

# PowerScheduler – Build & Load

Prepare to Build must be finished and course requests must be entered. If it is not, please contact NWOCA support.

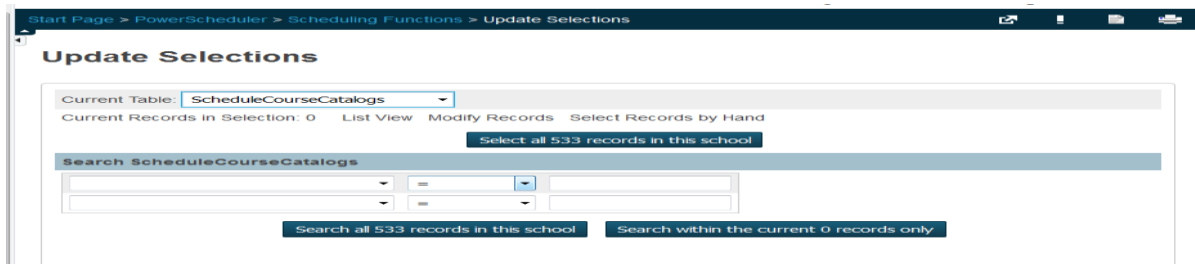
The first two steps involve setting up your courses for the new school year. You can make the changes individually (Step 1) or in mass (all courses) (Step 2a) or in groups (Step 2b/c). Please read through each step before you decide which step to follow. You may use a combination of the three steps.

Remember, you need to update each course that you will be using in the Master Schedule.

The screenshot shows the 'Course Information' page in PowerScheduler. The page is divided into several sections, each with a tabbed header: 'General Information', 'Scheduling Preferences', 'Sections Defined', 'Labs Defined', 'Load Options', and 'Substitute Information'. The 'General Information' section includes fields for Course Number (6LA), Course Name (6 Language Arts), Course Description, Course Credit Hours (1), Request Screen Credit Hours (1), Credit Type (ENG), Alternate Course Number, Grade Scale, CIP Code, and Vocational Class (No). The 'Scheduling Preferences' section includes checkboxes for 'Schedule This Course' and 'Use The Course For Lunch', a 'Department' dropdown with an 'Associate' button, and a 'Maximum Enrollment' field set to 0. The 'Sections Defined' section includes fields for 'Target Number of Sections to Offer' (0), 'Number of Teacher Assignments' (0), 'Periods Per Cycle' (0), 'Periods Per Meeting' (0), 'Frequency' (0), and 'Terms per year' (0 of 2). There are checkboxes for 'Allow Student Repeats in the Same Term' and 'Allow Student Repeats in Different Terms'. A 'Valid Terms' dropdown is also present with an 'Associate' button. The 'Labs Defined' section includes checkboxes for 'Is This Course A Lab', 'Lab Frequency' (0), and 'Lab Periods Per Meeting' (0). The 'Load Options' section includes fields for 'Load Priority' (0), 'Load Type' (Academic), 'Balance Priority' (Section), and checkboxes for 'Use Pre Established Teams', 'Close Section After Max', and 'Use Section Types'. The 'Substitute Information' section includes a checkbox for 'Don't Allow Student Substitutions' and three 'Global Substitution' fields, each with an 'Associate' button. A 'Submit' button is located at the bottom right of the page. Annotations include yellow arrows pointing to the 'Schedule This Course' checkbox, the 'Maximum Enrollment' field, the 'Frequency' field, the 'Valid Terms' dropdown, the 'Load Priority' field, and the 'Close Section After Max' checkbox. A blue arrow points to the 'Associate' button next to the 'Department' dropdown. A yellow box on the right contains the text 'Frequency: Ex. A=1 A,B=2 A,B,C,D,E=5'.

