose link the Parent Section field.
- **4.** In the pop-up window, click the subject, course, and the homeroom "parent" section. The selected section will display in the Parent Section field in the Courses & Sections tab.
- **5.** Click **Save**, and then close the tab.



6. Repeat this process for the rest of the child sections.

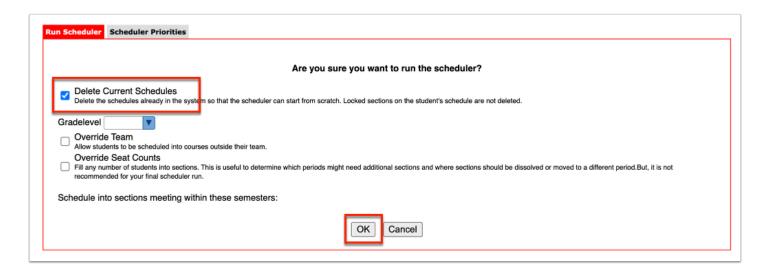
Moving the section will update the teacher and period on the section.

When multiple sections are changed from one teacher to another, any assignments that were linked to multiple sections remain linked.

Re-Running the Scheduler

After any changes have been made to the master schedule, you must re-run the Scheduler in order to redistribute the current student schedules. If the changes result in a higher percentage of fully scheduled students, you may wish to take a Master Schedule Snapshot to save those settings in the event that subsequent tweaks and runs result in a lower percentage. The next and previous steps can be repeated as many times as necessary until you are satisfied with the percent of fully scheduled students.

- 1. In the Scheduling menu, click Run Scheduler.
- 2. Select the **Delete Current Schedules** check box.
- 3. Click OK to re-run the Scheduler and create new schedules based on the changes made to the Master schedule.



Master Schedule Report Snapshots

The Master Schedule Snapshots screen allows individual schedulers to take a "snapshot" of the Teacher Schedules Report to track how changes made to sections impact the

percentage of students fully scheduled after each run of the Scheduler. If enabled by the district, the system can create a snapshot that runs hourly or once a day. The process described here is for Manual Snapshots, which are saved in the database for 6 months.

Creating a Manual Snapshot

Manual snapshots can be created as needed. Before making a change that could significantly affect the master schedule and student schedules, create a snapshot so that the schedules can be restored back to a previous point.

- 1. In the Scheduling menu, click Master Schedule Snapshots.
- **2.** Click **Create Snapshot** at the top of the screen.

The snapshot is created and added to the list. The user who created the snapshot, the date and time the snapshot was created, the percent of students scheduled, and the number of sections in the master schedule are displayed.



3. To add a description to the snapshot, click the **Description** field and enter the text.

Entering a useful description is recommended so that you and others involved in scheduling will know what this snapshot will restore.

4. Click Save.



Restoring the Master Schedule and Student Schedules

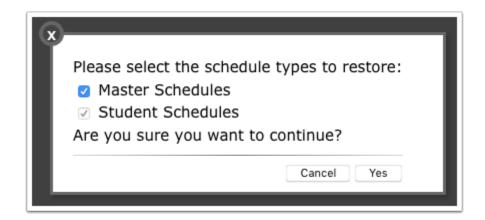
1. Next to the snapshot you want to use, click **Restore**.



2. In the pop-up window, select Master Schedules, if needed.

Selecting Master Schedules will revert the master schedule to the snapshot. Student Schedules is always selected by default. This will revert student schedules to the snapshot.

3. Click Yes to continue.



A green check mark and confirmation message is displayed at the top of the screen.



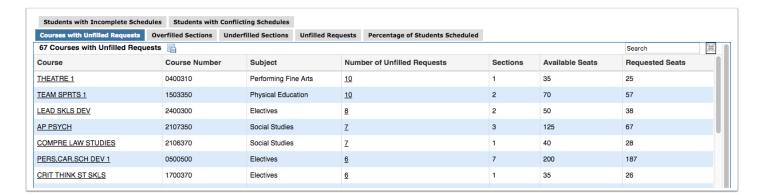
When determined appropriate, the Unfilled Requests report can be utilized to determine if creating new sections would increase the percentage of fully scheduled students. The remaining Loading Reports would be utilized once the school decides to no longer run the scheduler.

