Batch Scheduler

Preliminary Work Before Scheduling

- Review Courses/Course Groups/Course Section set up
- Review Course Requests
- Run Reports to be sure you have enough staff/sections to accommodate student course requests
- State Support recommends using the KISS method. (Keep It Simple Scheduling) It is best to use only one Master Schedule
- Prior to running the batch scheduler, hand schedule students who need to have a certain class during a certain period and the batch scheduler will work around that assignment.

Useful Reports to Use

- **CRSE Report**: Can be filtered by up to 10 fields and used to clean up courses, see information at a glance for selections. (SIS)
- **Course Detail Report**: Will show all information on courses but will not show demand counts. (Analytics Hub)
- **NORQ Report**: To find students with no course requests submitted. Batch Scheduler will ignore them.(SIS)
- **REQU Report**: Will show a list of all the students and their requests but will not show if the requests are in pending or approved status (SIS) This can also be found on the Request Page in SIS when searching by the course.(SIS)

Reports Continued

- **R401**: Student Course Request Verification. Edit(error) codes can be found on page 6 of the Batch Scheduler Checklist.(SIS)
- **Uncommitted Report**: If using the public course request module this report will tell you who has uncommitted request.(SIS)
- **R402**: Tally of Student Requests will give you the tally of requests for each course or course group to make sure you have enough capacity/course sections to accommodate the requests.(SIS)
- **R403**: Potential Course Conflicts Matrix. Used to see potential conflicts that may occur if the course is only offered once (singleton courses). You can also enter course for comparison to review in this report.(SIS)

Reports Continued

- **R405**: Student who requests a specific pair of courses. Can search by two course codes and see which students would have conflicts if those classes are offered at the same time.(SIS)
- **R404**: Students who requested a specific course/course group. This can also be found by searching on the courses/course groups in the request page.(SIS)
- **R406**: Course Conflicts. Same information as the matrix but in a different layout. Will tell you each course and what they conflict with and also how many requests will be affected. All courses are listed on a separate page.(SIS)
- **R407**: Class Master Schedule. This will show the demand count and capacity to determine if you have enough course sections.(SIS)
- **R416:** Course Requests Verification Slip. Can be printed requesting parent signature by using the comment box.(SIS)

Reports Continued

- **R409**: Location Schedule. This will show if rooms are double booked, or teachers are double booked for the same period.(SIS)
- **R813A**: Singleton List Report that is broken out by course term.(SIS)

Requests Review

There are three main pages to work with request:

Requests Page-This is what you are working on BEFORE running the scheduler. Assignments will not show on this page.

Requests and Assignments Page- Shows both what has been requested and what has already been assigned for the student. Be sure the assignments are on the same line as the requests to avoid duplicate assignments

Course Section Assignments-Used to clean up assignments after the schedule is finalized.

Course Section Assignment

State support recommends scheduling singleton course sections by hand prior to running the scheduler by using the course section assignment page or requests page.

Bulk Course Section Assignment: can be used for a single student or in bulk. You can use an ad hoc of students or use student ID numbers separated by a coma to add students to the course sections.