We recommend the highlighted be set at a minimum:

- a. **Select “Schedule This Course”**
  - b. **Department** (optional, but recommended)
  - c. Build Type (Default is “Standard”, but may need “Lab” or “Lab Float”)
  - d. **Maximum Enrollment**
  - e. **Periods Per Meeting (unless the course meets for a double period, normally ‘1’)**
  - f. **Frequency (refers to number of days the course meets during your cycle)**
  - g. Valid Start Periods
  - h. **Valid Terms (click “Associate”)**
  - i. Load Type (Academic, Elective, or Alternate)
  - j. **Close Section After Max – Check this box**
  - k. **Load Priority** – (optional, but recommended) set all to 7. As needed, you will change individually to 1,3,7,15,31, and 63. Additional information on Step 9.
2. **Individually:** PowerScheduler > Courses > Select a Course > Mark page as needed > Submit
3. May use **Auto Fill Course Information.**
- a. **Functions > Auto Fill Course Information > Apply to all Courses in the active catalog > Make Changes > Submit.**
  - b. To select a group of courses, use Update Selections > Current Table:  
**ScheduleCourseCatalogs** > CourseCatalogID = XXXX > Search all XXXX records in this school > Select Courses By Hand > Choose Courses > Click Submit.



- c. Now click on “Scheduling Functions” in your bread crumbs and choose “Auto-Fill Course Information”. Make sure the “Apply to” option is set to “the selected \_\_\_ courses”.
4. Add **Course Relationships** where needed. Most commonly used build relationships are:
- a. Is Blocked for Building With:
    - Different Terms – Same teacher, student, day & period, but different terms
    - Simultaneous – same time
    - See handout (60415 – Directions to Copy Course Relationship) for additional relationships – Next page.
    - (Ex. If you told a course 1<sup>st</sup> and 2<sup>nd</sup> Semester, you do not need a relationship.)
    - Report: Course Relationship – shows all Relationships

## How to add Course Relationships

Click Course > Associate > Select Course > Choose Relationship Type > Relationship Code > Submit

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

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

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

These requirements might include the following:

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

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

## 5. Teacher Information

- a. Review every teacher. Do you have new teachers since last year? Do you have non-returning teachers?
- b. May use **Auto Fill Teacher Information** to set some info, such as Schedule This Teacher & Maximum Consecutive Periods. **PowerScheduler > Functions > Auto Fill Teacher Information.**
- c. **For individual Teachers:** Select **Teachers** in **PowerScheduler > Preferences.**
- d. **For groups of teachers:** To select Teachers by hand: **Functions > Update Selections > Teachers table > Search Teachers:** (First drop-down) > Select those where the “Sched\_Scheduled” field = 1. Click on “Search all XXX records in this School” then click on “Select Records by Hand”. Make your selections. Press **Submit**. Click on “Scheduling Functions” in your bread crumbs and choose Return to Functions and choose “Auto Fill Teacher Information”. Make sure the “Apply to” option is set to “the selected \_\_\_ teachers.” Using your selection from the previous step, you can assign department, consecutive periods, etc.

## 6. Course Assignments: Teacher Assignments for Courses

- a. Courses(Select Courses) > Assignments tab > New
  - Click “Associate” to select a teacher
  - Enter the number of sections for this teacher
  - If course can meet either term(s), you may want to designate how many sections this teacher should have for a specific term. (add multiple assignments)
  - You can associate from Teacher or Course
- b. Tip: Course Request Tally Report helps determine section amounts.

## 7. Build Constraints as needed. The most commonly used Build Constraints are:

- a. Teacher Free: Select the Term/Day/Period(s) for when a teacher must be free.
- b. Teacher Part-time: The starting/ending periods when a teacher IS AVAILABLE.
- c. Pre-Schedule: Schedules a section ahead of time for a specific term/period/day (Ex. Band 1<sup>st</sup> Period – could be done at course preferences)
- d. See handout for additional constraints. (**less is better for PowerScheduler**)

**Build Constraints** restrict the actual building of the master schedule. To view a list of build constraints and the number of each that have been defined for your schedule, choose Build Constraints from the constraints menu.