Loading Reports: Unfilled Requests Report

1. In the Scheduling menu, click Loading Reports.

The Courses with Unfilled Requests tab is opened by default. This report displays the course name, course number, subject, number of unfilled requests, number of sections, number of available seats, and number of requested seats. If the number of unfilled requests equals the

difference between the number of requested seats and available seats, that is expected. If there are enough seats, but a lot of requests are still not filled, this indicates an issue with the master schedule. If the number of requested seats is greater than the number of available seats, then the scheduling team needs to determine if more sections are needed or if seat counts should be increased. If there are just a few students with unfilled requests, then their schedules need to be looked at by the scheduling team.



- **2.** Click on the course name link to view the course information in the Courses & Sections screen, opened in a new tab. Add or adjust sections as needed. Close the tab when finished.
- **3.** Click the number of unfilled requests link to view a list of the students with unfilled requests for the course in a new tab.

If the list has more students than the number displayed on the report, this indicates that some of the students entered this request as an alternate. Review the Priority column to determine which requests are alternate requests (priority greater than 1).

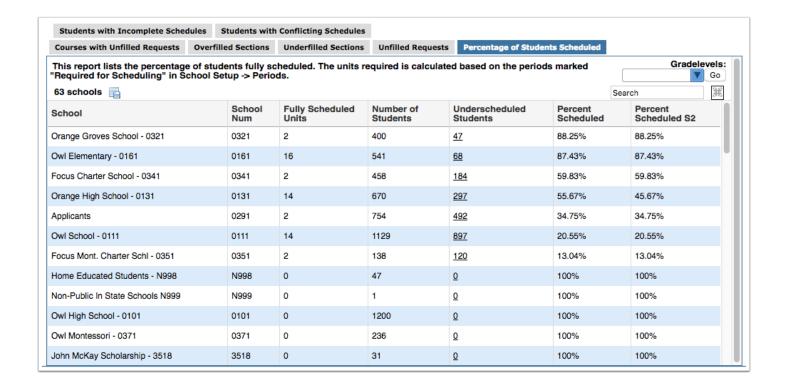
4. Click a student's name to view his/her requests.

Loading Reports: Percentage of Students Scheduled

The Percentage of Students Scheduled report displays the percentage of students fully scheduled (all periods are filled for the semester or year) based on the periods marked as "Required for Scheduling" and that have Length (minutes) set in Setup > Periods. If the setup is incorrect for periods, the percentage of students scheduled will not be correct. This report allows the district to review how close each school is to being 100% scheduled.

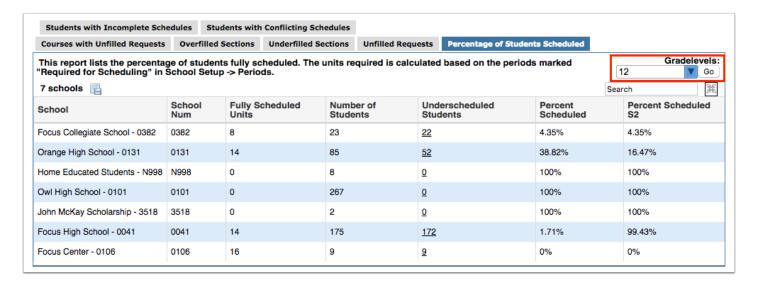
- 1. In the Scheduling menu, click Loading Reports.
- 2. Click the Percentage of Students Scheduled tab.

The report displays the school name, the number of fully scheduled units, the number of students enrolled at the school, the number of underscheduled students, the percentage of students fully scheduled, and the percentage of students scheduled for semester 1 (or semester 2, depending on the marking period selected at the top of the screen).