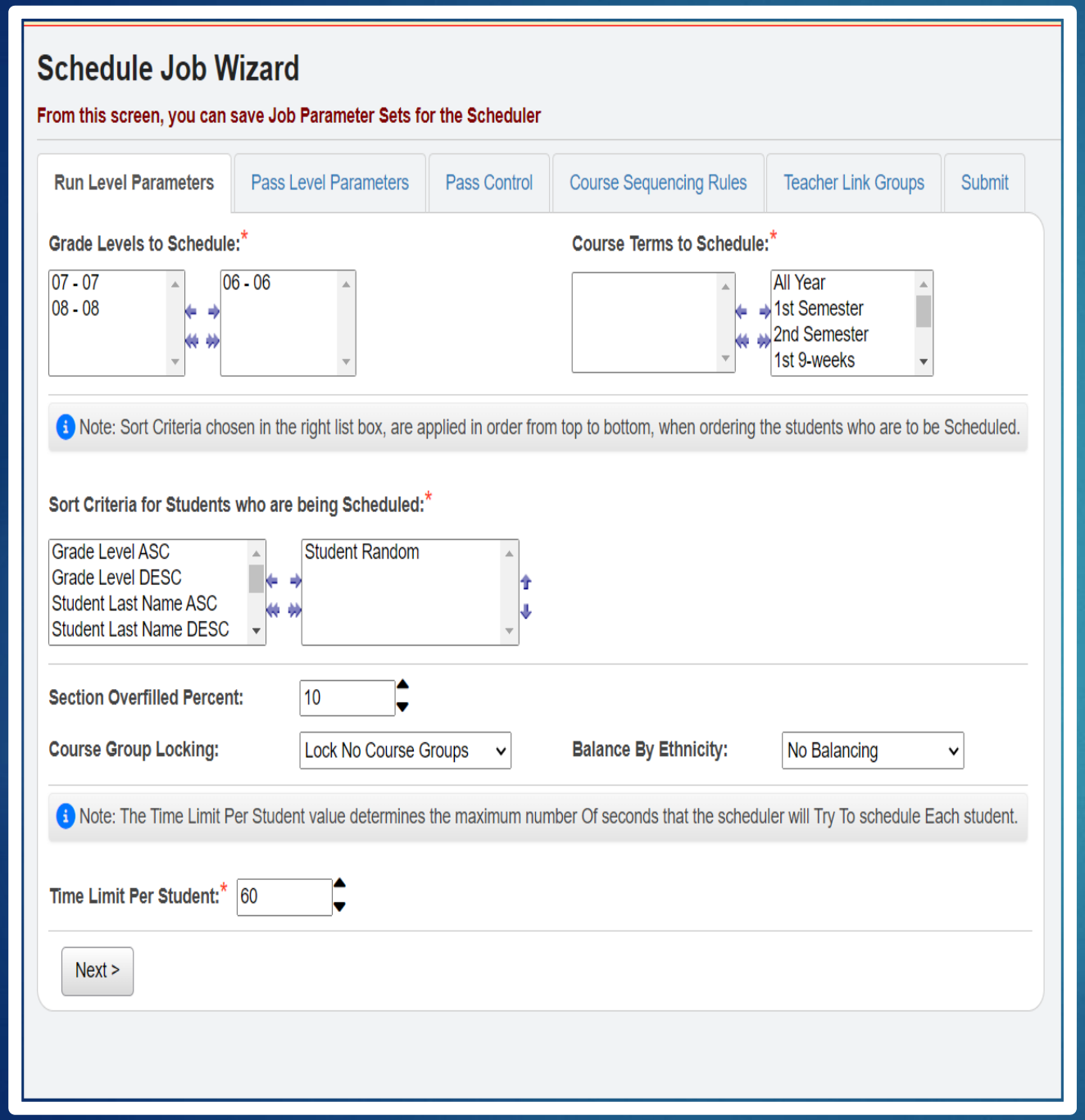
Configuring the Single Student Scheduler (SSS)

(This is Task number 3 on the Batch Scheduling Checklist)

Breadcrumb: StudentInformation>Management>School Administration>Scheduling Administration>Scheduler>Job Parameter Sets.

You can also type the word **Parameter** in the GO TO box on the SIS page.

Can be run from the Student Requests screen, but there is a defect running it from the Requests Assignments screen.



