PowerSchool SIS: PowerScheduler - Load Process

PowerSchool Student Information System

Contents

PowerScheduler: The Load Process – Step A

Managing the scheduling process for your school takes a lot of time, effort, and the coordination of multiple factors. The PowerSchool SIS scheduling engine, PowerScheduler, helps make the process more streamlined and successful. Before getting started on next year's schedule, first decide whether you are going to build a new master schedule or copy a master schedule from a previous school year.

The "PowerSchool SIS PowerScheduler: Prepare to Build" course is designed for schools that will build a new master schedule from scratch and load students into the new schedule. The "PowerSchool SIS PowerScheduler: Load Process" course is designed for schools that will copy a previous master schedule, make manual changes for the new year, and then load students into that schedule.

The choice is yours—some schedulers choose to build a new master schedule every year, while others copy the same master schedule each year and load students into it (unless they are making major changes to their master schedules). In a "load only," you make the master schedule changes manually. In a "build and load," the system uses an algorithm to help you determine how many sections are required and how to organize them, based on student scheduling requests.

Use this Load Process course to copy your master schedule, make manual adjustments, and load students into the master schedule. To complete the process, you will:

- Create a scheduling scenario (the format of your master schedule) that describes next year's periods, day cycles, years, terms, and courses
- Define or edit scheduling details, including departments, section types, and teacher teams
- Define or edit scheduling resources, including rooms, students, and teachers

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PowerScheduler: The Load Process – Step A

The Load Process

While preparing your master schedule, you will use two parts of PowerSchool SIS: the active, or “live,” side and the scheduling side. You will perform most of the setup on what is known as the PowerScheduler side of PowerSchool SIS. Additionally, you will work back and forth between PowerScheduler and the regular, live side of PowerSchool SIS, where you’re used to working.

The list below outlines the steps of the load process.

A. Auto Scheduler Setup
B. Define Course and Section Information
C. Define Rooms
D. Prepare Teacher and Student Information
E. Enter Student Course Requests
F. Adjust the Master Schedule Manually
G. Define Load Constraints
H. Load Students
I. Evaluate the Load
J. Explore Post-Load Options
Schedule Complete

Before you begin the Load Process in PowerScheduler, you’ll need to complete a few steps in PowerSchool SIS. Complete the following two steps on the live side of PowerSchool SIS before performing Step A.

- Make sure you have access to PowerScheduler on the Start Page, under Applications

  If the PowerScheduler link does not appear on the Start Page, you may not have access. Check with your PowerSchool SIS administrator.
- Create the future year at each school and at the district office

  If you don’t create the future year in PowerSchool SIS, you won’t be able to make courses available for scheduling next year, and, therefore, the school won’t have a course catalog.

Create the Future Year

Before starting your scheduling work in PowerScheduler, create next year’s terms on the live side of PowerSchool SIS for the district office and each school.

1. On the Start Page, click **School** > **Years & Terms**

   You’ll see a list of the current and previous school years at this school.
2. Click **New**
3. Enter a name for the future school year
4. Enter an abbreviation for the future school year

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PowerScheduler: The Load Process – Step A

5. Enter the first day and last day of school

		Example Entry
Name of School Year	2022-2023	2001-2002
Abbreviation	22-23	01-02
First Day of School	8/1/2022	08/23/2001
Last Day of School	7/31/2023	06/05/2002

Note: Once a year has been created, it cannot be deleted.

6. Click **Submit**

   You don’t have to add the individual terms for next year at this time. You will create the terms in PowerScheduler in the next step. When you commit the schedule, the year and terms will move from PowerScheduler to the live side of PowerSchool SIS automatically.

   Once you’ve set up the future year at your school, if you have the access, navigate to the district office. Then, click **District** > **Years & Terms**. Add the future school year on the Years & Terms page using the same process.

Step A: Using Auto. Scheduler Setup

Now that you have set up the future year on the live side, switch to the scheduling side of PowerSchool SIS and create a new scheduling scenario. When you create a scenario, you define the overall settings of your schedule for next year in PowerSchool SIS PowerScheduler. While several people at your school may schedule students, only one person should perform Step A: Auto. Scheduler Setup.

The Auto. Scheduler function sets up the terms, periods, and days associated with the school schedule. Using the Auto. Schedule Setup is optional, but setting up terms, periods, and days is required.

If you created years and terms on the scheduling side previously, performing the Auto. Scheduler function overwrites those years and terms, whether you created them manually or by using the Auto. Scheduler Setup. However, the Auto. Scheduler Setup does not overwrite the years and terms created on the live side.

Perform the Auto. Scheduler Setup

Perform the Auto. Scheduler Setup to create a new scheduling scenario for the load.

1. Switch from the district office to a school
2. On the Start Page, switch from the live side of PowerSchool SIS to the scheduling side by clicking **PowerScheduler**

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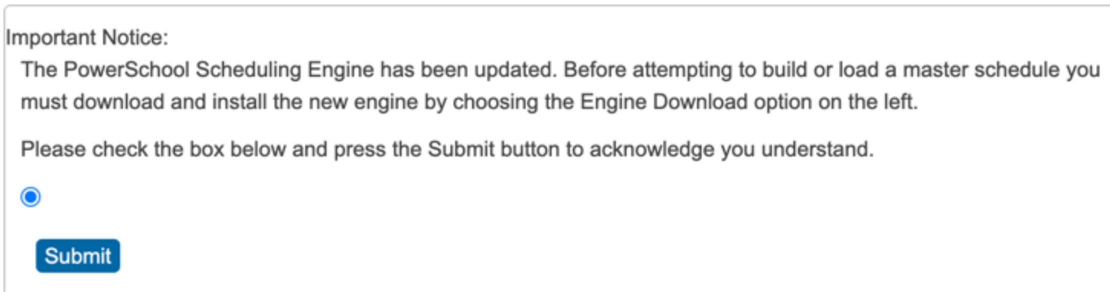
PowerScheduler: The Load Process – Step A

3. If you see the notice displayed in the following image, select the option and click **Submit**

   The notice below serves as a reminder that occasionally updates are made to the scheduling engine. If you navigate to a PowerScheduler page and see a message about updating the engine, you must download the most recent version of the scheduling engine. However, if you have previously installed the scheduling engine, uninstall it before reinstalling an updated version.

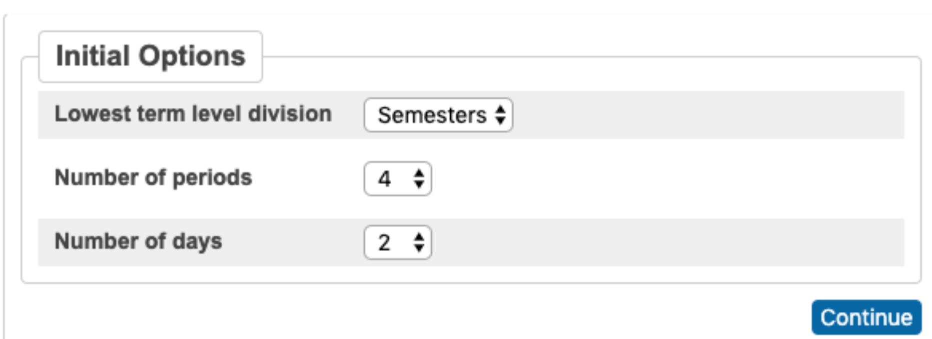


4. In the menu on the left side, below Scheduling Setup, click **Auto. Scheduler Setup**
5. Choose the term length of the school's shortest courses, the number of periods, and the number of days, then click **Continue**

   The “Lowest term level division” menu refers to types of course offerings: it does not refer to when you store grades or send out report cards. For example, your school sends out report cards every quarter. However, students don’t change courses each quarter; they change each semester. In that case, you would choose **Semesters** from the **Lowest term level division** menu.

   If your school uses blocks instead of periods, use the **Number of periods** menu to select your number of blocks.

   Use the **Number of days** menu to define the number of days in your rotation or day cycle, not how many days school meets each week. It refers to how many days occur before the cycle is repeated. For example, in a block schedule, your school may have A days and B days. Different classes meet on these different days. In this case, the number of days would be two because A day and B day need to meet before the cycle repeats itself. Most traditional six to eight period days tend to have a single cycle for their number of days.



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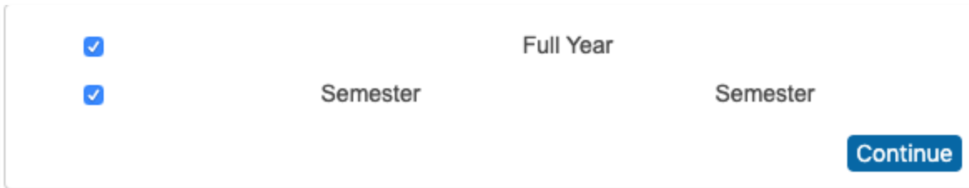
PowerScheduler: The Load Process – Step A

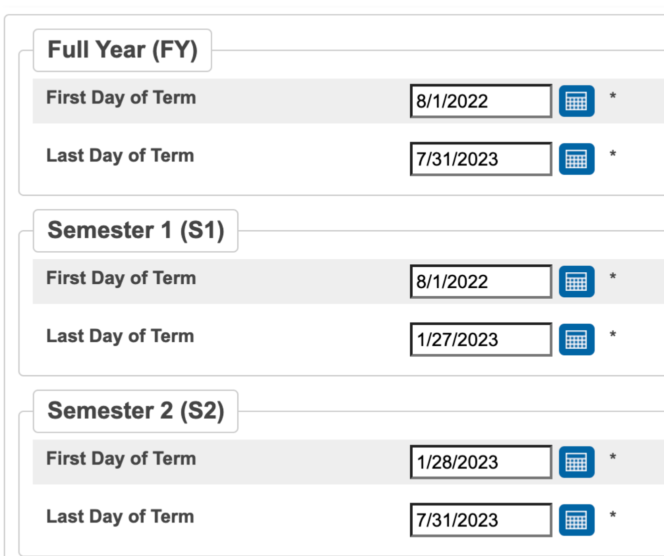
6. On the Auto Schedule Setup–Schedule Term Selected page, define scheduling terms for your school, and then click **Continue**

   These terms apply to scheduling only, not grading terms. The full year term is selected by default, since the full year term is required. Select the semester terms to include them in the process too.

7. Enter the dates for each of the terms and click **Continue**

   Make sure no gaps exist between the term dates. If your school hasn't finalized the exact dates, don't worry. You can change the dates at any time while working on the schedule, up until the moment you commit it. Committing the schedule is the last step in PowerScheduler.

8. Select **Load Only** since you plan to load students into a previously or manually created master schedule

   Alternatively, select **Build and Load** to use the scenario to build a master schedule and load students into the schedule. If you are planning to perform a build, see the "PowerSchool SIS PowerScheduler: Prepare to Build" course for more information.

9. Edit the build name and description of the build, if needed

   The build name defaults to the name of the full year term, and the build description defaults to "Automated Schedule Setup." If you plan to create more than one scenario to try out different schedules—for instance, to compare a scenario with eight periods on a one-day cycle to a scenario with four periods on a two-day cycle—edit the **Build Name** and **Build Description** fields.

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10. Use the default values for the **Terms**, **Periods**, and **Days** fields

    Note that these fields will contain the information you just set up in the Auto. Scheduler Setup.

11. The Course Catalog menu will not contain options for first-time PowerScheduler users

    When first-time users submit the scenario, PowerScheduler will create an initial course catalog. If course catalog options are present, don't choose one. It is highly recommended that you create a new scheduling course catalog each year. You will create a new course catalog later in this process.

12. Use the default values in the **Build Optimizations**, **Load Optimizations**, and **Best Schedule Weights** fields at this time

    Use these fields only if you are actively loading the schedule and encounter problems.

13. Click **Submit** to complete the Auto. Scheduler Setup process

Edit the Scenario

After you use the Auto. Scheduler function, the Scenarios page will appear. The new scenario will contain the information you entered during the Auto. Scheduler Setup. While you can create several scenarios using Auto. Scheduler Setup, only one scenario can be active at a time in each school. Create a new scenario using the previous steps. By default, the newest scenario will be the active one.

If you need to change the terms, periods, or days in an existing scenario, do not perform the Auto. Scheduler Setup again. Instead, navigate to the Scenarios page, select the name of the active scenario, and make the necessary changes on the Edit Build Scenario page.

Set the Schedule Year

You can enter student course requests for the current year and/or for future years. Student course requests may come in via PowerScheduler, the PowerSchool SIS Student Portal, or the Modify Future Requests student page. To ensure these requests are associated with the future scheduling year, set the scheduling year. By setting the scheduling year, the request screens you create in PowerScheduler will apply to the future school year.

Setting the Scheduling Year

Set the scheduling year to the future year that you created.

1. In PowerScheduler, below Tools, click **Functions** > **Set Schedule Year**
2. Choose the future schedule year from the menu

    Only the years established on the Years & Terms page on the live side of PowerSchool SIS are listed in the menu.

3. Click **Submit**

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PowerScheduler: The Load Process – Step A

Copying a Master Schedule

Now that you've created a scheduling scenario for next year, copy a master schedule you used previously. When you copy a master schedule, teacher assignments, and sections from the previous year are moved to the future year. Later, you will create a new course catalog and make manual changes to this information. After you copy a master schedule, create a new scheduling course catalog to associate the future full year term to the active scenario and edit the years and terms for next year, since the dates of the previous master schedule are copied over as well.

1. From the PowerScheduler menu, below Tools, click **Functions** > **Copy Master Schedule**
2. From the **Source year** menu, choose the year from which you want to copy the master schedule
3. Make sure that **Clear existing scheduling terms in the destination school year** is cleared
4. Select **Check here to confirm you want to proceed**
5. Click **Submit**

Creating the Scheduling Course Catalog

The scheduling course catalog lists the group of courses offered during a particular school year. You can add new courses and course prerequisites at any time. However, you must add or change prerequisites before you create course request screens if you want to include the courses in your PowerScheduler course catalog for the next scheduling year. You can create course catalogs at the district office, school by school, or associate the same catalog to all schools.

Use the Course Management feature of PowerSchool SIS at the District Office to control and set up course catalogs for each school year and for each school in the district. Navigate to the District Office and click **District**. Then click **Course Settings**. You can use the Course Settings page to restrict the creation of courses and course availability to the district level.

Before you create a PowerScheduler course catalog and perform a load, define the courses that are available for scheduling next year on the live side of PowerSchool SIS, and make courses unavailable or inactive as needed. At the District Office, click **District** > **Courses**. Open the filter options and select the school, status, and other options to sort the courses. Select or clear the check boxes until you see the courses you want. Select the check box next to a course name and click **Edit Availability for Schools and Years**. Then click **OK**. On the left, select the appropriate school year.

Click **Next**, and on the left, select the appropriate school or schools. For the Association Type, check either **Make Available** or **Make Unavailable** depending on whether you are adding or removing courses from the available course list.

Click **Next**, review the summary of changes, and click **Submit**. The courses will be added or removed from the school's course list.

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PowerScheduler: The Load Process – Step A

When you perform the Auto. Scheduler Setup for the first time, PowerScheduler creates a course catalog after you submit the scenario. The new catalog is based on the future course catalog you created in PowerSchool SIS and the courses offered currently. After the first year, create a new scheduling course catalog every year. By creating a new course catalog, you can keep track of which courses are offered each year. If you always use the same catalog, the catalog will be overwritten each year, and you will have no way to track your course offerings from year to year.

Create the Scheduling Course Catalog

Create a new scheduling catalog and attach it to the active scenario. The system schedules only the courses in the course catalog that you associate with the active scenario in PowerScheduler.

1. From the **School** menu, select your school
2. On the Start Page, click **PowerScheduler**
3. Below Scheduling Setup, click **Course Catalogs** > **New**
4. Enter a name and description for the catalog
5. Click **Submit**

   The course catalog you created appears in the list, but the catalog is not active yet. You can only edit the course catalog associated with the active scenario.