- **3.** To view specific grade levels on the report, select one or multiple grade levels from the **Gradelevels** pull-down.
- **4.** Click **Go** to regenerate the report.

The report now displays the information for students of the selected grade level(s).

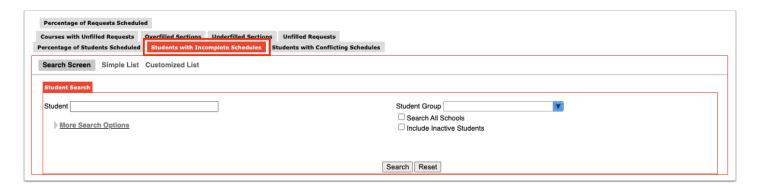


Loading Reports: Students with Incomplete Schedules

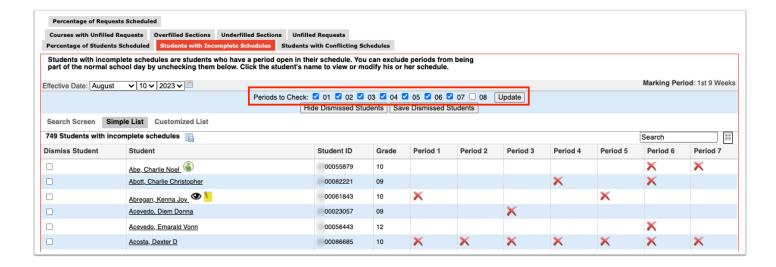
The Students with Incomplete Schedules report displays students who have one or more periods in which no courses are scheduled. This report is used once the Scheduler is no longer being run and student schedules need to be manually completed. After manually adjusting student schedules, re-running the Scheduler will override any individual changes made to student schedules. This report is also useful if continuing to run the Scheduler to see trends by period per grade level and determine if any courses may need to be adjusted or changed.

Individual students can be hidden on the report. This may be useful if certain students (such as juniors and seniors) do not need to have all periods scheduled to be considered "fully scheduled." This is controlled by the permission "Allow User to Dismiss Students on Loading Reports" in Users > Profiles.

- 1. In the Scheduling menu, click Loading Reports.
- 2. Click the Students with Incomplete Schedules tab.



- **3.** On the Search Screen, enter search criteria to locate a specific group of students and click **Search**, or do not enter any search criteria and click **Search** to view all students who have incomplete schedules.
- **4.** The **Effective Date** defaults to the first day of the marking period selected at the top of the screen. Adjust the Effective Date as needed to see incomplete schedules for semester 2.
- **5.** In the **Periods to Check** section, select the periods to display on the report. If you have periods set up for after school activities or for other purposes, do not select those periods.
- **6.** Click **Update** to regenerate the report.



The report displays the student name, student ID, grade level, and a column for each period. A red X displays in a column if the student is not scheduled into a course for that period as of the effective date for the marking period selected.

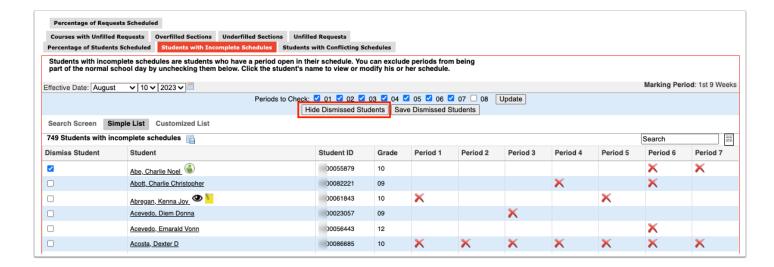
- **7.** If the school uses rotation days, select the rotation day to display on the report in the **Rotation Day** pull-down.
- **8.** If you have the profile permission "Allow User to Dismiss Students on Loading Reports," you can hide students on the report by selecting the **Dismiss Student** check box next to each applicable student and clicking **Save Dismissed Students**.

The selected students are hidden on the report. The total number of students with incomplete schedules indicated above the report will not change since the students are not permanently removed from the report, just hidden.