Single Student Scheduler Run Level Parameters Tab

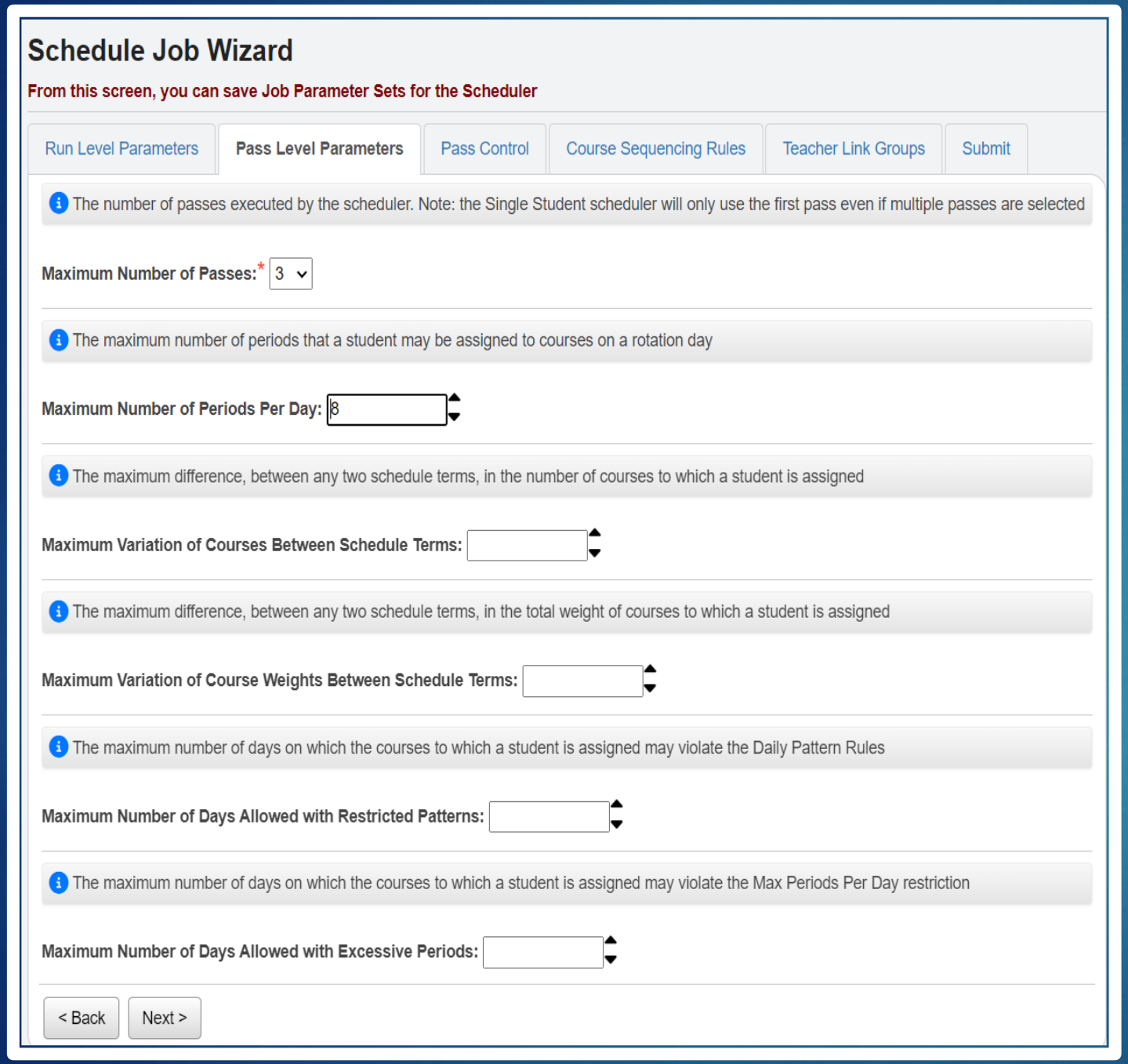
(Red Asterisks * are required fields)

Grade Levels and **Course Terms:** Select the ones you wish to schedule.

Section Overfill Percent: recommended to allow some overfill. If section has capacity of 25 and 5% overfill is allowed, the scheduler will allow 1 more person to be scheduled in that section.

Course Group Locking: recommend choosing Lock No Course Group as the option.