2020-2021	Not active catalog	Inactive	Edit
2021-2022	Not active catalog	Inactive	Edit
2022-2023	Not active catalog	Inactive	Edit

6. Below Scheduling Setup, click **Scenarios**, and select the name of the active scenario
7. From the **Course Catalog** menu, choose the name of the catalog you created

Terms	2 Associate
Periods	4
Days	2
Course Catalog	2022-2023

8. Click **Submit**
9. Below Scheduling Setup, click **Course Catalogs**
10. Click **Edit Course Catalog** in the row of the catalog you created

    If your catalog contains courses that are not available for scheduling at your school next year, you'll see a warning icon. Make those courses available at the district or school level (depending on your district's policies), then return to the Edit Course Catalog page.

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11. Clear the check box next to each course you don’t want to schedule next year

    By default, the system checks all courses made available for scheduling next year and offered this year. New courses added in PowerSchool SIS and made available at your school after you created the catalog will appear unchecked. Select the new courses to schedule them in the future year. If you don’t see a course that was offered previously, click **Unavailable Courses** to find the course and check its box to make it active. Then, contact your PowerSchool SIS administrator to make that course available for next year.

12. Click **Submit**

Verifying Optional Scheduling Preferences

Depending on your school and scheduling preferences, you may have already defined section types and teacher teams. These settings are optional. Additionally, you may want to make changes to the names of periods or days for next year.

While several people may be scheduling students, only one person per school should verify, define, and/or change these scheduling preferences. If you are that person, before you load students into a copied master schedule, verify that you defined periods and days correctly for your master schedule and update any optional preferences for next year.

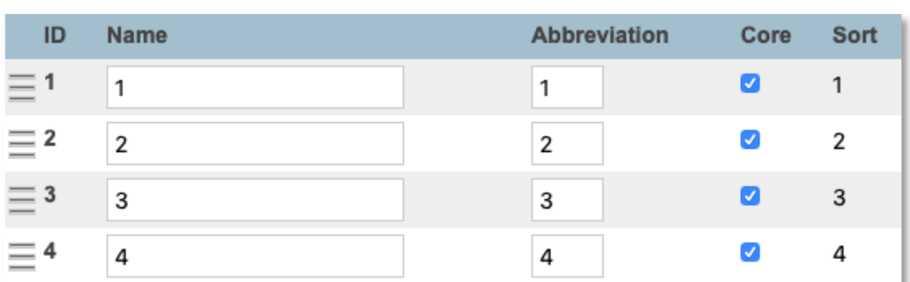
Periods

By using the Auto. Scheduler Setup, you have already defined the year and terms, periods, and days for your scenario. Revisit those items now just to be sure they are correct for next year. To add a new period or day to your schedule, edit the scenario.

Perform the following steps to make manual modifications to the default name, abbreviation, and sort order of the periods. Optionally, you can reorder and rename periods to create a period for homeroom.

1. In the PowerScheduler menu, below Scheduling Setup, click **Periods**

   The number of period IDs that appear on the Edit Periods pages depends on the number you choose from the Periods field on the Edit Scenario page. You cannot alter the ID number. This ID is listed on the Master Schedule report.



ID	Name	Abbreviation	Core	Sort
1	1	1	☑	1
2	2	2	☑	2
3	3	3	☑	3
4	4	4	☑	4

2. In the Name field for the period with the ID 4, enter ***Homeroom***

   By default, the period IDs match the period names, so when the ID is listed, you know which period the ID refers to. But you do have the option to modify the name in the Name field. For example, many schools have a homeroom period and change a period name to “Homeroom” for easy identification. Change the last period to Homeroom and then use the sort order to list Homeroom first.

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3. In the Abbreviation field for the period with the ID 4, enter ***HR***
4. Use the drag and drop bars next to the ID numbers to make Homeroom first on the list
5. Click **Submit**

   Your periods should look like the image below.

ID	Name	Abbreviation	Core	Sort
4	HR	4	☑	1
1	1	1	☑	2
2	2	2	☑	3
3	3	3	☑	4

Days

To add or remove a day cycle from your schedule, edit the active scenario. Perform the following steps to make manual modifications to the default name and abbreviation of the days.

1. Below Scheduling Setup, click **Days**
2. Enter the name and abbreviation for each day

   Changing the default name and abbreviation is optional.
3. Click **Submit**

Section Types

Use section types to differentiate sections of a course. For example, PE courses are taught by grade level and need a section for each grade level. Assign the section type to teacher assignments and student requests. Then, when PowerScheduler loads students into the master schedule, it filters students with the appropriate section type into the appropriate teacher's section.

1. Below Scheduling Setup, click **Section Types** > **New**
2. Enter a name and code for the section type
3. Click **Submit**

Teacher Teams

Some schools—most often middle or junior high schools—assign students and teachers to interdisciplinary teams to provide students with the most support and best monitoring system. For example, a 6th-grade teaching team may consist of four teachers who each specialize in a core academic subject such as math, science, language arts, and social studies. They work together to provide an instructional community for a group of students. Students take their core academic courses from the team teachers and take elective classes from other teachers and with students from other teams.

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PowerScheduler: The Load Process – Step A

Teams fall into two categories: static or dynamic. To create static teams, assign each student and teacher to a team manually. To create dynamic teams, assign teachers to a team. Then, the system assigns students to the appropriate team for the best balance.

1. Below Scheduling Setup, click **Teams** > **New**
2. Enter a name for the team
3. Click **Submit**

   If you decide to mass assign students to teams, you will need to use the ID number of the team, not the team name.

Summary

You have completed the first steps in the Load Process. In Step A, you:

- Decided to copy a previous master schedule and to load students into it
- Created the future year and terms on the live side of PowerSchool SIS
- Performed the Auto. Scheduler Setup to create a scheduling scenario
- Set the scheduling year
- Copied the master schedule
- Created a new course catalog
- Verified and updated scheduling preferences

While completing the scheduling process, the PowerSchool SIS Help menu is another great source of information. On any PowerSchool SIS or PowerScheduler page, click the **Help** icon to search for information about PowerScheduler. Next, continue in the Load Process with Steps B and C.

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PowerScheduler: The Load Process – Steps B and C

You've already used Auto. Scheduler Setup to create a scheduling scenario that outlines next year's terms, periods, and day cycles. In addition, you set the scheduling year, copied a previous master schedule, created a scheduling course catalog, and verified or updated optional scheduling preferences. Now it's time to complete the next two steps in the Load Process.

First, define course information:

- Define course preferences
- Add new courses for next year
- Create prerequisite rules and relationships for new and existing courses

Then, verify, update, or define room information for your school's classrooms.

A. Auto Scheduler Setup
B. Define Course and Section Information
C. Define Rooms
D. Prepare Teacher and Student Information
E. Enter Student Course Requests
F. Adjust the Master Schedule Manually
G. Define Load Constraints
H. Load Students
I. Evaluate the Load
J. Explore Post-Load Options
Schedule Complete

Step B: Defining Course Information

You've created your scheduling course catalog, but you have more course information to set up for next year. First, create any new courses you are offering and associate them with the appropriate school. Then define course preferences for new and existing courses, such as load priority and course maximums. Defining course information may seem like a complex setup procedure because the Preferences tab on the Course Information page is long and contains many fields, but you likely won't need to complete every field for every course.

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PowerScheduler: The Load Process – Steps B and C

Defining Course Preferences

To define course preferences, use the Auto Generate Course Information function, then update preferences manually and/or use the Auto Fill Course Information function.

- Use the Auto Generate Course Information function to copy preferences for all of your courses in the master schedule into your active PowerScheduler catalog

  You must copy a master schedule first before you auto-generate course information.
- Update preferences for courses individually
- Use the Auto Fill Course Information function to update preferences for a selected group of courses at the same time

Automatically Generating Course Information

Use the Auto Generate Course Information function to copy these course settings from a previous course catalog into your new scheduling catalog:

- Target Number of Sections to Offer
- Valid Terms
- Terms per year
- Periods Per Meeting
- Periods Per Cycle
- Frequency
- Is This Course a Lab
- Lab Periods Per Meeting
- Lab Frequency
- Maximum Enrollment
- Schedule This Course
- Build Type
- Load Priority
- Load Type
- Balance Priority

To use the Auto Generate Course Information function successfully, you must first copy a master schedule from a previous year. Auto Generate will overwrite any course changes you have already defined for the new scenario, so use the Auto Generate Course Information function before making changes, then make manual changes or auto-fill course information to change course preferences for next year.

Follow these steps from the PowerScheduler side:

1. Below Tools, click **Functions** > **Auto Generate Course Information**
2. Check **Set the following fields to their default values** to verify that you want to copy scheduling preferences from the courses in the current year's master schedule to the courses for next year's master schedule
3. Click **Submit**

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4. Click **Confirm Submit**

Verifying and Updating Course Preferences Manually

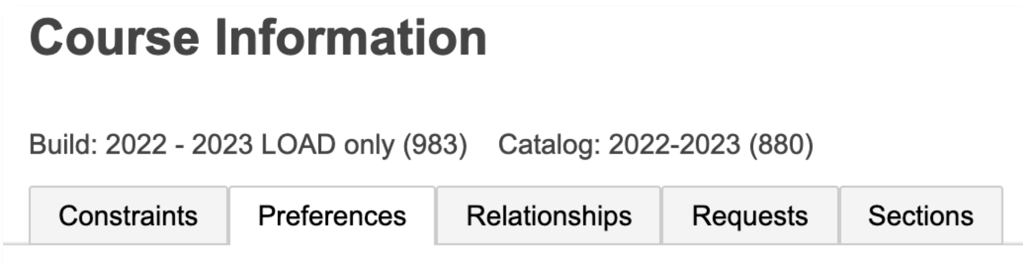
After auto-generating course information based on a previous year's master schedule, update information manually for any course preferences that need to change for next year.

The Preferences page is divided into seven sections: General Information, Scheduling Preferences, Sections Defined, Labs Defined, Room Requirements, Load Options, and Substitute Information. Since each course has different requirements, you may fill out the information in these sections in a number of different ways. Typically, you will focus on updating the information in the Scheduling Preferences and Load Options sections. Update information in other sections if the information has changed since the previous year.

Start the process of manually updating course preferences on the scheduling side of PowerSchool SIS.

1. On the PowerScheduler menu, below Resources, click **Courses**
2. From the menu on the left, click a course name

   The default tab on the Course Information page is Preferences. The following steps focus on course preferences. The four other tabs on the Course Information page include:

   - The Constraints tab – Lists any constraints entered for the course
   - The Preferences tab is the default tab on the Course Information page and is where the majority of the manual scheduling settings are entered
   - The Relationships tab – Used to enter relationships between the course and other courses
   - The Requests tab – Lists all requests submitted for the course
   - The Sections tab – Lists the available sections of the course

   Note that in the Build process, the Assignments tab (not pictured here) is also visible, but the Load Only process does not require teacher assignments.

3. In the General Information section of the **Preferences** tab, add a detailed description of the course in the **Course Description** field

   This course description will appear on the course request screens.

   Note: Any settings you add to the Preferences tab are not saved until you submit the page. If you switch to another tab on the Course Information page, your settings will be lost. Click **Submit** in each section to ensure your settings are saved.

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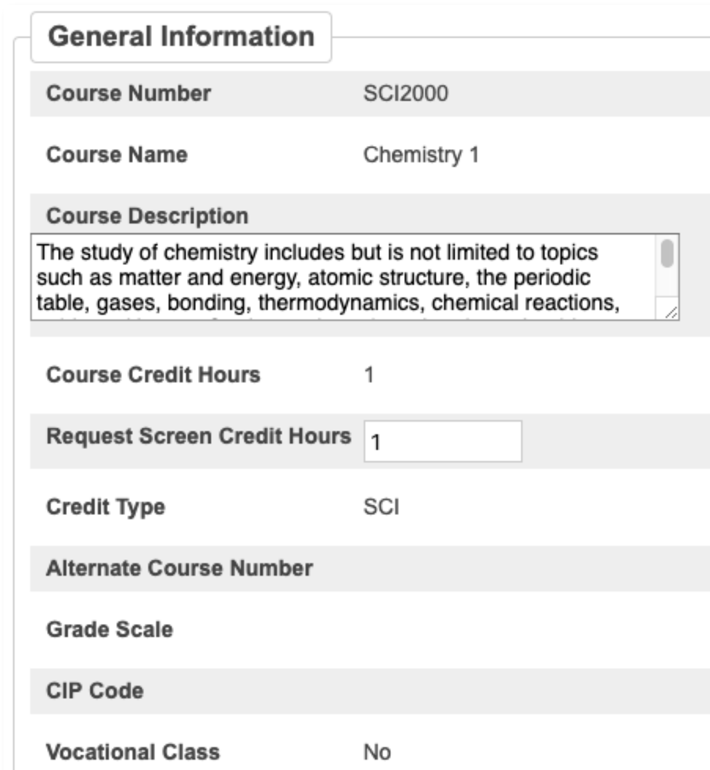
PowerScheduler: The Load Process – Steps B and C

4. Enter a value in the **Request Screen Credit Hours** field to represent the number of credit hours that students will request when selecting this course

   For example, Chemistry is a year-long class. Students earn 0.5 credit hours first semester, and another 0.5 credit hours second semester. When they select Chemistry on the course request screen, students will check Chemistry only once, but the request will count for both semesters of credit.

   The rest of the fields in the General Information section are static; you can change them only on the live side of PowerSchool SIS.



5. In the Scheduling Preferences section, verify that **Schedule This Course** is checked for every course that will be offered next year

   PowerScheduler ignores any courses that don't have Schedule This Course checked, so clear the check box for courses that are not being offered next year.

6. In the Load Options section, verify or update the number in the **Load Priority** field

   Use the Load Priority field to load students into higher priority courses first. For example, AP Chemistry is an advanced class with only one section offered next year. Therefore, AP Chemistry is more difficult to schedule, and it needs a high priority number. You can enter numbers from 1 to 99, but experience has shown that the following values (that follow the pattern of the original number doubled plus one) work best: 1, 3, 7, 15, 31, and 63. The lower the number, the higher the priority. Electives typically have a higher number so that the engine schedules the required courses first and electives last.

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7. The primary priority for loading is the value you entered in the Load Priority field; the default, the Balance Priority menu is set to Section, but you may choose to balance certain courses by gender, grade level, ethnicity, or house, depending on your school's needs and regional regulatory compliance requirements

   For the **Balance Priority** menu, verify or update the secondary load priority option for the course:

   a. Choose **Section** to keep the number of students balanced across sections
   b. Choose **Gender** to keep the number of males and females balanced in each section
   c. Choose **Grade** to keep the grade levels balanced in each section
   d. Choose **EthnicCode** to keep the ethnicities balanced in each section
   e. Choose **House** to keep the members of each house balanced in each section
8. Make additional changes to the information in this and/or other sections if needed, then click **Submit** to save the changes

Automatically Filling Course Information

The Auto Fill Course Information function enters course information simultaneously for all courses in your scheduling catalog, or for a selection of courses. Be careful when using the Auto Fill Course function, since preferences vary by course. After completing the Auto Fill function, use the Course List report to view the information you auto-filled, as well as to locate information that may be missing. Follow the instructions below to auto-fill information for a group of courses, such as all the courses in the English Department. If you want to auto-fill information for all of the courses in your scheduling catalog, begin with step 9 in the following instructions.

1. On the Start Page, click **PowerScheduler**
2. Below Tools, click **Functions** > **Update Selections**
3. From the **Current Table** menu, choose **ScheduleCourseCatalogs**
4. Click **Select all [xx] records in this school**
5. From the Search ScheduleCourseCatalogs menu, choose **CourseCatalogID**
6. In the blank field, enter the course catalog ID for this year, such as ***880***

   If you are unsure of the course catalog ID, open another tab in PowerScheduler and click **Course Catalogs**. The catalog ID is listed at the top of the page after the current catalog year.
7. Click **Search all [xx] records in this school**
8. Do one of the following:
   a. Click **Select Records by Hand**, select the courses you want to auto-fill with the course information, and click **Submit**
   b. Use the Search ScheduleCourseCatalogs fields to search for and select courses that meet specified criteria, such as all courses in the English Department, for example **Sched_Department = *ENG*** and then search within the current records only

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9. Navigate to the PowerScheduler menu. Below Tools, click **Functions** > **Auto Fill Course Information**
10. Choose to apply the changes to all courses or those you just selected
11. Complete all the fields that need to be auto-filled for the courses you selected

    The information you enter will vary depending on the group of courses you selected. Review the information in the previous section about updating and defining course preferences manually.
12. Click **Submit**
13. Run the Course List report to verify the information you auto-filled: **PowerScheduler** > **Reports** > **Course List** > **Submit**

Adding a New Course

Add new courses on the live side of PowerSchool SIS, not in PowerScheduler. Also, avoid creating duplicate courses by first verifying that the courses you plan to add aren't already in your district's Master Course List. Switch to the District Office, then click **District** > **Courses** to view the Master Course List. If the courses you want to create are already listed on the Master Course List page, do not create new courses. Instead, switch back to your school and make the courses available for the future year so they can be scheduled.