9. To re-display the students that were hidden, click Show Dismissed Students.

The dismissed students are re-displayed on the report.

10. Click **Hide Dismissed Students** to hide the dismissed students again.



11. Click the student name link to open the student's schedule in the Student Schedule tab. Adjust the student's schedule as needed, and close the tab when finished.

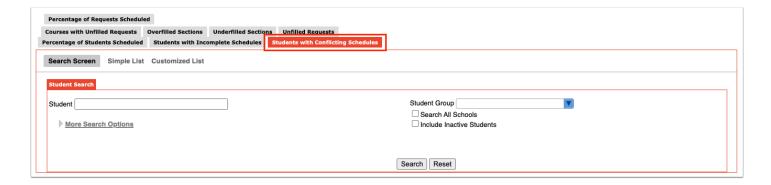


Any unfilled requests are displayed at the bottom of the Student Schedule pop-up window.

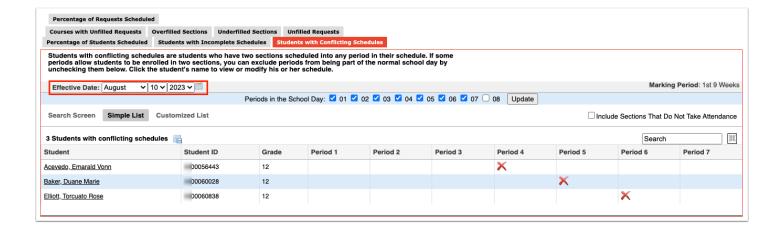
Loading Reports: Students with Conflicting Schedules

The Students with Conflicting Schedules report displays students who have more than one couse scheduled into a single period during any period of the school day. This report is used once the Scheduler is no being longer run and student schedules need to be manually completed.

- 1. In the Scheduling menu, click Loading Reports.
- 2. Click the Students with Conflicting Schedules tab.



- **3.** In the Search Screen, enter search criteria to locate a specific group of students and click **Search**, or do not enter any search criteria and click **Search** to view all students with conflicting schedules.
- **4.** The **Effective Date** defaults to the first day of the marking period selected at the top of the screen. Adjust the Effective Date as needed.



- **5.** In the **Periods in the School Day** section, select the periods in the school day to display on the report. If you have periods set up for after school activities or for other purposes, do not select those periods. Click **Update** to refresh the report.
- **6.** To include sections that do not take attendance on the report, select **Include Sections That Do Not Take Attendance**.

The report displays the student's name, student ID, grade level, and a column for each period. A red X displays in a column if the student is scheduled into more than one course during that period as of the effective date for the marking period selected.

7. Click the student name link to open the student's schedule in the Student Schedule tab. Adjust the student's schedule as needed, and close the tab when finished.

Activity

- 1. Review all Loader Reports and determine changes to the Master Schedule as needed.
- 2. Re-run the scheduler and note any change in the percentage scheduled.
- 3. BE SURE TO DELETE EXISTING SCHEDULES before re-running the scheduler.

Schedule Report

The Schedule Report displays the number of requests, open seats, and total seats for each course and section, and lists students enrolled in each course and section.

- 1. In the Scheduling menu, click Schedule Report.
- **2.** Click the subject in the Subjects list.

The courses for the selected subject are listed with the number of requests for the course, the number of open seats for the course, and the total number of seats for the course.

14 Subjects 13 Courses					
Subject	Course	Requests	Open	Total	
Dual Enrollment	AP ENG COMPO	0	90	90	
Electives	AP ENG LIT COMPO	0	72	72	
<u>English</u>	ENG 1	0	125	125	
Exceptional Student	ENG 1 THROUGH ESOL	0	25	25	
Math	ENG 2	0	100	100	
No Credit	ENG 2 THROUGH ESOL	0	25	25	
Performing Fine Arts	ENG 3	0	101	125	
Physical Education	ENG 3 THROUGH ESOL	0	25	25	
Practical Arts	ENG 4	0	100	100	
Science	ENG 4 THROUGH ESOL	0	25	25	
Social Studies	ENG HON 1	0	75	75	
<u>Temp</u>	ENG HON 2	0	125	125	
Vocational	PRE-AP ENGLISH 1	0	0		
World Languages			-	_	