Time Limit: Okay to leave the default of 60

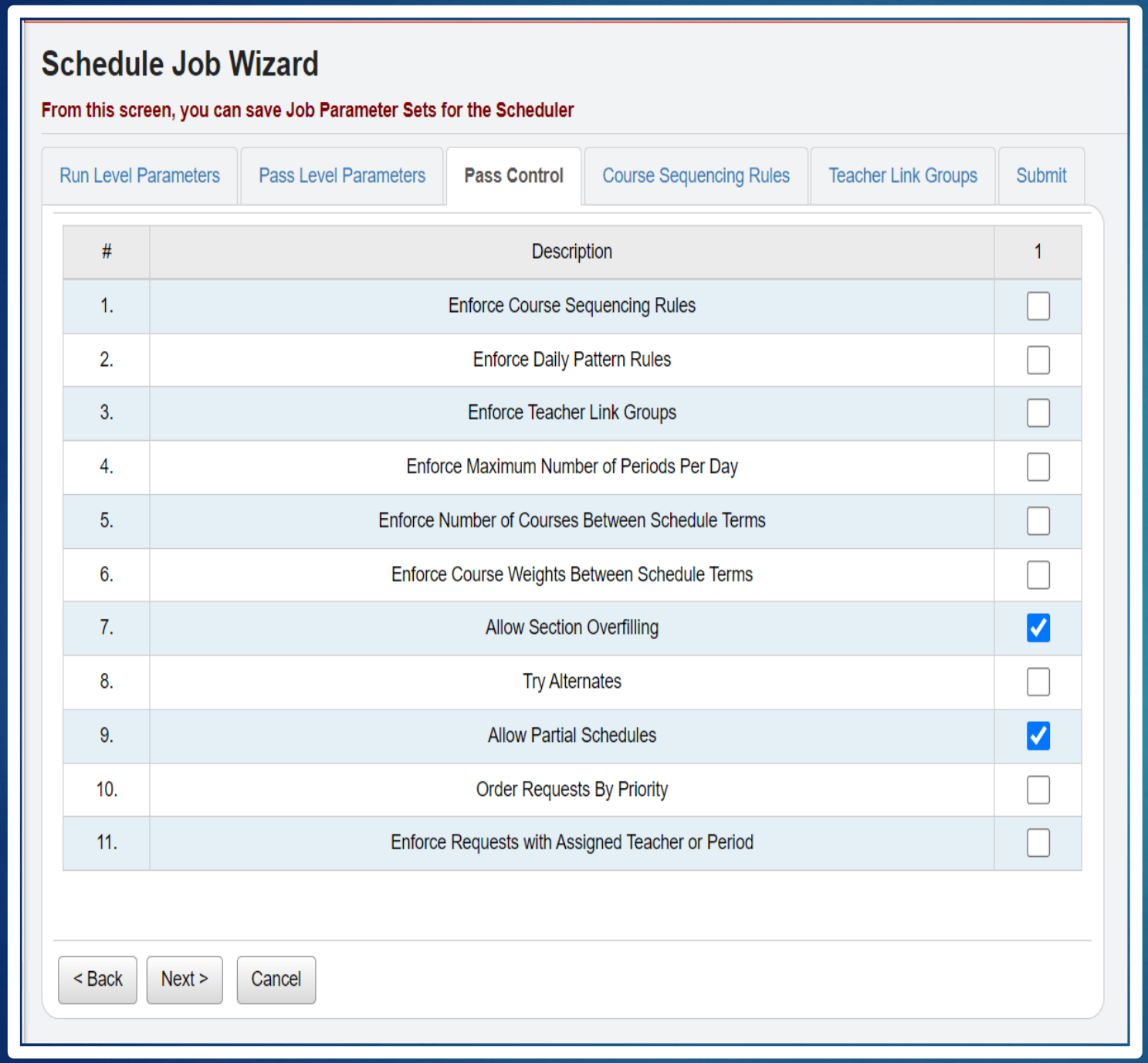


Single Student Scheduler Pass Level Parameters Tab

Max Number of Passes: Defaults to three but can be run as many times as needed.

Max Periods of the Day: If you want to be sure there is room for Study Halls you can use a lower number than the actual periods in a day

*The rest of the options are not used for the Single Student Scheduler and can be left blank.