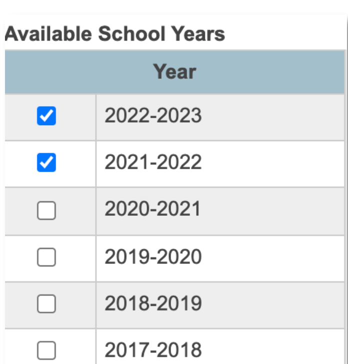
Add a New Course

You can add new courses in PowerSchool SIS at either the district or school level, depending on your district's policies and your security permissions. Follow the steps below to create a new course at the school level.

1. On the Start Page, click **School** > **Courses** > **+ New Course**

   If you don't have permission to create courses at the school level, your PowerSchool SIS administrator requires you to set up courses at the District Office. Switch to the District Office and click **District** > **Courses** > **+ New Course**.
2. Enter course information in the fields, select the school(s) at which the course will be available, and select the school year(s) for which you want the course to be available

   Select the current school year and the future year if you want to make the course available to students during the current year and offer the course again next year. Otherwise, select only the future year to include the new course in next year's schedule.



Available School Years

	Year
☑	2022-2023
☑	2021-2022
☐	2020-2021
☐	2019-2020
☐	2018-2019
☐	2017-2018

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3. Enter additional information about the new course, and then click **Submit**

Course Prerequisites

Your prerequisite setup establishes the requirements that a student must meet before requesting a course. You can build simple or complex prerequisite rules for courses in your school's catalog based on criteria you define. You can specify that a student must earn a particular grade or a certain number of credits in order to request the next course. You can even require that a teacher submit a recommendation before the student can request the course.

When you add new prerequisite rules to a course, you need to decide whether students must satisfy all of the rules or any of the rules. For example, if a student has to pass a prerequisite course with a specific letter grade *and* obtain a teacher recommendation, all of the rules would be required. However, if a student has to pass a prerequisite course with a specific letter grade *or* obtain a teacher recommendation, then the student can satisfy any of the rules.

Prerequisites are course-specific, not school-specific. Therefore, once you add a pre-requisite rule to a course, that rule will apply to every school offering the course. Also, since schools use the same courses from one year to the next, once a prerequisite rule is set, it will remain in effect until someone removes or modifies the rule. You can create the following types of prerequisite rules:

- Letter Grade – Students must pass the prerequisite course with one of the specified letter grades
- Percent Grade – Students must pass the prerequisite course with a minimum percentage grade
- Average Percent Grade – Students must pass the prerequisite courses with a minimum average percentage grade
- Credit Hours – Students must earn a range of credit hours in the prerequisite course(s)
- Concurrent Request – Students must request another course at the same time as this course
- Recommend – Students must receive a teacher recommendation in PowerTeacher to take the course
- Any of – Students must meet one of the established prerequisite rules
- None of – Students must meet none of the established rules
- All of – Students must meet all of the established prerequisite rules

Keep in mind that prerequisites limit the requests students can select on the student request pages. Prerequisites do not stop the PowerScheduler engine from loading a course into the student’s schedule if you override the prerequisite rules for a student.

Adding Course Prerequisites

Since students submit most requests before second semester ends, you can define prerequisite rules on the assumption that students will complete and pass their current courses. For example, a set of prerequisite rules may specify that students must take Chemistry prior to Physics, and that students must earn an A, B, or C letter grade in Chemistry before requesting Physics.

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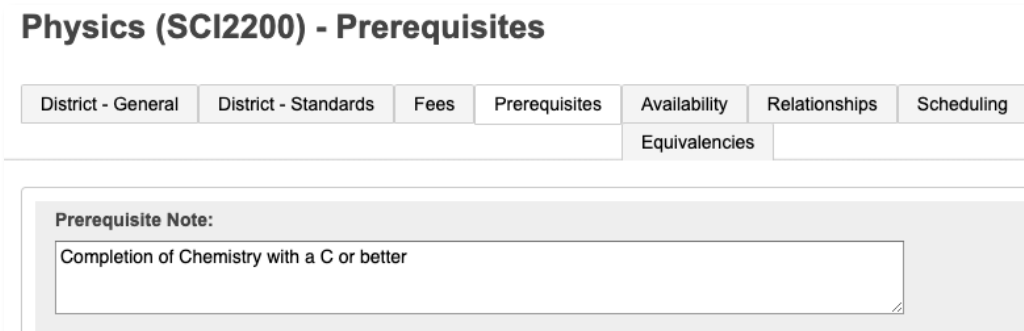
PowerScheduler: The Load Process – Steps B and C

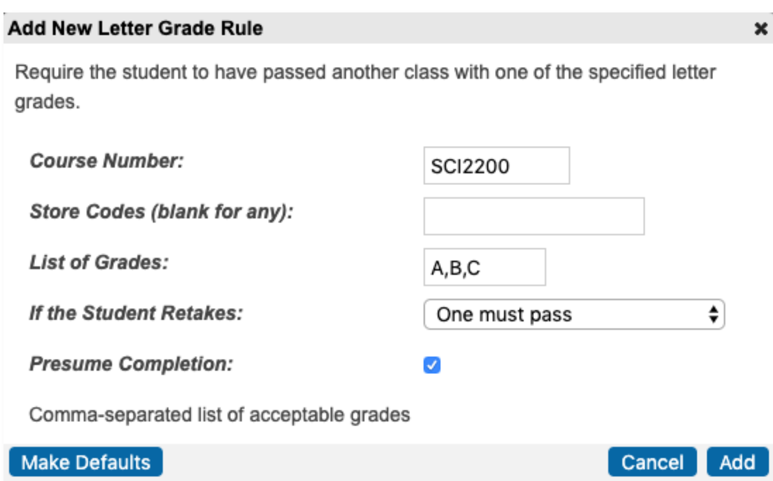
The course requirements are the result of two prerequisite rules between Chemistry and Physics. Add these prerequisites on the live side of PowerSchool SIS to the Physics course.

1. On the Start Page, click **School** > **Courses**
2. Find and select **Physics**
3. Click the **Prerequisites** tab
4. In the **Prerequisite Note** field, enter ***Completion of Chemistry with a C or better***



5. Click the **+** sign in the Prerequisites Rules section
6. Choose **Letter Grade** from the menu
7. Enter the beginning of the course number (a list of matching courses will appear)
8. Select the course
9. In the **List of Grades** field, enter ***A,B,C***

   If the grade scale includes grades with pluses and minuses, such as B+ and B-, include those grades as well.
10. From the **If the Student Retakes** menu, choose **One must pass**



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11. Check **Presume Completion**

    Check Presume Completion to ignore the prerequisite rule for the students who are taking the prerequisite course in the current term and temporarily allow students to request the class without completing the prerequisite.

    To add flexibility to the Presume Completion rule, navigate to **School** > **Final Grade/Reporting Term Setup**. At the bottom of the Final Grade Setup page, enter the number of days to extend the Presume Completion rule beyond the end of the term. After that number of days, the system will no longer presume the student passed the course and the request will become invalid if the student did not pass.

    Alternatively, enter a negative number to stop the Presume Completion rule before the course ends. For example, entering ***-3*** would stop the Presume Completion rule three days before the last day of the course.

    Keep in mind, once you set up course prerequisite rules, they will be carried over from one scheduling year to the next. You can edit the prerequisite rules at both the district and school levels. You can also edit or add prerequisite notes and rules for a group of courses by clicking **Edit prerequisites for entire department** at the bottom of the page.
12. Click **Add**
13. Click the **+** sign again
14. Choose **Recommend** from the menu
15. Enter the department of the teacher, such as ***SCI***
16. Click **Add**

    If the student must pass or receive a recommendation, click the **+** sign, choose the Any Of rule, and click **Add**. Then, click and drag the existing rules to the Any of section. The Any Of rule requires the student to meet one of the prerequisites, not all.
17. Finally, click **Save**

Defining Course Relationships

After you auto-generate and update course information, you can define relationships between courses. Course relationships introduce an additional set of rules into the scheduling system. With course relationships in place, courses that are related are not scheduled automatically into the first available spot in student schedules, but instead are scheduled in relation to each other.

You can create several types of course relationships in PowerScheduler, but the more relationships you create, the more complicated the schedule becomes. Relationships apply to either the build (master schedule) or the load (student schedules). Since you have copied a master schedule, use any of the following course relationships that apply to the load:

- Has a Load Coreq of – Courses that need to be requested together and scheduled during the same term
- Has a Load Postreq of – Courses that need to be scheduled the term after the student takes the related course

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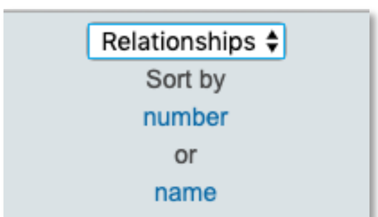
- Has a Load Prereq of – Courses that need to be scheduled before the student takes the related course

  The Coreq, Postreq, and Prereq relationships only relate to the current scheduling year. PowerScheduler does not check historical data for previous courses.
- Must Not Load Coreq With – Courses that cannot be scheduled during the same term
- Must Load Distinct With – Courses that cannot be loaded into overlapping terms (usually used in schools that use both semesters and trimesters)
- Must Load the Term After – Courses that should be loaded after the related course in sequential terms
- Must Load the Term Before – Courses that should be loaded before the related course in sequential terms

Defining Course Relationships

Use these steps to create a relationship between courses when loading student schedules. Note that when you define a relationship for one course with another course, you do not need to define the relationship for both courses. For example, if you make Chemistry a load prerequisite to Physics, you do not need to also make Physics a post-requisite to Chemistry. One relationship between the two courses is sufficient.

1. On the Start Page, click **PowerScheduler**
2. Below Resources, click **Courses**
3. From the menu at the top of the course list, choose **Relationships**



4. Click the name of the course for which you want to define a relationship, and click **New**
5. Click **Associate** and select a course to relate to the course you originally selected
6. Choose a relationship type from the menu
7. Click **Submit**

Step C: Defining Rooms

Your school's campus is essential to the scheduling process. In previous steps, you've created the necessary facilities and departments in your school. Now, update your room information as needed. Filter and sort the columns on the Rooms page so that you can quickly organize and locate rooms. Use the Search field to filter the list of rooms. Click a column heading to sort the list of rooms by room number, descriptions, department, maximum capacity, and so on.

When defining rooms, you can do any combination of the following:

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PowerScheduler: The Load Process – Steps B and C

- Auto-generate rooms based on rooms used in a previous, copied master schedule
- Update room information manually, one at a time
- Auto-create rooms to create a series of rooms with a predefined set of criteria
- Use the Update Selections function to update one field of information for a group of rooms at one time

Automatically Generating Rooms

To use the Auto Generate Rooms function, you must have defined rooms in a previous year and copied the master schedule from that year. The Auto Generate Rooms function overwrites any manual changes or rooms you created for the new schedule year, so perform this function before making manual changes or using the Auto Create Rooms function.

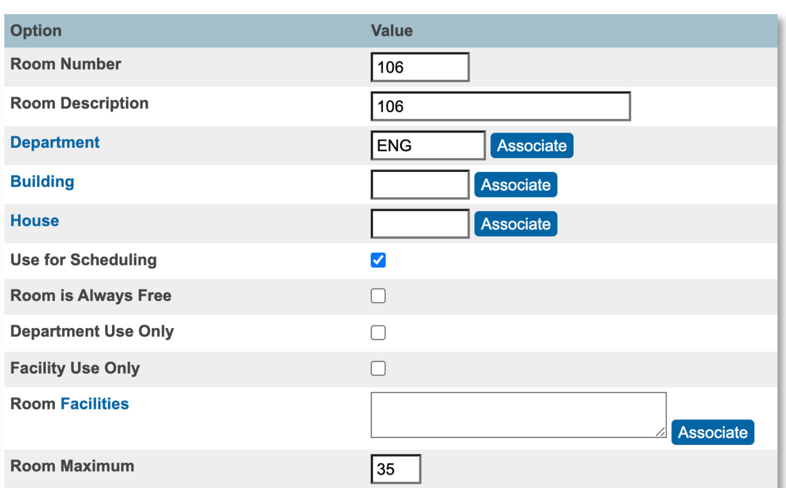
1. Below Tools, click **Functions** > **Auto Generate Rooms**
2. Check **Select checkbox to verify the command** to copy all rooms from the current year's master schedule to the new master schedule you are building
3. Click **Submit**

Defining Rooms Manually

Create a new room or edit an existing room one at a time in PowerScheduler.

1. In the PowerScheduler menu, below Resources, click **Rooms**
2. Click **New Room** to create a new room, or click a room number to edit an existing room
3. Enter or update the room number and room description
4. For Department, click **Associate** and select a department
5. Associate a building and/or house to the room, if applicable.
6. Check **Use for Scheduling** to ensure the room is used in the schedule

   If multiple classes can take place in the room at the same time throughout the school day, check **Room is Always Free**. Check **Department Use Only** to reserve the room for classes associated with the room's department, but keep in mind that this restricts the flexibility of the scheduling engine.



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7. Check **Facility Use Only** if the room contains a facility, such as a chemistry lab, and you want to restrict use of the room to classes that require that facility

   If the room contains a facility, click **Associate** > (Select the facility) > **Submit**.

8. Enter the room maximum

   The Room Maximum field is essential. Make sure that the course maximum does not exceed the room maximum.

9. Click **Submit**

Automatically Creating Rooms

You can create a set of rooms at one time with the Auto Create Rooms function. Once the system creates the rooms, you can go back to each room and modify the information manually as needed.

1. Below Tools, click **Functions** > **Auto Create Rooms**
2. Enter a start number, increment number, number of rooms, and a prefix to the room number, if applicable
3. Associate a department, building and/or house as needed
4. From the **Use for Scheduling** menu, choose **Yes**
5. Fill out the remaining fields as needed

   The remaining fields are optional and may or may not be appropriate to complete, depending on the group of rooms you are creating. For example, if you are creating rooms for a new wing of the school, but the room maximums vary, leave the **Room Maximum** field blank or enter the most common maximum, and change the exceptions after auto-creating.

6. Click **Submit** to create the rooms with the scheduling information you defined

Modifying Room Data Using the Update Selections Function

Mass update one field for a group of rooms using the Update Selections function. Using the Update Selections function is similar to using DDE/DDA to search for information from PowerSchool SIS tables. In PowerScheduler, searches and modifications are limited to the tables used for scheduling.