Start Page > PowerScheduler > Constraints > Build Constraints

- Course Optimize – Set build optimization parameters for a course.
- Course Restrict – Restrict a section of a course to a particular period or day.
- Course Room – Force a course to schedule in a specific room.
- Course Team – Specify teaching teams for blocked courses.
- Pre-Schedule – Pre-Schedule a section of a course.
- Room Free – Block a room from being scheduled for a particular term, day and period.
- Schedule Break – Identify breaks in the schedule for max-in-a-row counts.
- Teacher Dovetail – Partial course scheduled using a few periods possible.
- Teacher Free – Specify periods that a teacher must be free. (Ex. Shares teacher with another school.)
- Teacher Part-Time – Limit a teacher’s schedule to a range of periods.
- Teacher Team – Specify teaching teams for a set of courses.

## 8. **Course Rank. PowerScheduler > Course Rank > Build Rank**

- a. Run a Build/Validate once using system-assigned rank. (After the system builds the initial rank, you can make manual adjustments.)
- b. If “Build Rank” button is clicked after manual adjustments are made, manually assigned ranks will be lost. Use “Build Rank” button again if courses were added or removed.
- c. Click “Update Rank” if the number of sections, course requests, or constraints have changed. (Manual rank changes are not lost.)

**Note:** Even though no current course rank appears on the page, the confirm message will appear when you click Build Rank. **Submit.**

9. Enter **Load Priorities**, (optional) as needed. The Default value is 0. Recommended values are: 1, 3, 7, 15, 31, and 63. (1 = the highest priority.)
  - a. Start by setting all courses to 7, then adjust individual courses to give them a higher (less than 7) priority or lower (greater than 7) priority.
  - b. To update one course: PowerScheduler > Courses > Preferences tab
  - c. To mass update groups of courses: Use Update Selections function > select the ScheduleCourseCatalogs table; select records that match your catalogID; Select Records by Hand.
  - d. Now return to Functions & use Auto Fill Course Information to update Load Priority.

## 10. Build Master Schedule:

Start Page > PowerScheduler > Build Schedule

### Build Schedule

Validate	
Validate only (Performs only a validation of the scheduling data)	<input checked="" type="checkbox"/>

Build	
Build master schedule (Creates schedule from scratch overwriting any existing schedule from the scenario)	<input checked="" type="radio"/>
Use locked master records	<input type="checkbox"/>

Optimize	
Optimize master schedule (Creates a previously built schedule by attempting to reschedule individual courses to reduce conflicts to improve balance)	<input type="radio"/>
Time allowed for optimizations	<input type="text"/> hour(s) <input type="text"/> minute(s)
Skip courses with ranks above	<input type="text"/>

Execute

- PowerScheduler > **Build** > Select “**Validate only**” > **Execute**
- Click “**Q**” beside “**Build**” to view results. Click “**View**” under “Results Log”.
- Make corrections & re-run the Validate. Check results.  
(Do a, b and c together. Once finished, move to step d.)
- Once the Validate completes successfully, run the Build again; Click “**Q**”, then “**View**” under “Results Log”.

## 11. Import Master Schedule:

- Once the Build is error-free, click “**Q**”, then “**Import**”. We recommend you select “Master Schedule” only.

**12. Load Constraints:** Load constraints restrict the way PowerScheduler loads students into courses in the master schedule.

PowerSchool includes six types of load constraints. Each type constrains student schedules in a specific way. Since constraints restrict the load process, it is always best to use the fewest number of constraints required to accomplish your scheduling goals.

**Start Page > PowerScheduler > Constraints > Load Constraints**

Balance/Adjustment – Preload a section with n students before calculating assigned.

Student/Student Avoid – Keep two students from being scheduled together.

Student/Teacher Avoid – Keep an individual student and teacher from being scheduled together.

Student Fee – Schedule a free period for a student.

Section Link – Link the sections of two courses with the same students.

Student Preference – Force a student to schedule in a specific teacher's section.

**See Appendix A for specific information about each type of constraint.**

### 13. Fix Section Links: (see below)

- a. If you had any Course Relationships set up with Relationship Type = “Is Blocked For Building With”, and Relationship Code = “Different Terms”, you must follow the steps on the handout for “Fixing Section Links Created by the Build”. (Section links created from the PowerScheduler > Constraints > Section Links page do not need to be fixed.
- b. Section links are copied from previous year – if sections changed, make corrections now.