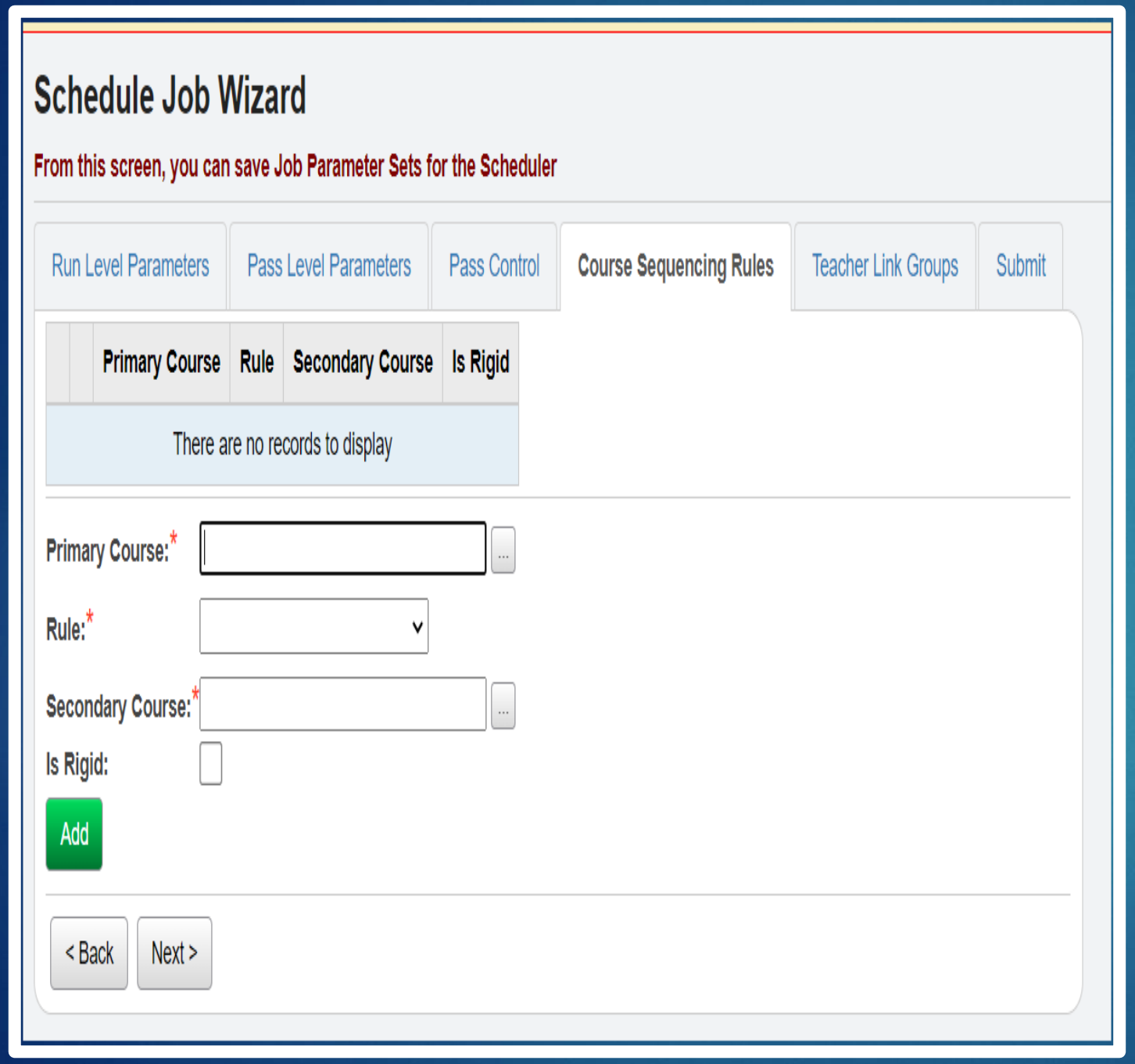


Single Student Scheduler Pass Control Tab

Allow Section Overfill: If overfill was selected on tab 1, you will need to check item 7 here or the SSS will ignore that setting.

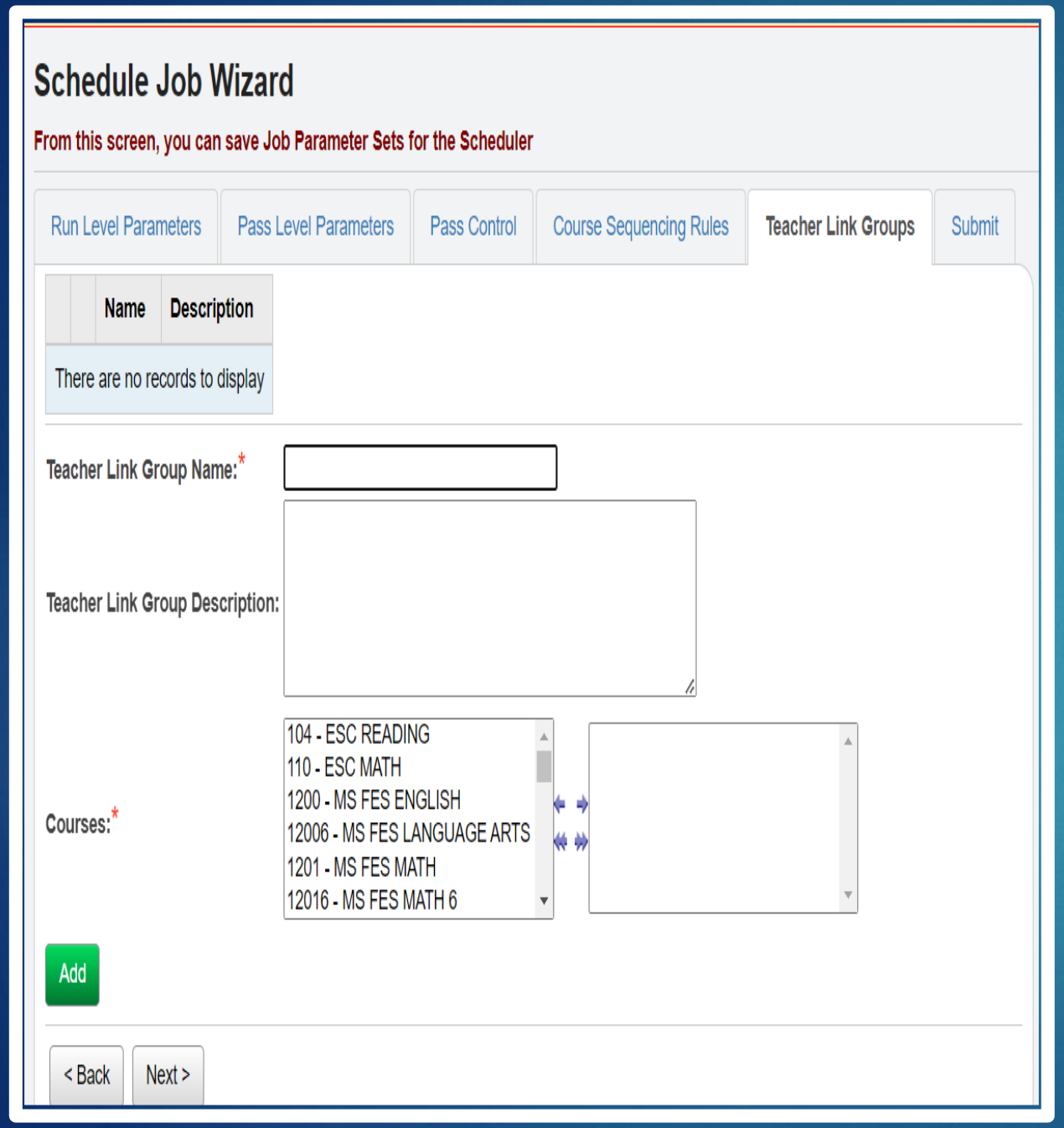
Allow Partial Schedules: This option should be checked.