1. Below Tools, click **Functions** > **Update Selections**
2. From the **Current Table** menu, choose **ScheduleRooms**
3. Do one of the following:
   a. Click **Select all [xx] records in this school** to select all rooms

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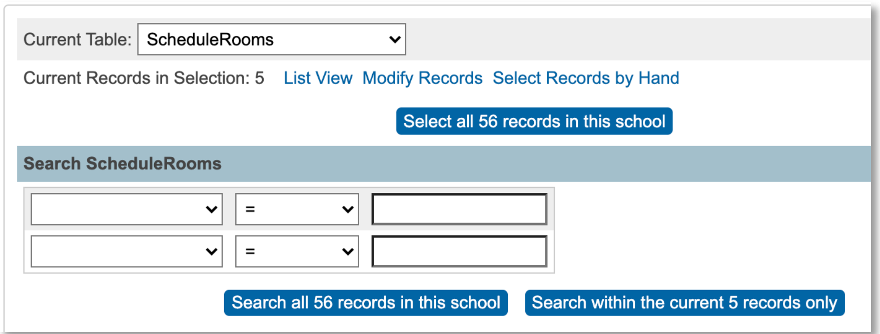
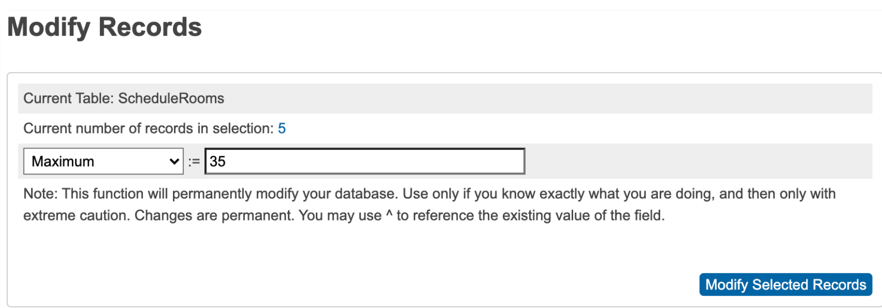
PowerScheduler: The Load Process – Steps B and C

b. Use the Search ScheduleRooms fields to search for and select rooms that meet specific criteria, such as all rooms in the English Department



4. Click **Modify Records**
5. Choose the room field you want to edit from the menu

   For example, all the rooms in the English Department need the same room maximum, so choose **Maximum**.
6. Enter a value for the selected rooms, such as ***35***



7. Click **Modify Selected Records**
8. Click **Confirm Modify Selected Records**

Summary

You have completed the next two steps in the Load Process. In Steps B and C, you:

- Defined course preferences by updating course information manually and/or by using the Auto Fill Course Information, Auto Generate Course Information, and/or Update Selections functions
- Added new courses for next year
- Created course prerequisites for new and/or existing courses
- Created course relationships
- Defined classrooms by updating room information manually and/or by using the Auto Create Rooms, Auto Generate Rooms, and/or Update Selections functions

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PowerScheduler: The Load Process – Steps B and C

While completing the scheduling process, the PowerSchool SIS Help menu is another great source of information. On any PowerSchool SIS or PowerScheduler page, click the **Help** icon to search for information about PowerScheduler. Next, continue in the Load Process with Step D.

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PowerScheduler: The Load Process – Step D

You are preparing to load students into a master schedule that you copied from a previous year. So far you have created a scheduling scenario, created a scheduling course catalog, added new courses and prerequisites, and defined rooms. Next, you will prepare student and teacher information for scheduling. First, learn how to update student scheduling preferences manually using the Auto Fill Student Information function and the Update Selections function. Then learn how to prepare teacher information both manually and by using the Auto Fill Teacher Information function.

A. Auto Scheduler Setup
B. Define Course and Section Information
C. Define Rooms
D. Prepare Teacher and Student Information
E. Enter Student Course Requests
F. Adjust the Master Schedule Manually
G. Define Load Constraints
H. Load Students
I. Evaluate the Load
J. Explore Post-Load Options
Schedule Complete

Step D: Preparing Student and Teacher Information

Student Information

In PowerScheduler, "student information" doesn't refer to student demographic information like addresses and phone numbers. Instead, student information refers to scheduling preferences, such as next year's grade level and next school indicators. For successful scheduling, you must define student information before entering student requests. For example, the Next Year Grade field not only tells PowerSchool SIS what grade level the student will have next year, but also which request form to associate with the student. First, move student information to PowerScheduler. Then update student scheduling preferences manually or by using the Auto Fill or Update Selections functions.

Moving Student Information to PowerScheduler

Before you can start scheduling students, use the Scheduling Setup student page and the Next School Indicator to move student information to PowerScheduler.

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PowerScheduler: The Load Process – Step D

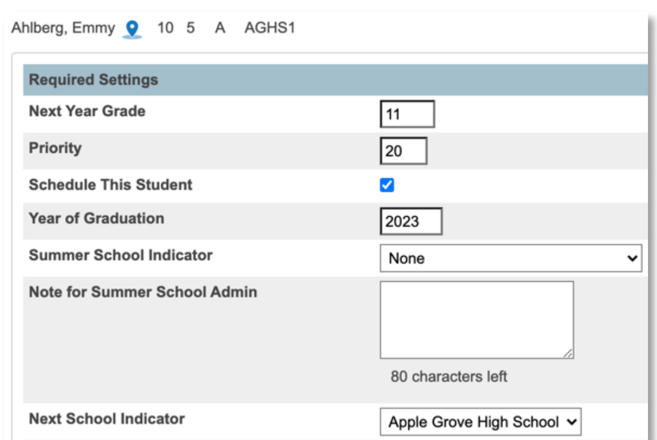
Move Student Information to PowerScheduler

Begin the process on the live side of PowerSchool SIS with the Scheduling Setup student page.

1. On the school's Start Page, search for and select a student who will attend this school next year
2. From the student menu, below Scheduling, click **Scheduling Setup**

   As you enter new students into PowerSchool SIS, complete the Scheduling Setup page as part of the data entry process. Then, each year, the Scheduling Setup page will be updated with the end of year process. While you complete several fields on the Scheduling Setup page, only one field places a student in PowerScheduler: the Next School Indicator.
3. In the **Next Year Grade** field, enter the appropriate grade level
4. Check **Schedule This Student**
5. From the **Next School Indicator** menu, choose the appropriate school

   If you don’t have options in the Next School Indicator menu, navigate to the Start Page. Click **School** > **Next School** > **New** to add the next school options.



6. Click **Submit**

   You don’t have to set the Next Year Grade, Schedule This Student, or Next School Indicator fields manually for every student. Use the Student Field Value or Next School Indicator group functions to set these fields for an entire grade level.

   On the Start Page, select a group of students. Click the **Select Function** arrow and then click **Next School Indicator**. Use the group functions on a regular basis to update any new student records that might be missing this information. Keep in mind that when you run the group functions for the highest grade level in your school, those students will be graduating or moving to a different school. The remaining fields on the Scheduling Setup page will be covered in the next section.

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PowerScheduler: The Load Process – Step D

Updating Student Scheduling Preferences

You must enter scheduling preferences before your students start submitting requests. If you don't enter the preferences, students will have access to the wrong request forms or no request forms at all.

You can enter or update scheduling preferences using any of the following methods:

- Update or enter scheduling preferences for each student manually, one at a time
- Auto-fill scheduling preferences for students by year of graduation
- Use the Update Selections function to update a field of information for several students at a time

Update Student Scheduling Preferences Manually

Depending on the number of students at your school, you might choose to update scheduling preferences manually, one at a time. However, manually updating takes the most time.

1. On the Start Page, click **PowerScheduler**
2. Below Resources, click **Students**
3. Search for and select a student or group of students

   The students you select appear in the students menu on the left.
4. Choose **Preferences** from the menu at the top of the student list, and click a student's name
5. Enter the next year grade or verify that it is correct

   The Next Year Grade field indicates the request screen each student will use to submit his or her course requests for the next school year, and which grade level the student will be promoted to.
6. Enter a number in the **Priority** field or verify that it is correct

   Use the Priority field to indicate which students PowerScheduler is to schedule first. For example, upcoming seniors have a higher priority than upcoming freshman. The lower the number, the higher the priority. Use the priorities 10, 20, 30, and 40. If you have one senior who needs a higher priority than the rest, enter the priority 9. Use the priority gaps for scheduling flexibility.
7. Verify that **Schedule This Student** is checked for every student you want to schedule

   The "Schedule This Student" check box includes the student in the load process. If this box is not checked, the student's information will not be moved to the PowerScheduler side, and the student will not be scheduled. Make sure to clear this box for graduating students.
8. Enter the student's graduation year in the **Year of Graduation** field
9. Verify that the **Next School Indicator** field is set to the correct school

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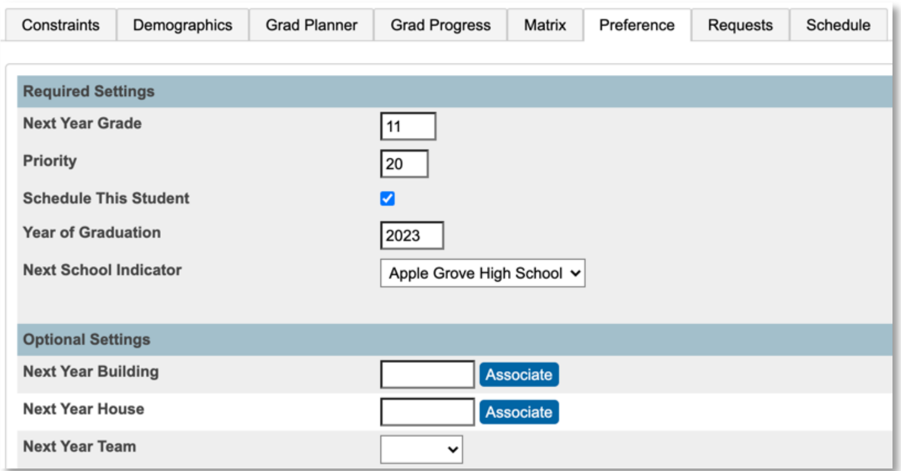
PowerScheduler: The Load Process – Step D

10. Complete the Optional Settings section if your school uses buildings, houses, and/or teams

    Buildings, houses, and teams are described and set up in Step C.



11. Click **Submit**

12. Repeat steps 5–11 to enter scheduling preferences for each of the students you select

Automatically Filling Student Scheduling Preferences

Use the Auto Fill Student Information function to enter student information for a group of students. You can use the Auto Fill Student Information function as often as you'd like to make sure all students' scheduling preferences are entered in PowerScheduler. However, you should not use the function once you start making manual changes for the students who are being retained. When you retain students, you switch their Next Year Grade, Year of Graduation, and possibly the Next School Indicator fields; consequently, if you use Auto Fill after you have processed a retained student, you will overwrite the students' retention information.

1. In the PowerScheduler menu, below Tools, click **Functions** > **Auto Fill Student Information**

   The Auto Fill Student Information page is always blank and does not store the information you auto-filled last.

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2. Enter information by grade level. You can auto-fill information for one or more grade level at a time, or for all grade levels. Enter the next year grade level, scheduling priority number, and graduation year. Use the menu to indicate whether or not to schedule each grade level.

   When entering information for 12th graders, remember that graduating seniors don’t need to be scheduled next year.

Field Name	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Next Year Grade	9	10	11	12	99
Priority	40	30	20	10	
Schedule This Student	Yes	Yes	Yes	Yes	No
Year of Graduation	2026	2025	2024	2023	2022

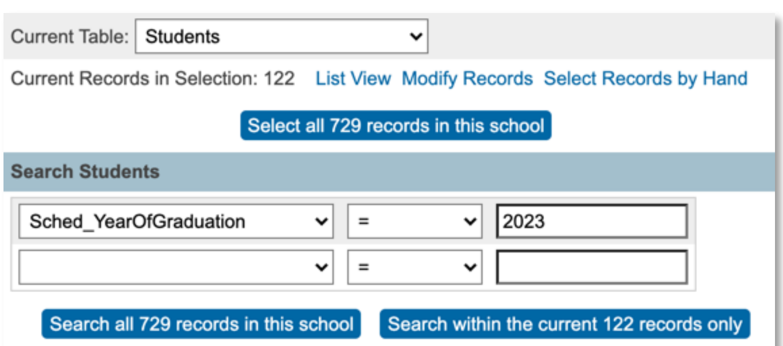
3. Click **Submit**

Updating Student Scheduling Preferences Using the Update Selections Function

You can also use the Update Selections function to enter and/or modify student scheduling information for a selection of students.

1. Below Tools, click **Functions** > **Update Selections**
2. From the **Current Table** menu, choose **Students**
3. Do one of the following:
   - Click **Select all [xx] records in this school** to select all students
   - Click **Select Records by Hand** to select a specific group of students

   Use the Search Students fields to search for and select students who meet specific criteria, such as all students graduating in 2023.



4. Click **Modify Records**
5. Choose the student field you want to edit from the menu

   For example, to identify the team the selected students will be scheduled with next year, choose **Sched_NextYearTeam**.

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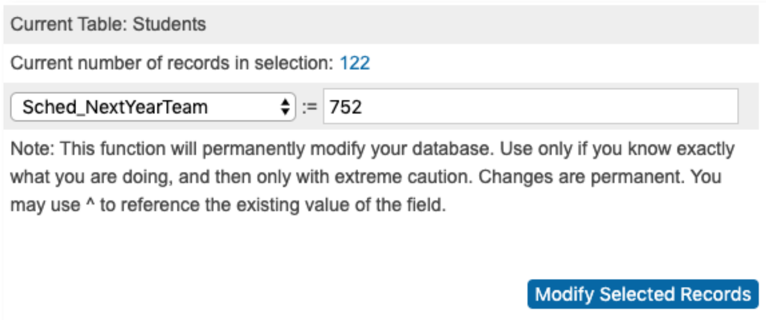
PowerScheduler: The Load Process – Step D

6. Enter a value in the blank field, such as the team ID

   You can find this ID number by clicking **Teams** in the Scheduling Setup section of the navigation menu.

7. Click **Modify Selected Records**
8. Click **Confirm Modify Selected Records**

Teacher Information

Update teacher scheduling information for every teacher who instructs at least one course at your school. In order to schedule a teacher, you must make the teacher active in PowerScheduler by checking Schedule This Teacher. Uncheck Schedule This Teacher for teachers who will not be teaching classes at your school next year. You can make these updates manually or use the Auto Fill Teacher Information function to update scheduling information for a group of teachers.

Moving Teacher Information into PowerScheduler

Update teacher scheduling preferences by moving teacher records into PowerScheduler. Begin on the live side of PowerSchool SIS. Since the master schedule is already built, you do not need to update the fields on the Schedule Setup page for returning teachers. Complete the entire Schedule Setup page for a new teacher.

1. On the Start Page, click **Staff Search**
2. Search for and select the new teacher
3. Click **Schedule Setup**
4. Next to the Department field, click **Associate**
5. From the Choices Dialog window, select a department
6. Click **Submit**
7. Next to the Preferred Room, click **Associate**
8. From the Choices Dialog window, select a room number
9. Click **Submit**

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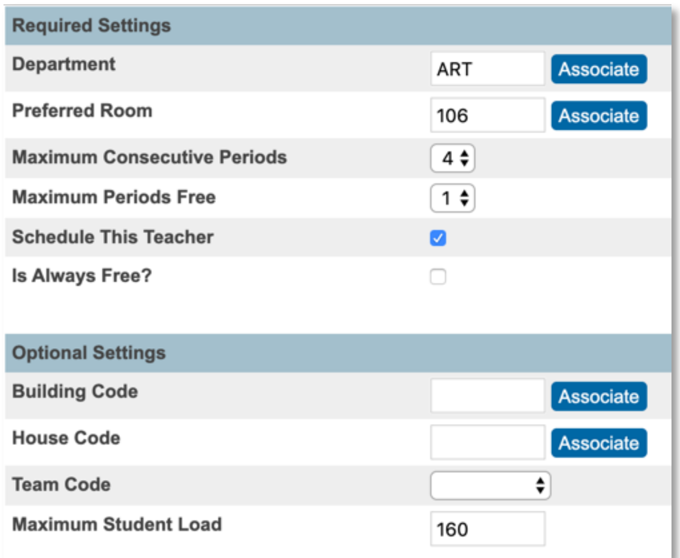
PowerScheduler: The Load Process – Step D

10. Check **Schedule This Teacher**

    If a teacher won't be returning next year, clear the **Schedule This Teacher** check box.



11. Click **Submit**

    You don't have to complete this field manually for every teacher. One option is to use the **Set Staff Field Value** group function on the live side of PowerSchool SIS. First, click **Staff Search**. Select your teachers, click the **Select Function** arrow, and click **Set Staff Field Value**. Select the field **Sched_Scheduled** for the field to change and enter ***True*** for the new field value. Click **Submit** to save the changes. Review the information that will be changed and click **Submit** to confirm the changes.