## Fixing Broken Section Links resulting from the Build process

It is a known issue that, during the **Build** process, Section Links created by various Relationships are broken. The following steps will repair and restore them. (Do this step for everyone. If there are not links, it will not hurt anything.)

**First**, go to the Update Selections function (PowerScheduler > Functions > Update Selections.)

### Step 1: Determining your Build ID and Catalog ID

- Select the ScheduleBuilds table and click the “Select all \_\_\_ records in this school” button.
- From the blue links, choose “List View” and get the Build ID for your currently active build. Build ID# \_\_\_\_\_
- Go back to scheduling functions in the breadcrumbs – select update selections
- Now, select the ScheduleCatalogs table table and click the “Select all \_\_\_ records in this school” button.
- From the blue links, choose “List View” to find the CatalogID for your currently active build. The one that says: true. Catalog ID# \_\_\_\_\_

### Step 2: Fixing the Section Links

- Go back to scheduling functions in the breadcrumbs – select update selections
- Select the ScheduleConstraints table and search for records that match your Build ID and Constraint Code 92 (Section Links), as shown below.

### Update Selections

Current Table: ScheduleConstraints

Current Records in Selection: 0 List View Modify Records Select Records by Hand

Select all 644 records in this school

Search ScheduleConstraints

BuildID = 451

ConstraintCode = 92

Search all 644 records in this school Search within the current 0 records only

- Select: Search all XXX records in this school.
- Once you have isolated those records, choose the “Modify Records” link, and enter
- Catalog ID = \_\_\_\_\_ (your catalog ID number) and Modify the records.
- Choose Modify Records. This time enter ConstraintFlagField1 = False, and Modify the record.

**NOTE: This process will need to be done each time you run another Build.**



## 14. Load Students.

- PowerScheduler > Load > check “Validate Only” & check “Close Sections at Max” > Execute.**
- View the results: Click on the “Q” next to “Load”, then on “View” under “Results Log”. To view errors & messages produced by the Load, click “View” under **Load Log**.
- Once the Validate runs successfully, **Run** the Load again **without checking Validate Only**; check the “Close Sections at Maximum” box > **Execute**.
- View the results of the load per the instructions above.

The screenshot shows the 'Load Schedules' page in PowerScheduler. The breadcrumb trail is 'Start Page > PowerScheduler > Load Schedules'. The page title is 'Load Schedules'. Below the title, it says 'Build: 2019 - 2020 (951) Catalog: 2019-2020 Course Catalog (901)'. The main content area is a form with two sections: 'Validate' and 'Load'. The 'Validate' section has a 'Validate only' checkbox which is checked, with a subtext '(Performs only a validation of the scheduling data for loading)'. The 'Load' section has a 'Load type' dropdown menu with three options: 'Load all students' (selected), 'Balance', and 'Reschedule the selected 0 students'. Below this, there are three checkboxes: 'Close sections at maximum' (checked), 'Use global course substitutes (see Course Preferences)' (unchecked), and 'Use student course substitutes (see Requests)' (unchecked). An 'Execute' button is located at the bottom right of the form.

## 15. Import Results.

- Once the Load has completed successfully, click on the “Q” next to “Load”, then click on “Import” under “Results”. – **DO NOT CLICK SUBMIT**

16. **Evaluate the Load** using Post Load Reports: (Start with B, C, and G)

- a. Master Schedule List
- b. Schedule Course Enrollment
- c. Schedule Results by Grade
- d. Student Schedule List
- e. Room Utilization
- f. Student Schedule Report
- g. Non-Scheduled Student Requests for Scheduled Courses
- h. Individual Student Conflict Matrix

17. **Manually adjust student schedules** after all electronic loading is complete.