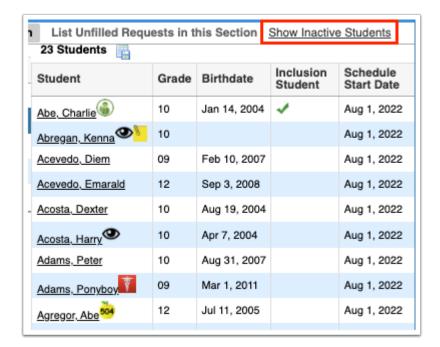
3. Click the course in the Courses list.

The sections of the course are listed with the room number, number of open seats, and total number of seats.

4. To list students enrolled in the course, click **List Students in this Course** at the top of the screen.

The students enrolled in the course are listed along the right side of the screen, along with their grade level, birthdate, whether they are an inclusion student, and their schedule start date for the course.

5. To view inactive students in the course, click **Show Inactive Students** at the top-right of the screen.



The list of students is updated to include inactive students. Inactive students are highlighted in gray. The Schedule End Date and Enrollment End Date columns are displayed and list these dates as applicable.

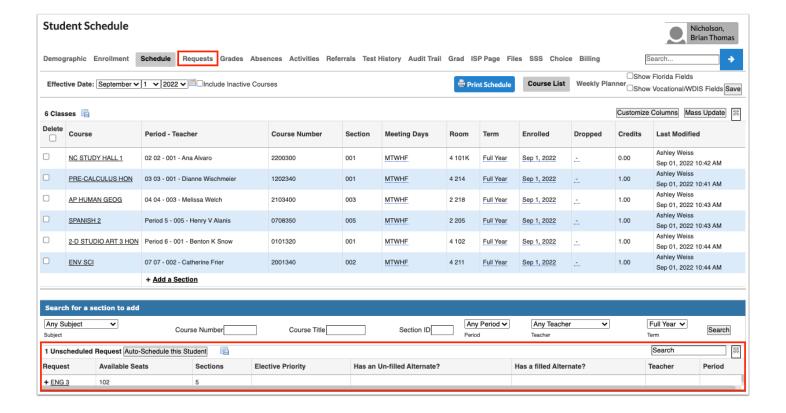
- 6. Click Hide Inactive Students to remove inactive students from the list.
- **7.** Click a student's name to open the student's schedule in a pop-up window, and close the pop-up window when finished.



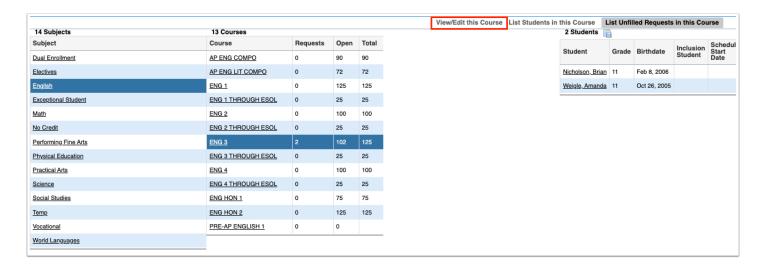
8. To view unfilled requests in the course, click **List Unfilled Requests in this Course** at the top-right corner of the screen.

Students with unfilled requests in the course are listed at the right side of the screen, including their grade level and birthdate.

- **9.** Click a student's name to open the student's schedule in a pop-up window.
- **10.** Scroll down to the bottom of the screen to view the student's unscheduled requests, or click **Requests** at the top of the screen to view the Student Requests screen.



- 11. Close the pop-up window when finished.
- **12.** To view the course's information in Courses & Sections, click **View/Edit this Course** at the top of the screen.



The Courses & Sections screen is displayed with the course information.

13. Make any necessary changes to the course if needed and click **Save**.