Automatically Filling Teacher Information

Use the Auto Fill Teacher Information function to fill in some teacher information simultaneously for all teachers or for a group of teachers. Use the Update Selections function to select a group of teachers, or auto-fill information for all teachers by skipping steps 2–4 in the following instructions.

1. On the Start Page, click **PowerScheduler**
2. Below Tools, click **Functions** > **Update Selections**
3. From the **Current Table** menu, choose **Teachers**
4. Click **Select all [xx] records in this school**
5. Do one of the following:
    a. Click **Select Records by Hand**, select the teachers you want to auto-fill with teacher information, and click **Submit**
    b. Use the Search Teachers fields to search for and select teachers who meet specific criteria, such as all teachers in the English Department, then click **Search within the current [xx] records only**
6. Below Tools, click **Functions** > **Auto Fill Teacher Information**

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PowerScheduler: The Load Process – Step D

7. Select to apply the changes to all teachers or those you just selected
8. Complete the fields you want to auto-fill for the selected teachers

   For example, choose **Yes** from the **Schedule This Teacher** menu.
9. Click **Submit**

Summary

You have completed the next step in the Load Process. In Step D, you:

- Moved student information to PowerScheduler
- Updated student information manually and/or by using the Auto Fill Student Information and Update Selections functions
- Moved teacher information into PowerScheduler
- Defined teacher scheduling preferences manually and/or by using the Auto Fill Teacher Information function

While completing the scheduling process, the PowerSchool SIS Help menu is another great source of information. On any PowerSchool SIS or PowerScheduler page, click the **Help** icon to search for information about PowerScheduler. Next, continue in the Load Process with Step E.

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PowerScheduler: The Load Process – Step E

You are in the middle of your preparation to load students into a master schedule for next year. So far, you have created a scheduling scenario and a scheduling course catalog, and you defined scheduling settings, rooms, and student and teacher information. Next, you will prepare to enter student course requests. Once you define your school's grade-level requirements, you will learn how teachers and administrators enter course recommendations in PowerTeacher and PowerSchool SIS. Then you will create course groups and student course request pages. Next, learn how to enter student course requests in PowerScheduler, in the PowerSchool SIS Student and Parent Portals, and in PowerSchool SIS. Finally, learn how to override course prerequisites and use course request tools.

A. Auto Scheduler Setup
B. Define Course and Section Information
C. Define Rooms
D. Prepare Teacher and Student Information
E. Enter Student Course Requests
F. Adjust the Master Schedule Manually
G. Define Load Constraints
H. Load Students
I. Evaluate the Load
J. Explore Post-Load Options
Schedule Complete

Step E: Entering Student Course Requests

It's important to complete all the previous steps of the scheduling process before entering student course requests for next year. This means performing the Auto Schedule Setup, copying a previous master schedule, creating a new scheduling course catalog, and updating student and teacher information. Once you have completed these steps, it is time to gather student course requests. Begin by defining the grade-level requirements for your school.

Defining Grade-Level Requirements

Before starting the process of creating request screens, spend some time researching and gathering course information for each grade level at your school. Outline the grade-level course requirements to save time and avoid errors when creating course groups and request screens. First, collect the following information for each grade level:

- Required courses
- Number of credits students must earn
- Possible semester elective courses
- Possible year-long elective courses

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- Possible no-credit courses
- Number of terms for each request
- Before- or after-school courses
- Possible lunch periods

Take the time to gather requirement information first so you can perform all of the following steps efficiently. You will use this information to create course groups and course request pages for each grade level.

Course Recommendations

Teacher recommendations are another element of the request process. Certain courses will require a teacher's recommendation prior to submitting course requests. Teachers submit their recommendations in PowerTeacher. You can edit and delete recommendations in PowerSchool SIS. Administrative staff members can also submit recommendations using Request Management on the student pages menu.

Adding Recommendations in the PowerSchool SIS Teacher Portal

Teachers can enter course recommendations one student at a time or for multiple students at once in the PowerSchool SIS Teacher Portal. Teachers can recommend only the courses available at their school, and they can only create recommendations for students they teach.

1. On the PowerTeacher Start Page, click **Recommendations**
2. Click **Create Recommendations**
3. Select the classes in which the students are enrolled, or check the **Class(es)** box in the upper-left cell of the table to select all classes

Class(es)

☐	Period / Day	Section Number	Course Name	Course Number
☑	1(A)	2	U.S. History	SOC1000
☐	3(B)	3	Current Affairs	SOC2000
☑	4(A)	5	U.S. History	SOC1000

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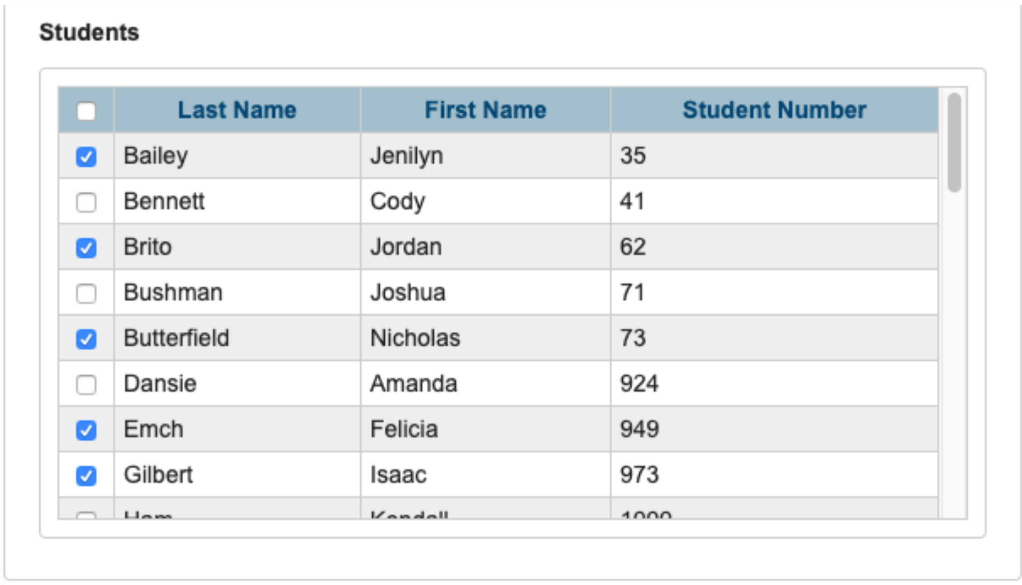
4. Select the students for which you want to submit the recommendation, or check the **Students** box in the upper-left cell of the table to select all students



Students

☐	Last Name	First Name	Student Number
☑	Bailey	Jenilyn	35
☐	Bennett	Cody	41
☑	Brito	Jordan	62
☐	Bushman	Joshua	71
☑	Butterfield	Nicholas	73
☐	Dansie	Amanda	924
☑	Emch	Felicia	949
☑	Gilbert	Isaac	973

5. Click **Next**
6. Choose the year for which to submit the recommendation
7. Check the course you are recommending for these students, such as **Current Affairs**
8. In the **Comments** field, enter a comment describing the recommendation, such as ***Recommend placement in Current Affairs based on student success in U.S. History.***
9. Click **Submit**

   Edit or delete individual recommendations at any time by clicking the **Edit** icon.

Editing Recommendations in PowerSchool SIS

When a teacher submits a recommendation for a student, that recommendation will be listed on the Manage Recommendations student page. Administrative staff with access to the page can edit the recommendations and add new recommendations.

1. On the Start Page, search for and select a student
2. Click **Request Management** > **Manage Recommendations**
3. Click the **Edit** icon to make changes or to delete a recommendation
4. To enter a new recommendation, click **Create New Recommendation**
5. In the **Course Number** field, enter the beginning of the course number and select the course from the list that appears below
6. Choose the future scheduling year from the **Scheduling Year** menu
7. In the **Comments** field, enter a comment describing the recommendation, such as ***Counselor recommendation after student conference***

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8. Click **Submit**

Creating Course Groups

Use course groups to organize courses into groups that satisfy academic requirements, such as a requirement that students take at least one math class each semester. Course groups represent the range of courses that are available to a student for a particular request on the student request screens. For example, every senior must select an English class from the 12th Grade English course group that contains English 12, AP English, Creative Writing, and Journalism.

You can create as many course groups as needed for each grade level and subject at your school. Consider setting up different course groups for required courses, core academic courses, semester-long electives, and year-long electives for each grade level. Course groups carry over from year to year and can be edited as your school's course offerings change.

Create or Edit a Course Group

Create new course groups in PowerScheduler for next year or edit existing course groups. When students enter their course requests, they will be presented with options from the course groups you create.

To edit an existing course group, navigate to the Course Groups page and click the name of the course group you want to edit.

1. On the Start Page, click **PowerScheduler**
2. On the PowerScheduler menu, below Requesting, click **Course Groups**
3. Choose the order in which you want courses to be listed on the student course request pages from the menu

   You can sort courses by name or number.
4. On the left side, click **New** at the top of the group list
5. At the top of the list of courses, click **Current Catalog**

   Use the Current Catalog (the scheduling catalog created in PowerScheduler, not the School Master Schedule) when creating your course groups to ensure that a course group doesn't contain classes that are no longer offered.
6. Enter a name for the course group

   It is helpful to include the grade level and the subject in the name of the course group, such as ***11th-Grade Electives***.
7. From the **Type** menu, choose **Scheduling Only**

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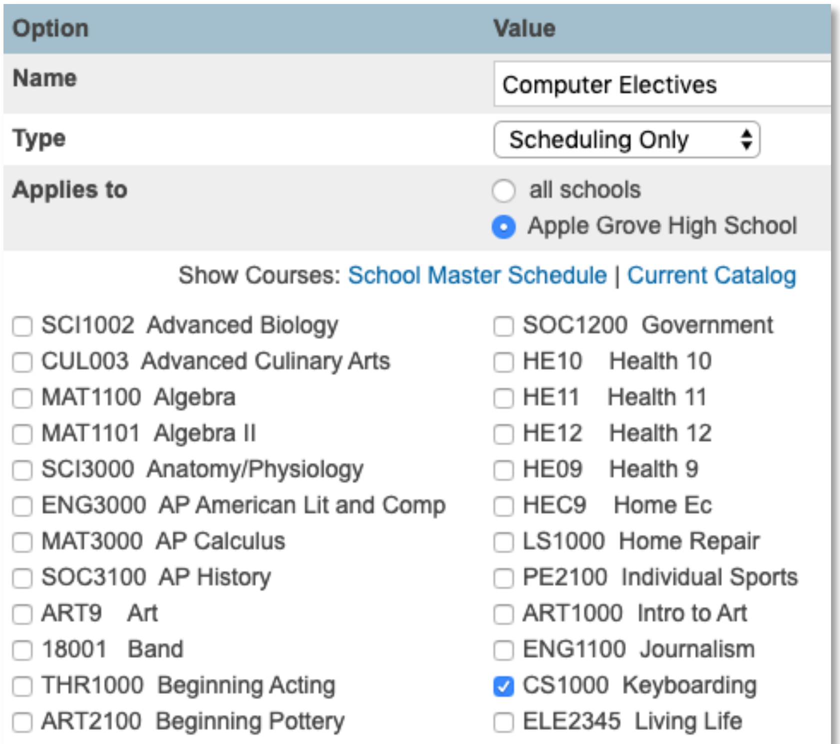
8. Select where to apply the course group: all schools or the current school. Check the name of each course that belongs to the course group



9. Click **Submit**

10. Continue creating course groups for each grade level and/or subject, or click the name of a course group to edit it as needed

Creating Requirements

The course requirements you create determine which courses students must take. Add course requirements to course request screens that students, parents, and staff members use to select classes from course groups. Course request screens and requirements are copied from year to year, so once you create them the first time, you can then edit existing screens as requirements change.

The three types of requirements are:

- Single-course requirement
- Multi-course requirement
- Core requirement

Single Course Requirements

Use a single-course requirement when students need to make just one selection from a course group. For example, the juniors must choose one English class from a list of possible English classes.

1. On the PowerScheduler menu, below Requesting, click **Screen Setup**

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2. Select the appropriate grade level

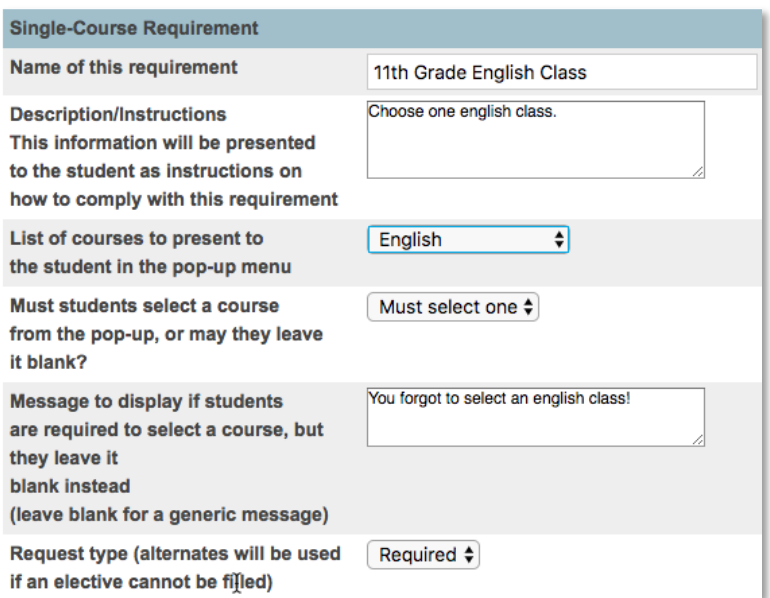
   Make sure to choose the grade levels the student will be in during the scheduling year.

3. Click **New Single Course Requirement**
4. Enter a requirement name and description/instructions for the students
5. From the menu, choose a course group that contains the list of courses that fulfill the requirement
6. Choose whether the student must select a course or may leave the requirement blank

   Complete the entire page to ensure a successful request form. For example, if each student must select a course from the group, choose **Must select one**.

7. Enter a message to display if the requirement isn't completed correctly, or leave this field blank to have a generic message appear for students
8. From the **Request type** menu, choose **Elective**, **Alternate**, or **Required**

   Use the "Request type" menu to define a general priority for the request. The system schedules required requests first, elective requests second, and alternate requests third. If an elective course cannot be scheduled, an alternate takes the elective's place.



9. Enter a sort order number for the placement of the requirement on the request screen

   For example, enter the sort order number ***0*** to place the requirement first. Complete the entire page to ensure a successful request form.

10. Click **Submit**

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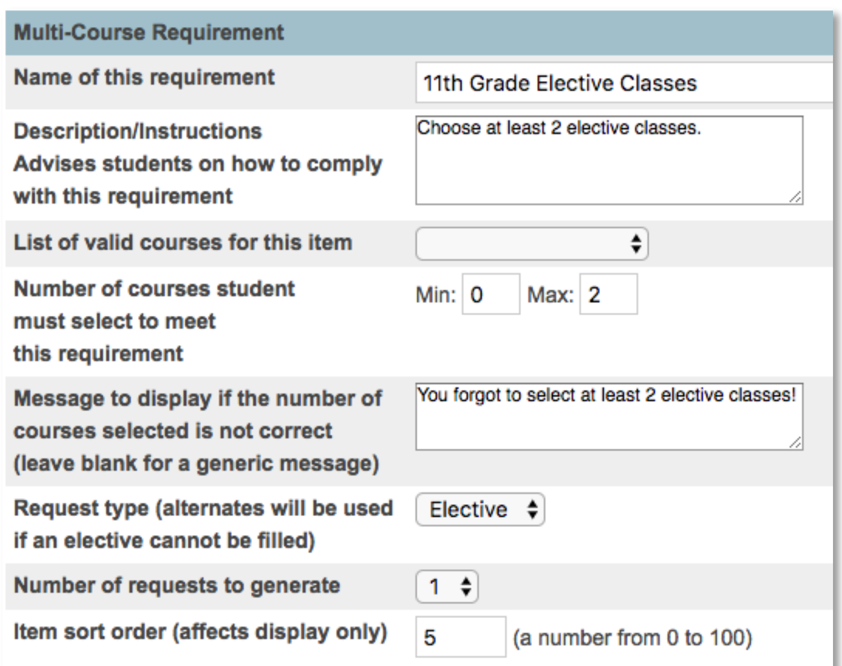
Multi-Course Requirements

Use a multi-course requirement when students need to choose several courses from a course group. For example, suppose 9th graders can choose up to two semester-long elective courses. You define the number they must select.