18. **Manually Enroll Students - Optional**

- a. **PowerScheduler > Students > Select Students to be Scheduled into a class > Select Students by Hand > Functions > Schedule Mass Enroll**

**Student Scheduling Functions**

What do you want to do for all of the 3 students you have selected?	
Function	Description
Export Using Template	Uses a template to export data on currently selected students.
List Students	Prints a quick list of currently selected students.
Mass Add Requests	Lets you enter the same course request for selected student at one time.
Mass Delete Requests	Lets you delete the same course request for selected students at one time.
Next School Indicator	Sets the next school indicator for currently selected students.
Print Reports	Prints reports for currently selected students.
Print Mailing Labels	Prints mailing labels for currently selected students.
Quick Export	Exports data on currently selected students.
Reports Menu	Goes to the Reports menu.
Schedule Mass Enroll	Enrolls currently selected students in a section.
Schedule Reports Menu	Goes to the scheduling reports menu.
Work with these students	Make the selected students the working group.

**Mass Enroll**

Mass enroll the selected students into which class?

Select a teacher...  Period  Day  Term

OR


(course.section)

Clicking the Submit button below will cause the selected 3 students to be enrolled in the class specified above.

b. Do one of the following:

- i. Select a Teacher, Period, Day, Term. OR:
- ii. (Recommended method) Enter the course.section in the blank text box.  
Example:

**Mass Enroll**



Mass enroll the selected students into which class?

Select a teacher...  Period  Day  Term

OR

2958.2 (course.section)

Clicking the Submit button below will cause the selected 3 students to be enrolled in the class specified above.

## 19. To Print Future Student Schedules while still in current school year:

- For a “Report Card” format, edit the “Schedule Listing” & check “Use Future Schedule” checkbox:

### Student Schedule Listing for Report Card: PSU - Student Schedule

Option	Value
Column Title Style	Helvetica 10 (B) ▾
Class Listings Style	Helvetica 10/12 ▾
Use Future Schedule (student's schedule for next year)	<input type="checkbox"/>



### **COMMIT THE SCHEDULE**

**After the end of the current school year, but BEFORE the EOY** process has been run, it will be necessary to run the “**COMMIT**” in order to copy the new master schedule and student schedules from PowerScheduler to the Live side. Here are some important notes:

- Feel free to contact NWOCA’s Student Services department for assistance with the Commit.
- Update Years and Terms on the Live Side for the next school year if necessary. School > Years and Terms > Select Next School Year > Edit Terms. Make sure the starting/ending dates on the Live Side **exactly match** those in PowerScheduler. (Now is the time to make corrections if necessary – BEFORE the commit is run!)
- Make sure that the “Days” on the Live Side have the same “Name” and “Abbreviation” as in PowerScheduler.
  - Live side: **School > Days**
  - PowerScheduler side: **PowerScheduler > Days**
- PowerScheduler > **Commit**

# Appendix A

## Load Constraints

Load constraints restrict the way PowerScheduler loads students into courses in the master schedule.

PowerSchool includes six types of definable load constraints. Each type constrains student schedules in a specific way.

**Note:** Since constraints restrict student schedules, the more constraints you define, the less flexibility the system has to load students into courses and the less optimal the resulting schedule will be. It is always best to use the fewest number of constraints required to accomplish your scheduling goals.

### Start Page > PowerScheduler > Constraints > Load Constraints

Balance Adjustment – Pre-load a section with n students before calculating assigned.

Student/Student Avoid – Keep two students from being scheduled together.

Student/Teacher Avoid – Keep an individual student and teacher from being scheduled together.

Student Fee – Schedule a free period for a student.

Section Link – Link the sections of two courses with the same students.

Student Preference – Force a student to schedule in a specific teacher’s section.

## How to Add a Balance Adjustment Constraint

Use a Balance Adjustment constraint to pre-load a course section with a certain number of reserved seats before adding the rest of the students. For example, use this constraint if you have a math class that needs five seats open for SPED students.

1. On the start page, choose **PowerScheduler** from the main menu. The Scheduling page appears.
2. Under Resources, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Balance Adjustment**. The Balance Adjustment Constraints page appears.
4. Click **New**. The Edit Balance Adjustment Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Course Number	Click <b>Associate</b> to select the name of the course you want to balance.
Section Number	Enter the section number of the selected course that you want to balance.
Teacher	Click <b>Associate</b> to select the name of the teacher who instructs this course section.
Number of Reserved Seats	Enter the number of seats to be held.