*The other options are not typically used when running the Single Student Scheduler



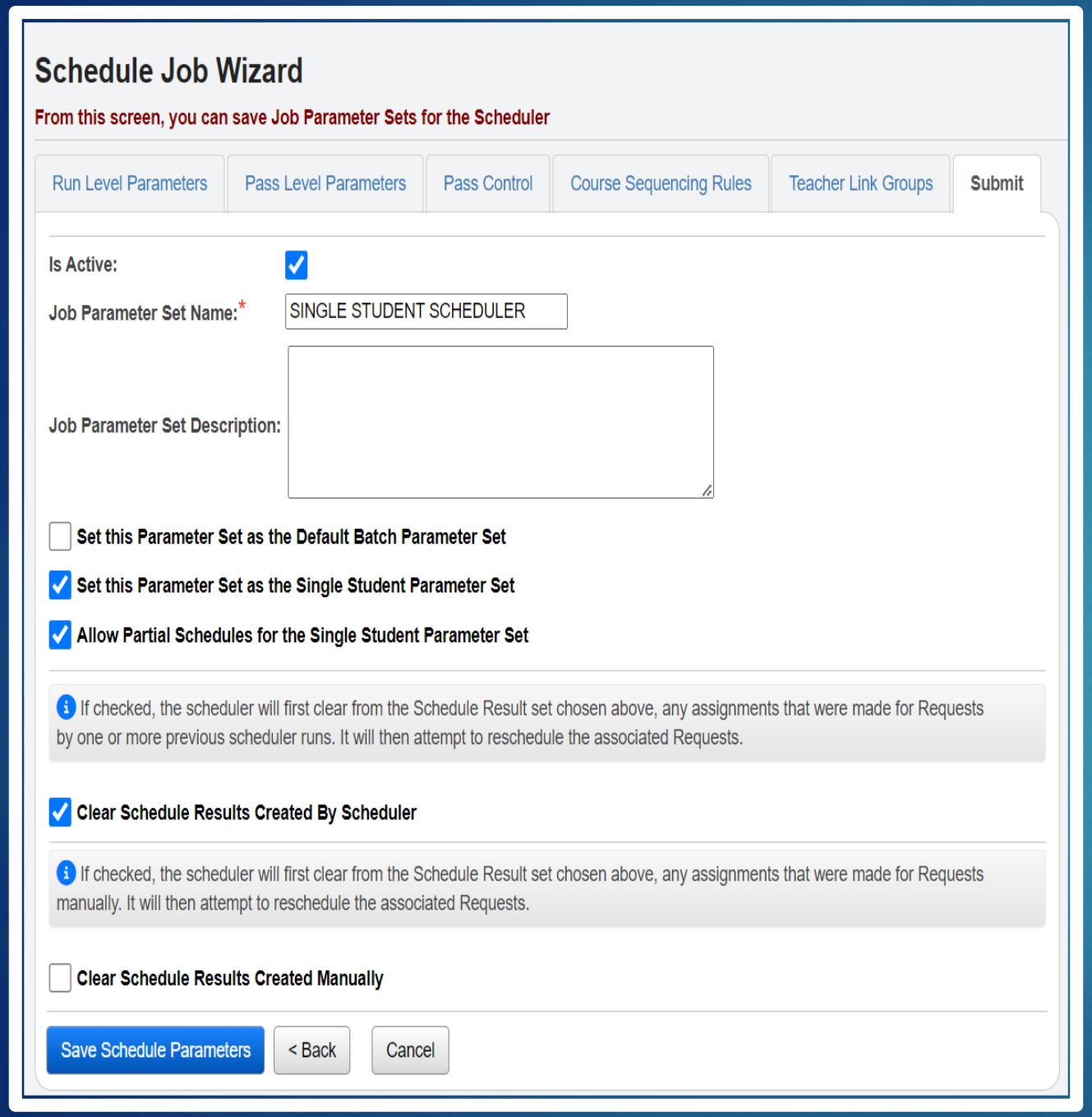
Single Student Scheduler Couse Sequencing Rules Tab

*These options are not typically used for the Single Student Scheduler and can be left blank. They can be edited if a school decides to use them at any time.