1. On the PowerScheduler menu, below Requesting, click **Screen Setup**
2. From the Requests menu, click the appropriate grade level
3. Click **New Multi-Course Requirement**
4. Enter a requirement name and description/instructions for the students
5. From the menu, choose a course group that contains the list of courses that fulfill the requirement
6. Enter the minimum and maximum number of courses the student must select

   For example, if the student can select up to two courses but isn't required to select a course, enter ***0*** in the **Min** field and ***2*** in the **Max** field.
7. Enter a message to display if the requirement isn't completed correctly
8. From the **Request type** menu, choose **Required**, **Elective**, or **Alternate**
9. Enter a sort order number for the placement of the requirement on the request screen



10. Click **Submit**

    When creating a multi-course requirement for electives, consider creating another multi-course requirement using the same course group so students can select their alternate electives from the same list.

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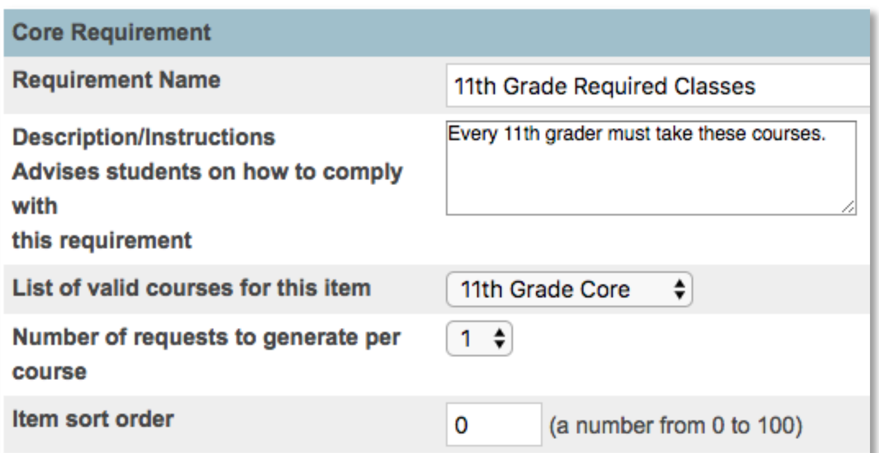
PowerScheduler: The Load Process – Step E

Core Requirements

Use a core requirement to display a set of predefined requests that all students in a grade level must take, such as core classes for 9th graders. These courses are selected automatically for students, and students cannot change selections or decline core requirements. Requests for the core requirements are added when the request page is submitted. For example, if PE09 is a core requirement, then every 9th grade student will be automatically assigned a request for PE upon submitting the request screen. You will need to manually remove the requests for any student with special circumstances who will not be taking the course.

1. From the PowerScheduler menu, below Requesting, click **Screen Setup**
2. From the Requests menu, click the appropriate grade level
3. Click **New Core Requirement**
4. Enter a requirement name and description
5. From the menu, choose a course group that contains the courses that fulfill the core requirement
6. Enter a sort order number for the placement of the requirement on the request screen



7. Click **Submit**

Previewing and Activating the Course Request Forms

Before activating the course request screens for parents and students and/or administrative staff, preview the screens to check for accuracy. Once you have previewed the screens, activate them for parents and students only, administrative staff only, or both groups. The course request screens contain separate check boxes to enable access to the registration screen for parents and students, and for administrative staff. You control who can access the screens and the length of time the screens are available by activating and deactivating the screens.

1. On the Start Page, click **PowerScheduler**
2. Below Requesting, click **Screen Setup**
3. From the Requests menu, click the appropriate grade level

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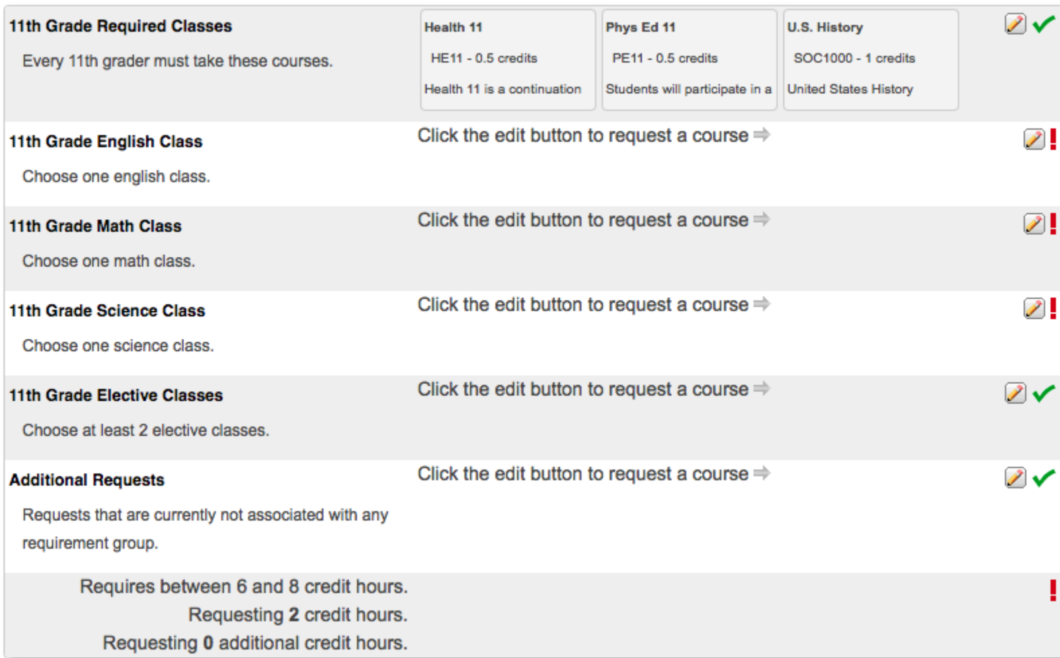
4. In the **Number of credit hours each student must submit** field, enter the **Minimum** number of credit hours and the **Maximum** number of credit hours needed for the grade level
5. Click **Submit** to save these changes
6. Next to PowerSchool SIS Student and Parent Portal, click **Preview Student Registration Screen**



7. Review the request form

   Click the **Edit** icon to edit the course requests for that requirement. The green check mark confirms a selection or signifies an optional requirement. The red exclamation mark indicates that the student has not selected a course yet to satisfy that requirement.
8. Navigate back to **Screen Setup** to make changes or to activate the screens for student and/or staff use
9. Check **PowerSchool Admin Portal** and/or **PowerSchool Student and Parent Portal** to enable access to the registration screens

   To disable access to the registration screens, repeat the process and clear the check boxes.
10. Click **Submit**

Entering Student Course Requests

You will learn three methods of entering course requests. Remember to preview and activate the request forms for each grade level so students, parents, or administrative staff members can enter requests.

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PowerScheduler: The Load Process – Step E

Use one of three methods for collecting student course requests:

- Enter requests manually for students one at a time
- Mass add requests for groups of students
- Have students use the course request form online

Students, parents, and/or administrative staff members enter course requests using the request screens. Students and their parents enter course requests in PowerSchool SIS Student and Parent Portals, and administrative staff members enter course requests using the Modify Future Requests student page in PowerSchool SIS or the Requests page in PowerScheduler.

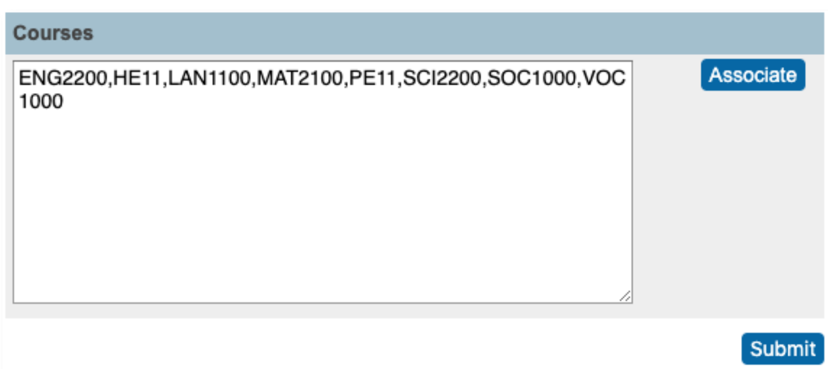
Entering Course Requests in PowerScheduler

You can enter course requests manually for individual students in PowerScheduler.

1. On the Start Page, click **PowerScheduler**
2. From the PowerScheduler menu, below Resources, click **Students**
3. Search for and select a student
4. Click **Requests** > **New Request** > **Associate**

   To select multiple courses, click the courses while holding the **Command** key on a Mac or the **Control** key on a PC.
5. Click **Submit**

   You cannot edit the courses in the text box. If you need to make changes, click **Associate** again.



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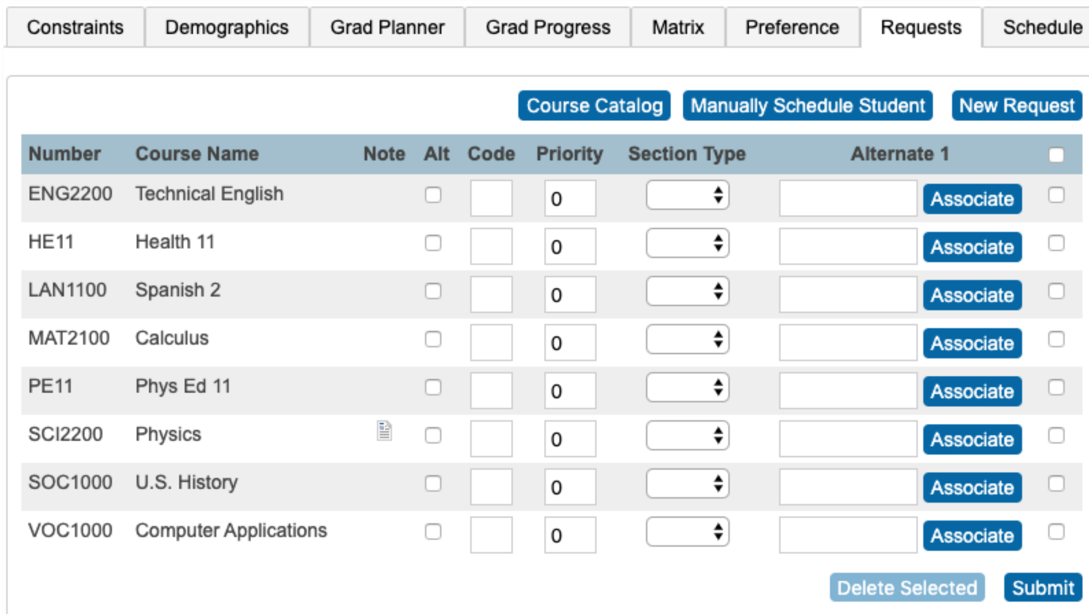
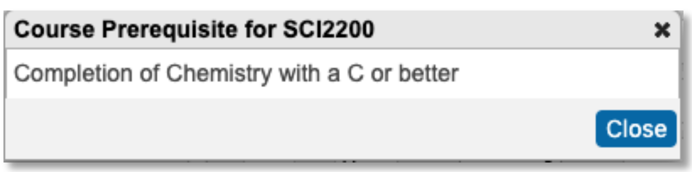
6. Click **Submit**



7. Click the **Note** icon to view prerequisite information



8. Enter ***E*** in the **Code** field for all elective courses

   Identifying elective courses is optional, but elective course requests are scheduled after required courses to optimize student schedules.

9. Check **Alt** next to any alternate elective course requests to mark the course requests as alternates for any elective courses that can't be scheduled

10. Use the **Priority** field to define alternate requests further

    Defining a course priority identifies an alternate course that needs to be scheduled before another alternate course. Enter ***1*** for the first alternate course, ***2*** for the next alternate, and so on. The higher the number, the lower the priority.

11. From the **Section Type** menu, choose an option if the course uses section types

    For example, Journalism has an honors section and a regular section. Choose **Honors** so the student won't be scheduled in the regular section of the course.

12. Click **Associate** to select an alternate for a course

    If PowerScheduler can't schedule the course, it will attempt to schedule the alternate. Selecting an alternate this way ensures the alternate course will replace only one specific course.

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13. To delete requests, check the box(es) on the right, then click **Delete Selected**

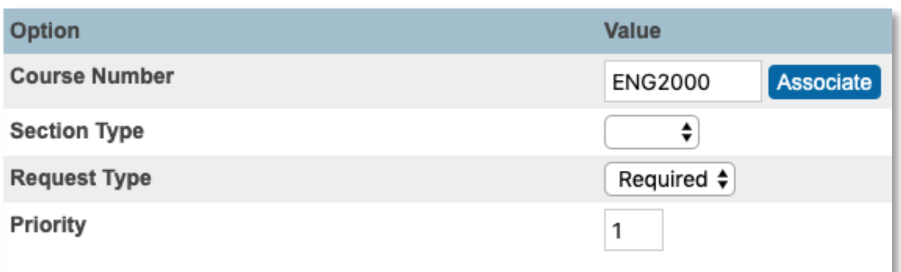
    To delete all requests at one time, check the box in the header next to **Alternate 1**, and then click **Delete Selected**. Click **Confirm Delete Selected**.

14. Click **Submit**

Entering a Course Request for Several Students

You can enter a course request for a group of students using the Mass Add Requests function in PowerScheduler.

1. On the Start Page, click **PowerScheduler**
2. Below Resources, click **Students**
3. Search for and select the students for whom you want to enter the course request, such as the entire current 10th-grade class
4. Click **Functions** > **Mass Add Requests**
5. Click **Associate** to select a course, then enter information in the fields



6. Click **Submit**
7. Click **Back**
8. Repeat steps 5–7 as many times as needed

Entering Course Requests in the PowerSchool SIS Student and Parent Portals

Students and/or parents can enter course requests online using the PowerSchool SIS Student and Parent Portals.

1. Enter your school's URL for the PowerSchool SIS Student and Parent Portals in the address field of your web browser
2. Enter your username and password, and click **Sign In**
3. Click **Class Registration**
4. Select your course requests
5. Click **Submit**

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Entering Course Requests in PowerSchool SIS

You can enter, edit, or delete course requests for a student on the live side of PowerSchool SIS using the Request Management student page. Do not modify requests on the Modify Current Requests student page. Requests on the Modify Current Requests page apply to the current school year. Instead, use the Modify Future Requests page to edit student requests for the future scheduling year.

1. On the Start Page, search for and select a student
2. Click **Request Management** > **Modify Future Requests**
3. Select, edit, or delete the student's course requests
4. Click **Submit**

Finding and Resolving Invalid Requests

Student requests may be identified as invalid for a variety of reasons. For example, you may define some prerequisites based on the assumption that students will complete or pass the prerequisite course. If students don't complete or pass the prerequisite courses, their requests for those courses become invalid. Additionally, students who change schools during scheduling season may have course requests at their old school and/or requests for courses that are not offered at their new school. You can use functions on the live and scheduling side to find and resolve invalid requests.

Invalid Requests Group Function

After mass adding requests or manually adding requests, perform the Invalid Requests group function on the live side. The Invalid Requests function collects all the requests a selection of students has made for the specified school year and re-evaluates each request against the course prerequisites and recommendations.

1. On the live side of PowerSchool SIS, on the Start Page, select a group of students
2. Click the **Select Function** arrow and under Scheduling choose **Invalid Requests**
3. Select **Re-evaluate and display new results**
4. Select the future scheduling year
5. In the Courses area, choose to evaluate requests for all courses, courses in a given department, or for a certain course
6. Click **Submit**
7. Click **Make these students the current selection**
8. Select the first student and navigate to his or her Request Management page
9. Click **Modify Future Requests**
10. Make the necessary changes to the student's requests and **Submit** the changes

Resolve Invalid Requests Function

When students change schools during scheduling season, their requests may become invalid because the requests are associated to the wrong school or the wrong course. Use the Resolve Invalid Requests function to replace these requests and avoid validation errors.