6. **Note:** You must either enter a section number or select a teacher.
7. Click **Submit**. The Balance Adjustment Constraints page appears.

## How to Add a Student/Student Avoid Constraint

Use a Student/Student Avoid constraint to specify that two selected students cannot be scheduled into any of the same course sections.

1. On the start page, choose **PowerScheduler** from the main menu. The Scheduling page appears.
2. Under Resources, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Student Avoid**. The Student/Student Avoid Constraints page appears.
4. Click **New**. The Edit Student/Student Avoid Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Student 1	Click <b>Associate</b> to select the name of one of the students you want to separate from one another.
Student 2	Click <b>Associate</b> to select the name of the other student.

6. Click **Submit**. The Student/Student Avoid Constraints page appears.

## How to Add a Student/Teacher Avoid Constraint

Use a Student/Teacher Avoid constraint to specify that this student and this teacher cannot be scheduled into any of the same course sections.

1. On the start page, choose **PowerScheduler** from the main menu. The Scheduling page appears.
2. Under Resources, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Teacher Avoid**. The Student/Teacher Avoid Constraints page appears.
4. Click **New**. The Edit Student/Teacher Avoid Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Student	Click <b>Associate</b> to select the name of the student you want to avoid scheduling with a selected teacher.
Teacher	Click <b>Associate</b> to select the name of the teacher you want to avoid scheduling with the selected student.

6. Click **Submit**. The Student/Teacher Avoid Constraints page appears.

## How to Add a Student Free Constraint

Use a Student Free constraint to specify those periods when a student must be free, such as when taking a course at another school.

1. On the start page, choose **PowerScheduler** from the main menu. The Scheduling page appears.
2. Under Resources, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Student Free**. The Student Free Constraints page appears.
4. Click **New**. The Edit Student Free Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Student	Click <b>Associate</b> to select the name of the student who needs to have a free periods.
Term	Choose from the pop-up menu the term in which this student needs free periods.
Schedule	Select the checkbox next to each period in each day that you want to schedule this student to have a free periods.

6. Click **Submit**. The Student Free Constraints page appears.

## How to Add a Section Link Constraint

Use a Section Link constraint to specify that if students are enrolled in one course section, they must also be enrolled in another, specific course section.

1. On the start page, choose **PowerScheduler** from the main menu. The Scheduling page appears.
2. Under Resources, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Section Link**. The Section Link Constraints page appears.
4. Click **New**. The Edit Section Link Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Course Number 1	Click <b>Associate</b> to select the name of one of the courses for which you want to link a section.
Section Number 1	Enter the section number of the course in the Course Number 1 field that you want to link to another course section.
Course Number 2	Click <b>Associate</b> to select the name of the other course for which you want to link a section.
Section Number 2	Enter the section number of the course in the Course Number 2 field that you want to link to the section in the Section Number 1 field.

6. Click **Submit**. The Section Link Constraints page appears.

## How to Add a Student Preference Constraint

*Use a Student Preference constraint to schedule a student into a particular course section, term, or teacher.*

1. On the start page, choose **PowerScheduler** from the main menu. The Scheduling page appears.
2. Under Resources, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Student Preference**. The Student Preference Constraints page appears.
4. Click **New**. The Edit Student Preference Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Student	Click <b>Associate</b> to select the name of the student you want to force to schedule in a specific course section.
Course Number	Click <b>Associate</b> to select the name of the course.
Term	Choose the term to which you want this constraint to apply from the pop-up menu (optional).
Section Number	Enter the section number of the course into which you want the student to be scheduled (optional).
Teacher	Click <b>Associate</b> to select the name of the teacher who instructs this course section (optional).

6. **Note:** Though the last three fields are optional, you must make a selection for at least one of the fields.
7. Click **Submit**. The Student Preference Constraints page appears.

**Note:** To view a list of load constraints and the number of each that have been defined for your schedule choose Load Constraints from the constraints menu.

## Constraint Codes

### Build Constraints

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

### Load Constraints – Note: Student Avoid and Teacher Avoid have the same code#

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