Single Student Scheduler Teacher Link Groups Tab

*These options are not typically used for the Single Student Scheduler and can be left blank. They can be edited if at any time a school decides to use them.



Single Student Scheduler Submit tab

Job Parameter Set Name: Enter Single Student Scheduler as the name

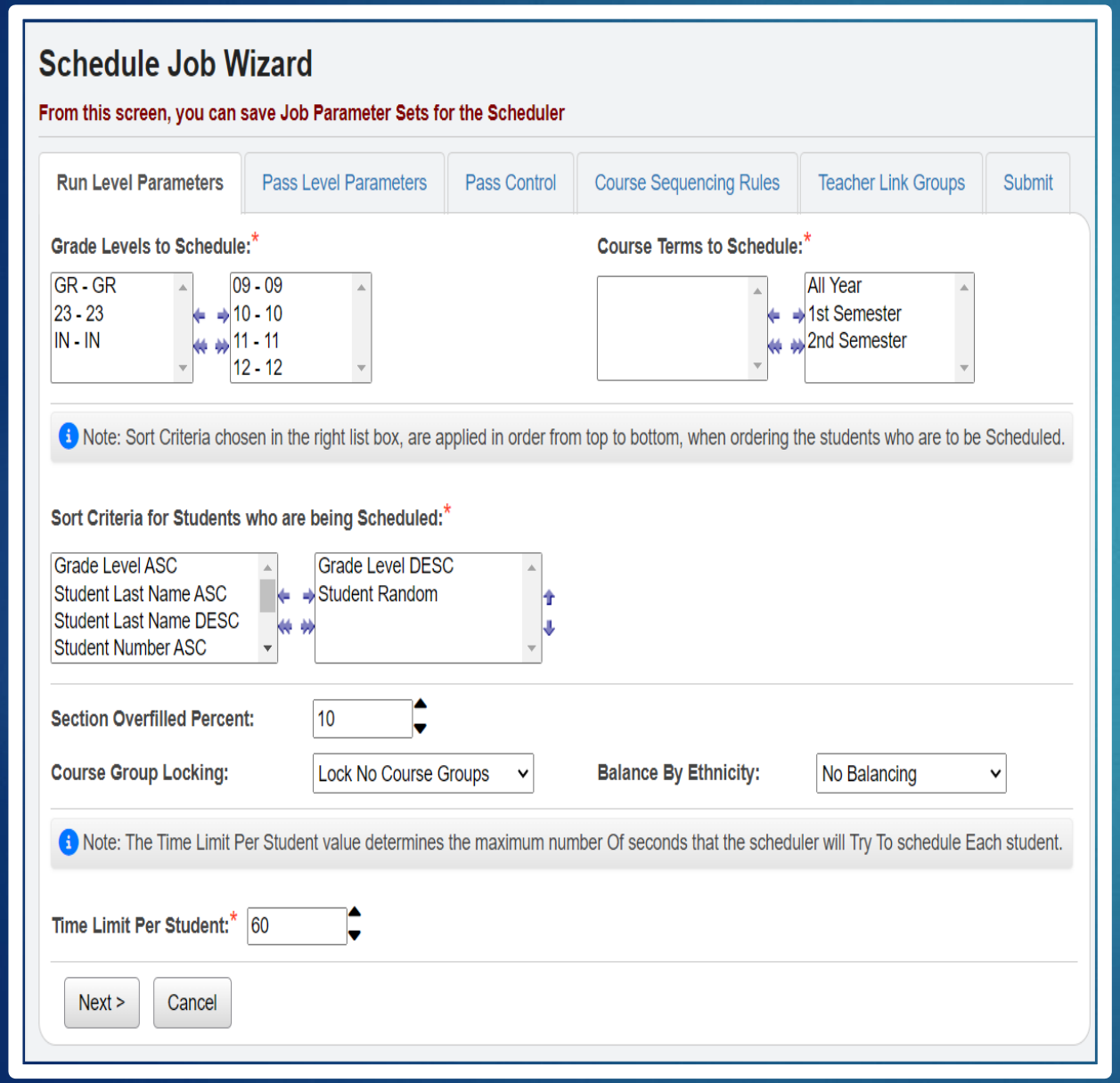
Choose: Set this Parameter Set as the Single Student Schedule Set. After the page refreshes, a new option appears

Choose: Allow Partial Schedules for the Single Student Parameter Set.