1. Navigate to the scheduling side by clicking **PowerScheduler**

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2. On the PowerScheduler menu, under Tools, click **Functions**
3. Click **Resolve Invalid Requests**

   Optionally, use the Filter section to filter the requests by course name, course number, status, school, and/or student name, and then click **Apply**. Sort the requests by clicking the name of a column.
4. Resolve the invalid requests by deleting the requests, changing an invalid school, or changing an invalid course

   To remove the invalid requests, check the requests, then at the bottom of the page click **Delete Requests**. Then click **Confirm Delete Requests**.

   To resolve requests that are invalid because of a change in school, check the requests. Then at the bottom of the page, click **Change School**.

   To resolve requests that are invalid because they apply to an invalid course, check the requests, then at the bottom of the page, click **Change Course**. Assign a new course to the requests.

Managing Recommendations and Prerequisites

Unfulfilled course prerequisites stop a student from requesting a course. Course requirements include taking or passing a prerequisite course, having a teacher recommendation, or a combination of these requirements. Define course requirements in the Course information found in School Setup or District Setup.

When students select from a course group on the request screens, they check the classes they want to take. However, students cannot check classes if they haven't met the prerequisites. For example, a new 10th-grade student wants to take Speech. However, he can't select the course because he hasn't met the English teacher recommendation requirement. You can contact the English teacher for a recommendation for the new student, and if the teacher agrees, then enter a recommendation on the teacher's behalf on the student's Request Management page. Once on the Request Management page, click **Manage Recommendations** > **Create New Recommendation**.

Additionally, you can use the Override Prerequisites function to allow a student to request a course even if the prerequisites have not been met or use the function to validate a recommendation that was entered by an administrative staff member instead of a teacher. You can override a prerequisite by navigating to the student pages and clicking **Request Management** > **Override Prerequisites**.

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Course Request Reports

Once you or the students have entered all course requests, use the following reports and request tools to analyze and confirm the success of the request process. To find the reports, navigate to PowerScheduler and click **Reports**.

- Course Request Tally report – This report lists the number of primary and alternate student course requests by course. A course must have at least one request to appear on the Course Request Tally. Consider using this report to see how many teacher assignments you'll need for a course, to verify that students have requested a required course, and to determine if a low-enrollment course can be offered. Click a column heading to sort the report by course number, course name, type of request, and total requests.
- Requests by Course report – This report lists each course in your scheduling catalog and the names of students who have requested that course. Consider using this report to make sure the right students are requesting the right courses and to verify that student requests were entered properly.
- Requests by Student report – This report lists each student alphabetically along with the names of the courses that the students requested. Consider using this report to see which courses students have selected, to verify that student requests were entered properly, and to investigate students who have too many or too few requests.
- Student Request Tally report – This report lists the number of requests each student has made. Consider using this report to verify which grade levels have completed registration and to identify students who have entered too many or too few requests.

Summary

You have completed a critical step in the Load Process. Student course requests are the key to scheduling. In Step E, you:

- Entered course recommendations in PowerTeacher and edited them in PowerSchool SIS
- Created course groups for course request screens
- Set up single, multi-, and core requirements for student request screens
- Previewed and activated course request screens
- Entered individual and group student course requests in PowerScheduler, PowerSchool SIS Student and Parent Portals, and PowerSchool SIS
- Learned about creating recommendations, finding invalid requests, and overriding course prerequisites
- Found course request reports and tools to analyze the request process

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PowerScheduler: The Load Process – Step E

While completing the scheduling process, the PowerSchool SIS Help menu is another great source of information. On any PowerSchool SIS or PowerScheduler page, click the **Help** icon to search for information about PowerScheduler. Next, complete the Load Process with Steps F-J.

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PowerScheduler: The Load Process – Steps F-J

You are nearly done preparing to load students into a master schedule for next year. So far, you have created a scheduling scenario and course catalog, defined scheduling settings, including student, teacher, and course information, and collected student course requests. Now it's time to make manual adjustments to the master schedule, define load constrains, load students into the schedule, evaluate the load, and explore post-load options.

A. Auto Scheduler Setup
B. Define Course and Section Information
C. Define Rooms
D. Prepare Teacher and Student Information
E. Enter Student Course Requests
F. Adjust the Master Schedule Manually
G. Define Load Constraints
H. Load Students
I. Evaluate the Load
J. Explore Post-Load Options
Schedule Complete

Step F: Adjusting the Master Schedule Manually

The master schedule you are copying will need to be adjusted to fit next year's requirements. Make manual adjustments to sections before you load students. For example, you might need to move a course section to a different day or period or assign a section to a different teacher.

1. On the Start Page, click **PowerScheduler**
2. On the PowerScheduler menu, below Schedule, click **Sections**
3. Click the course for which you want to adjust a section
4. Click the section number of the section you want to edit

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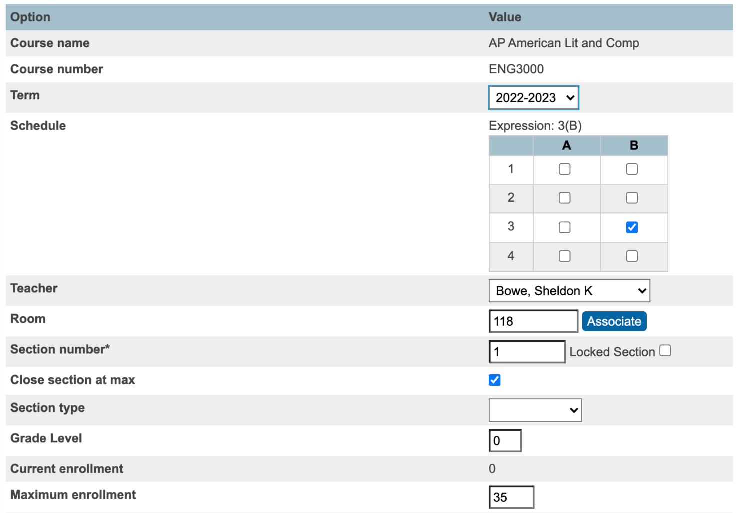
5. Enter or edit information in the fields or menus as needed



Option	Value
Course name	AP American Lit and Comp
Course number	ENG3000
Term	2022-2023
Schedule	Expression: 3(B)
Teacher	Bowe, Sheldon K
Room	118 Associate
Section number*	1 Locked Section
Close section at max	
Section type	
Grade Level	0
Current enrollment	0
Maximum enrollment	35

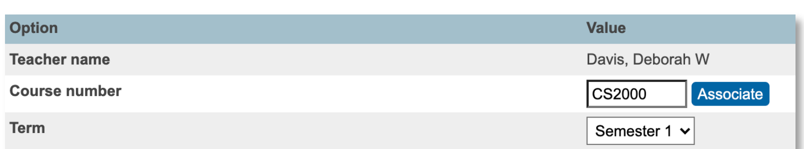
	A	B
1		
2		
3		
4		

6. Click **Submit**

Changing Teacher Sections

What if a teacher is no longer teaching a certain course section? You know that a teacher will still be teaching courses at your school, but one of her sections needs to be associated to a different course. For example, instead of teaching a section of Word Processing, Ms. Davis will be teaching a section of Programming C++. Rather than deleting the Word Processing section and adding a section of Programming C++, change the course associated with the Word Processing section.

1. On the Start Page, click **PowerScheduler**
2. Below Resources, click **Teachers**
3. Select the teacher name for which you want to adjust a section
4. Click the **Schedule** tab
5. Select a section number
6. Next to the course number, click **Associate**



Option	Value
Teacher name	Davis, Deborah W
Course number	CS2000 Associate
Term	Semester 1

7. Select a new course then click **Submit**
8. Change any other section information as needed then click **Submit**

If you wish to update settings for a group of sections, such as changing all rooms for the Chemistry sections at once, use the **Update Selections** function. With the Update Selections function, you can select, modify, and delete several scheduling records at once. Follow the steps in the Load Process Step C (Modifying Room Data Using the Update Selections Function) but change your search criteria to identify and update the needed sections.

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Using the Visual Scheduler

You copied your master schedule and made some changes manually, but you still have more changes to make. Once you've completed your scheduling setup, use the Visual Scheduler to make master schedule changes manually. The Visual Scheduler is a tool you can use to view your school's master schedule in a block format, like a whiteboard but with the versatility of a computer. Use the Visual Scheduler to see how course sections fit together before you begin loading students into those classes.

Making Schedule Changes with the Visual Scheduler

Many schedulers use a whiteboard to see their schedule and understand the big picture. The Visual Scheduler mirrors that same principle. The schedule grid is a digital whiteboard. Each section tile in the Visual Scheduler displays section information, including the course name, course and section number, and the number of enrolled students. Determine the term length by the size of the section tile. A yearlong section fills the entire section cell, a semester section fills half of the cell, and a quarter section fills a fourth of the cell.

Teacher names represent the columns, and periods represent the rows. The cell colors identify the target number of sections for the course. Singleton courses are pink, doubleton courses are green, courses with three or more sections are gray, and cells with gray stripes mean the teacher has a teacher-free constraint for that period. If you copied the master schedule and have not completed the course setup, all courses will appear as gray tiles, regardless of the number of sections.

A die icon makes PowerScheduler accessible to color-blind users. The icon, displayed in the lower-right corner of the cell, shows one dot for a singleton course and two dots for a doubleton course, ensuring that those who can't distinguish the colors know that there are only one or two sections of the course.

If you do not see the right information in the Visual Scheduler, review your setup information. Perform these setup tasks before using the Visual Scheduler:

- Make courses available for scheduling
- Perform the Auto Scheduler Setup
- Set the schedule year
- Create the course catalog
- Copy the master schedule
- Format course and section preferences
- Define rooms
- Update student and teacher scheduling information
- Enter student requests

The Visual Scheduler contains several tools you can use to adapt your view of the grid. Click the magnifying glass icons to zoom in and out. Zoom in to the section tiles when the terms are shorter in length, or when you have multiple sections scheduled for the same teacher, day, period, and term. Zoom out to view the master schedule at a higher level and identify gaps in the schedule.

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Next to the Courses column title, click the first blue icon to filter the courses. Apply a filter to show all courses or courses that are not scheduled. Also, filter courses by term length so that you can schedule the longer-term length classes first, then the shorter-term length classes. Then, click the second blue icon to sort the listed courses. Sort the courses by options such as course name or course number. Use the sort function to quickly access the courses you want to schedule next.

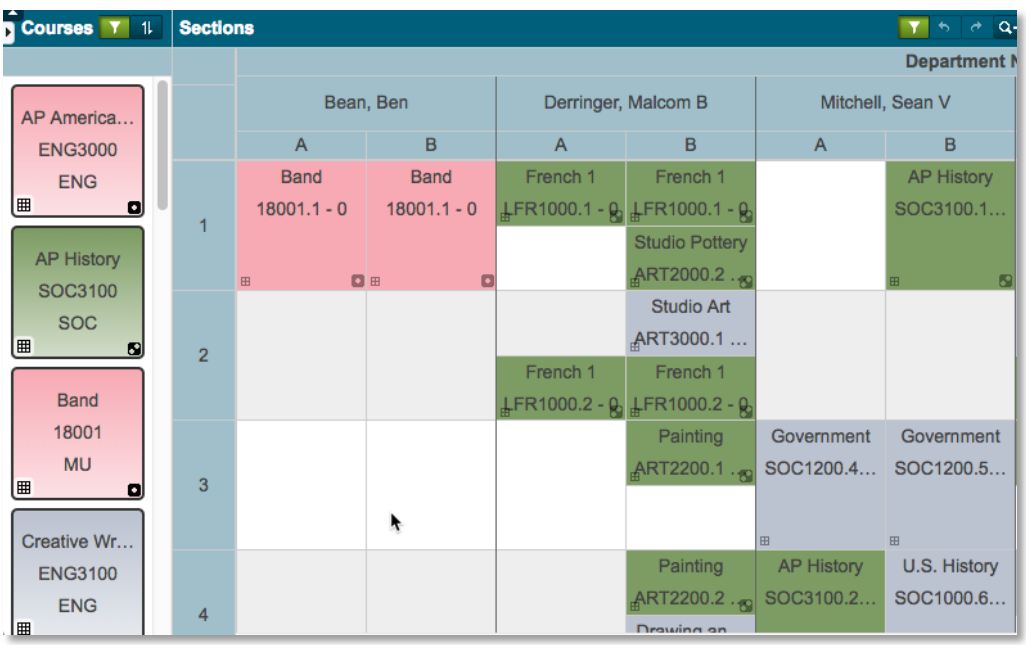
Just like you filtered the courses you would see in the Courses column, filter the sections you see on the grid. Filter the sections using four categories: teacher, time, location, and section. For example, filter by period, and select one period or multiple periods.

You can move courses and sections around on the schedule from one place to another by dragging and dropping the tiles. You can also undo and redo changes you make on the grid using the forward and back arrow icons in the upper-right corner.

Follow these steps to filter, sort, move, and change course sections using the Visual Scheduler.

1. On the Start Page, click **PowerScheduler**
2. Below Schedule, click **Visual Scheduler**

   Begin by setting filters so you see only the courses and sections that you want to work with.



3. Above the Courses column, click the **Filter** icon
4. Select a term
5. Select to view all courses or unscheduled courses
6. Click **Filter**

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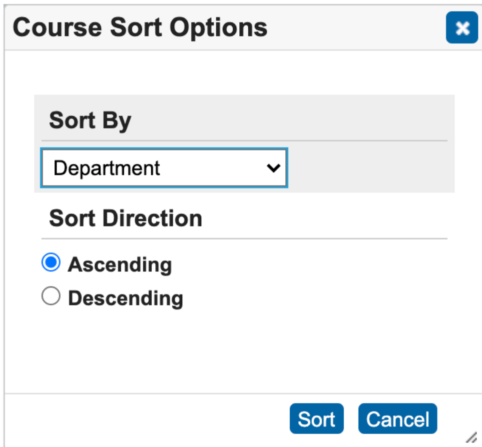
7. Next to the Filter icon, click the **Sort Criteria** icon



8. Choose **Department** and click **Sort**

   The courses will now be listed by department instead of course name.
9. To create a new section, click and drag a course to an open cell on the grid

   Multiple courses and sections can occupy a cell.
10. To move a section to another period, click and drag the section to the correct cell
11. Above the grid to the right of Sections, click the **Filter** icon to narrow the course sections
12. Choose a filter or filters

    To remove a filter, click **x** next to it or to remove all filters, click **Clear Filters**.
13. Click **Filter**
14. Click a section name view and edit the section details

    Make adjustments to the section. For example, change a room number, increase the maximum enrollment, or select a different period. Also, you may see alerts for invalid section details. After you've performed a load, click the current enrollment number to see the students scheduled in this section.
15. Click **Save**

    Click **Delete** if you want to remove the section completely.
16. Hover your cursor over the square icon in the lower-left corner of the section to view course request information

    For each course, you can view the total number of course requests and the number of course requests that students have in common with other courses.
17. Move your cursor away from the window to close it

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18. Below the Zoom icons, click the small triangle to open the Seats Available Chart

    The Seats Available Chart shows a dynamic count of the number of seats available for each period and grade level. For example, if 100 7th graders are enrolled in your middle school, then you might need 4 course sections with a maximum enrollment of 30 students per class for Period 1. So you would have 120 seats available for 100 students during that period. If zero seats are available, check your course preferences and student requests.

Seats Available Chart

Grade 9 0	Grade 10 124	Grade 11 108	Grade 12 162
0	74	106	139
	74	106	139
0	115	79	123
	115	79	149
0	92	55	93
	92	55	119

Once you have formatted the grid, you can start making changes to the schedule. For example, select a section cell to change a room number, or drag and drop a section cell to change the teacher. Although you can make changes to the schedule directly from the grid, you can also change the grid from other pages in PowerSchool SIS. For example, to include a program restriction, navigate to the PowerScheduler Edit Section page. To make an inactive course available for scheduling, navigate to the Courses page at the District Office. The best location to make a change depends on the information you need to edit. In some cases, you can make a change in multiple places, so use whichever location best fits your needs.

Step G: Defining Load Constraints

Constraints impose limits on the scheduling process by restricting how courses are loaded. Build constraints restrict the way the scheduling engine will schedule a course in the master schedule. Load constraints restrict the way the scheduling engine loads students into courses that have already been scheduled.

Use the fewest number of constraints to accomplish your scheduling goals; otherwise you'll end up with too many students who cannot be scheduled. The greater the number of constraints, the smaller the number of student course requests that can be satisfied.

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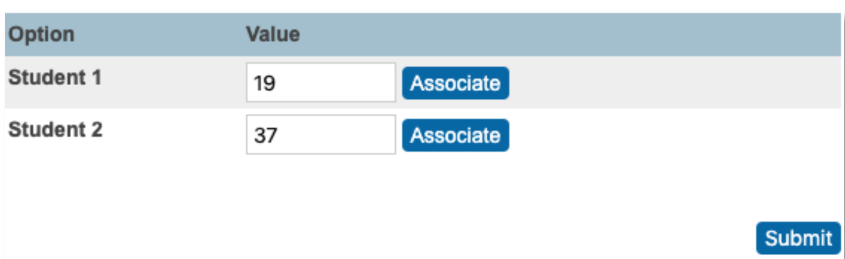
Below is a list of the available load constraints. Don't add load constraints until after you are done copying and adjusting the master schedule. Consider defining load constraints after you load students one time to see the resulting student schedules without constraints.

- Balance Adjustment – Pre-load or "pad" a section with "fake" students to reserve space in sections, such as reserving space in required courses for new students
- Student Avoid – Keep two students from being scheduled into any of the same course sections, such as siblings or students that have had conflicts with each other
- Teacher Avoid – Prevent a student and a teacher from being scheduled into any of the same course sections, such as a student and teacher who are related to each other
- Student Free – Specify a period when a student must be free, such as when the student is taking a course at another school or if the student attends school only part-time
- Section Link – Specify that students enrolled in one section must be enrolled in another section together, such as Biology and Biology Lab
- Student Preference – Schedule a student in a particular course section, such as student Lori Smith who needs to take Ms. Bryant's third period AP Calculus class

Define Load Constraints

Follow these steps to create load constraints:

1. On the Start Page, click **PowerScheduler**
2. Below Scheduling Setup, click **Constraints**
3. Click the load constraint you want to define, such as **Student Avoid**
4. Click **New**
5. Enter information as required by the fields on the constraint page



6. Click **Submit**

To view information about the constraints that have already been created, click **Load Constraints** in the Constraint menu. The Load Constraints page has a description of each load constraint and the count of each type of constraint. Use the Count column to keep track of how many constraints you are using. These numbers will change as you add and delete constraints. Click the number to view or edit the constraints.

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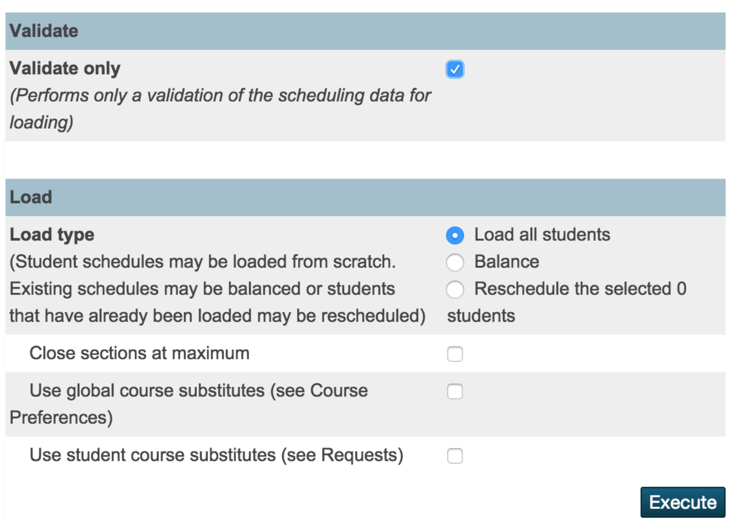
Step H: Loading Students

For the load process, use the server-side engine loader included with PowerSchool SIS. Not only does the server-side engine loader eliminate the need to download and run the scheduling engine, it also produces better results because of its additional features, including special program balancing and optimized processing. In PowerSchool SIS, the server-side engine loader is enabled by default, which eliminates the need to run the scheduling engine on client machines for the load process. It also provides additional functionality, such as special program balancing, as well as optimized processing for better results. To evenly balance students in programs across sections during a load, click **PowerScheduler**. Then, under Scheduling Setup, click **Programs** and select the special programs.

You are now ready to load students into the master schedule and create student schedules. You can load students multiple times in order to test different scenarios. For example, you might find that once you've loaded students, you need to define additional constraints. Create the constraints, then run the load again to reschedule students while abiding by the new constraint.

1. On the Start Page, click **PowerScheduler**
2. Below Processing, click **Load**
3. Check **Validate only** to perform a validation of the data before attempting a load

   After you have performed a validation and corrected any errors, return to step 1 and perform these steps again without checking Validate only.
4. Select a Load type:
   - **Load all students** – Schedules all students
   - **Balance** – Adjusts existing student schedules to help improve the balance of students between course sections. Use this option if a previous load resulted in imbalanced sections.
   - **Reschedule the selected [xxx]** – Reschedules only those students you select before you access the Load page. Use this option if you need to make corrections to the schedules for a group of students rather than the entire student population.



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5. Select the appropriate check boxes to indicate that you want the system to do any combination of the following options: close sections at the course maximum, use global course substitutes from course preferences, and use student course substitutes from course requests

   Do not select "Close sections at maximum" the first time you load students. That way, you can see what the scheduling engine does in terms of loading students into classes, which may help you identify possible problems with the schedule or scheduling preferences. For example, if English 10 has a course maximum of 25 students, but 35 students are loaded into a section, then there may be too few sections of English 10 available, or there may be problems with the master schedule that created an imbalance in the load.
6. Click **Execute**

Step I: Evaluating the Load

You've completed your first load, so it's time to evaluate the results. After the system finishes running the load, data appears on the Scenarios page. The Scenarios page shows the percentages of students who were scheduled with their course requests satisfied and without scheduling conflicts.

Viewing the Load Results

On the Scenarios page, the value in the %Scheduled column is the percentage of student requests that were filled successfully. The value in the %Core Scheduled column is a calculation based upon the periods identified as "Core" that were filled successfully, and the %Requests Satisfied column shows the percentage of total requests, including alternate requests, that were filled.

If you see numbers from 1 to 100 in the %Scheduled, %Core Scheduled, and %Requests Satisfied columns, then you'll know that the load was successful. How successful the load was depends on the percentages you see. For example, if you see that only 85% of student requests were scheduled, then you'll know that the load was fairly successful.

Follow these steps to view the results of the load:

1. On the Start Page, click **PowerScheduler** > **Scenarios**
2. View the load results for the appropriate scenario

   If you see zeros in the percentage columns, the load was unsuccessful and you have some validation errors to fix. Identify the validation errors by looking at the error log.
3. Below Processing, click **(Q)** next to Load

   If you've run the load more than one time, you will see a list showing the date and time that each load was completed.
4. Click **View** in the Results Log column

   The Results Log page alerts you to any problems the system had when loading students into the master schedule. A dashed line appears if the load was successful.

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5. Analyze the information and messages on the results log

   There are three types of messages:

   - Info – Informational messages, such as "Invalid YOG found in the Student file The students is [xx] and the YOG is 0" (where YOG stands for "year of graduation")

     These messages do not prevent a successful load.
   - Warning – "Red flag" messages, such as "The Request file contains an invalid student. The course is [xx], the student is [xx]. The request was dropped"

     These messages should be addressed, but they do not prevent a successful load.
   - Error – Validation errors that you must correct in order for the engine to run. For example, if you mass set up teams for a group of students but use the team name instead of the code, the system will not be able to load those students into the appropriate classes based on teams.

     These errors prevent a successful load.
6. Fix any errors and run the load again

   Once the load is finished, you must import the new data into the PowerSchool SIS database. Any time you execute a Load, regardless of whether you load all students or reschedule a smaller selection of students, you must import the new data into PowerSchool SIS. If you do not import the new data, you'll be looking at old data from the previous load. Think of importing the data as "refreshing" the data.

   To import the load data, click **(Q)** > **Import**. Then, fix any schedule problems and load again. View the log and import again until you schedule the majority of your students successfully. For more information on importing from any PowerSchool SIS or PowerScheduler page, open the Help menu and click **Help Center**.

Once the import is complete, return to the Scenarios page to check the summary of results again. Click **Scenarios**. This time a display of numbers greater than zero in the %Scheduled, %Core Scheduled, and %Requests satisfied columns on the Scenarios page, means that there are no more validation errors. The Load was successful! However, you may have to make some adjustments to students' schedules if the percentage of students who were scheduled is not quite 100%. Next, run the post-build reports to analyze the scheduling data and identify and fix possible problems with students' schedules or scheduling preferences.

Viewing Post-build Reports

When you no longer have validation errors, you don't need to view the Results Log again. Instead, start running the post-build reports. Use the post-build reports after the load to figure out why some students didn't get scheduled into the courses they requested. Listed below are a few of the reports that are commonly used to evaluate student schedules. All of the available reports are listed in the Post Build Reports section on the Scheduling Reports page.

- Use the Alternate Request Report to see a list of the courses and alternate courses requested by each student. You will see an x in the Scheduled column if the request was satisfied.

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- Use the Non-scheduled Course Requests report to list student requests that were not scheduled for each course. The report results are listed by course. This report will also indicate the request was an alternate choice by labeling "(Alt)" next to the course name. If you run the report and see that an alternate didn't get satisfied, don't be alarmed. It could just mean that the student got his elective request rather than the alternate request.
- The Non-scheduled Student Requests report shows the same information that the Non-scheduled Course Requests report does, but the results are sorted by student rather than course. You can see which requests weren't scheduled for each student on the report. Again, if you run the report and see that an alternate didn't get satisfied, it may mean that the student got his elective request rather than the alternate request.
- Run the Student Schedule List report, also known as the Student Classes Scheduled report, to see the percent of requests scheduled for each student and the number of classes scheduled per student. Use this report to identify students who are not fully scheduled. For example, a student who was 56% scheduled with 6 classes may need to be enrolled in more classes. You can click the number in the Classes Scheduled column to identify which periods are available to be scheduled.

  It's important to note that if your school uses a period that not all students attend, such as a zero period for Band, then you could see that most students are 94% scheduled on this report. If that is the case, it means that students are fully scheduled because they don't need that zero period. Also, some students may show 100% with 10 classes, while others may show 100% with 12 classes. Such results are common when some students take semester-long courses, while others take year-long courses only.
- Run the Schedule Course Enrollment report to show, by course, the number of seats available, the total number of requests, the number of seats filled, the number of seats vacant, and the unfilled requests for each course. Values in the Requests, Seats Filled, and Unfilled Requests columns are linked to additional information. For example, you can click the number of unfilled requests to analyze why students on the list weren't scheduled in the course.

  This is one of the most valuable reports you can use to help identify problems with the schedule because it shows you why students didn't get scheduled into courses. For example, if A+ Certification only has 90 seats available and there are 122 requests, you know it's over-requested and so you may be less concerned than you would be otherwise with the column that tells you there are 32 unfilled requests.

  However, if you see Algebra has 100 seats and 97 kids requested it, but 21 of them didn't get it, that's a problem. In that case you will need to analyze the schedule. You might ask yourself, "Is Algebra scheduled during a period that most students can get into?" or "Did I accidentally put a lower load priority on Algebra than other required courses?"

To run scheduling reports, follow these steps:

1. On the Start Page, click **PowerScheduler**
2. Below Tools, click **Reports**
3. Print the following post-load reports to evaluate student schedules:
    - Non-scheduled Course Requests

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- Non-scheduled Student Requests
- Student Schedule List
- Alternate Request Report
- Under-scheduled Students
- Schedule Course Enrollment

4. Print the following reports to evaluate the master schedule:
    - Master Schedule
    - Master Schedule (PDF)
    - Master Schedule List
    - Room Schedule
    - Room Utilization

Now that you have run the load successfully, identified errors in the schedule, and fixed those errors, you can run the load again. Make sure to select the "Close sections at max" option to close sections when they reach the maximum enrollment and use global or student course substitutes.

Step J: Exploring Post-load Options

Once you've run the load using the "Close sections at max" option, consider your next steps. Exploring post-load options is the final piece of the scheduling process.

You have several options for fixing any remaining student scheduling issues. You can manually adjust student schedules, or you can re-load just a specific group of students without re-loading the entire school.

If you need to make manual changes to schedules, do so after you're absolutely sure that you're done loading students. If you make manual changes and then re-load, your changes will be overwritten and lost.

With that in mind, let's look at each post-load option in more detail.

After you load students into the master schedule, you can do the following:

- Accept the load and make manual adjustments to student schedules
- Resolve student conflicts by loading student schedules again and selecting the substitute check boxes on the Load page
- Adjust student course requests manually, and load the students again
- Select and re-load only a specific group of students after selecting the substitute check boxes on the Load page or adjusting student course requests manually

Adjusting Student Schedules Manually

Complete the following steps to adjust an individual student's schedule.

1. On the Start Page, click **PowerScheduler**
2. Below Resources, click **Students**
3. Search for and select a student or a group of students

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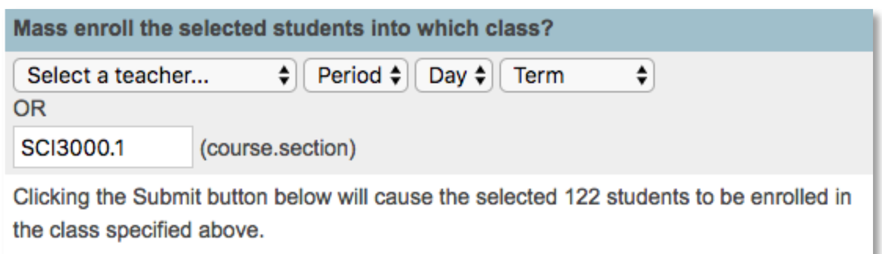
4. From the menu at the top of the student list, choose **Schedule**
5. Click a student's name
6. Use the **Enroll** menu to enroll the student in a class for a specific period
7. Use the **Drop** menu to drop a class from the student's schedule

Adjusting Several Student Schedules Manually

Complete the following steps to adjust student schedules for a group of students.

1. On the Start Page, click **PowerScheduler**
2. Below Resources, click **Students**
3. Search for and select the students you want to enroll in the same course
4. Click **Functions** > **Schedule Mass Enroll**
5. Do one of the following to enroll the selected students in a section:
    a. Choose a teacher, period, day, and term from the menus
    b. Enter the course and section number in the course.section format, such as ***SCI3000.1***



6. Click **Submit**

Reloading a Specific Group of Students

Complete the following steps to re-load a group of students instead of the entire student body.

1. On the Start Page, search for and select the group of students you want to re-load
2. On the main menu, click **PowerScheduler**
3. Below Processing, click **Load**
4. Select **Reschedule the selected [xx] students**

    The system reschedules only those students you selected on the Start Page.
5. Select the appropriate check boxes to indicate if you want the system to close sections at maximum, use global course substitutes, or use student course substitutes for this group of students
6. Click **Execute**
7. Click **Import** to import the schedules into your PowerSchool SIS database

Continue making manual modifications and importing schedules into PowerSchool SIS until all students are loaded successfully and you are satisfied with the results.

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Summary

You have completed the final steps in the Load Process. In Steps F-J, you:

- Adjusted the master schedule manually by changing sections and using the Visual Scheduler
- Defined load constraints
- Loaded students into the master schedule
- Evaluated the success of the load by viewing the load error log and post-load reports
- Explored post-load options and adjusted student schedules manually

While completing the scheduling process, the PowerSchool SIS Help menu is another great source of information. On any PowerSchool SIS or PowerScheduler page, click the **Help** icon to search for information about PowerScheduler.

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