Choose: Clear the Schedule Results Created by the Scheduler

DO <u>NOT</u> CHOOSE: Clear Schedule Results Create Manually or all your manually entered assignments for students will be deleted.

Configuring Batch Schedule for Entire School



Batch Scheduler
Run Level Parameters Tab
(Red Asterisks * are required fields)

Grade Levels: Can run all or single grades. If running all and you want to schedule seniors first, select Grade Levels DESC as the sort criteria

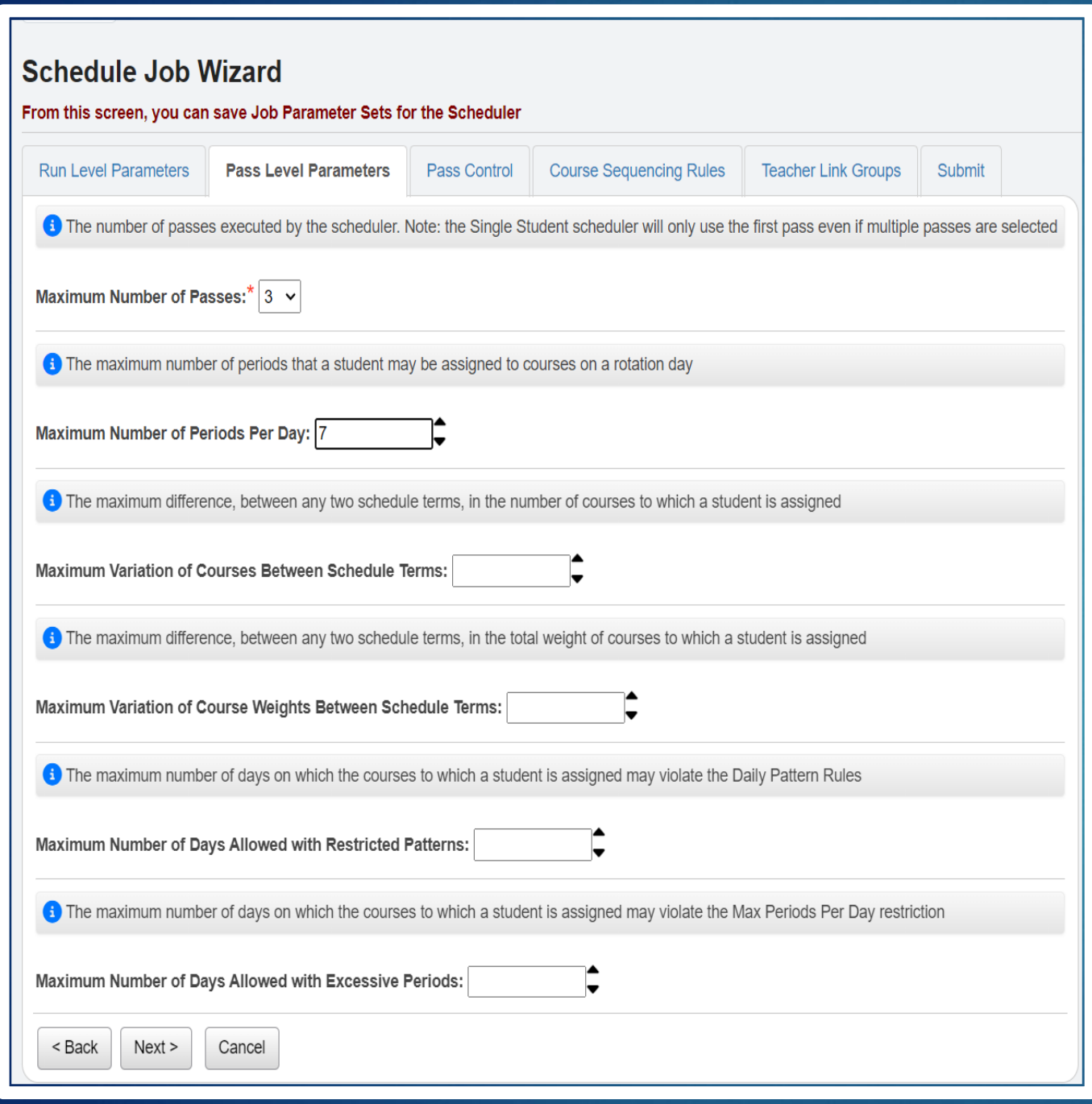
Course Terms: Pull over the course terms you want to schedule.

Overfill: Select the percentage of overfill you would like to use. (5% of class of 25=1)

Course Group Locking: Recommended-Lock No Course Group

Balance by Ethnicity: Typically set to No Balancing

Time Limit Per Student: Okay to leave at default of 60

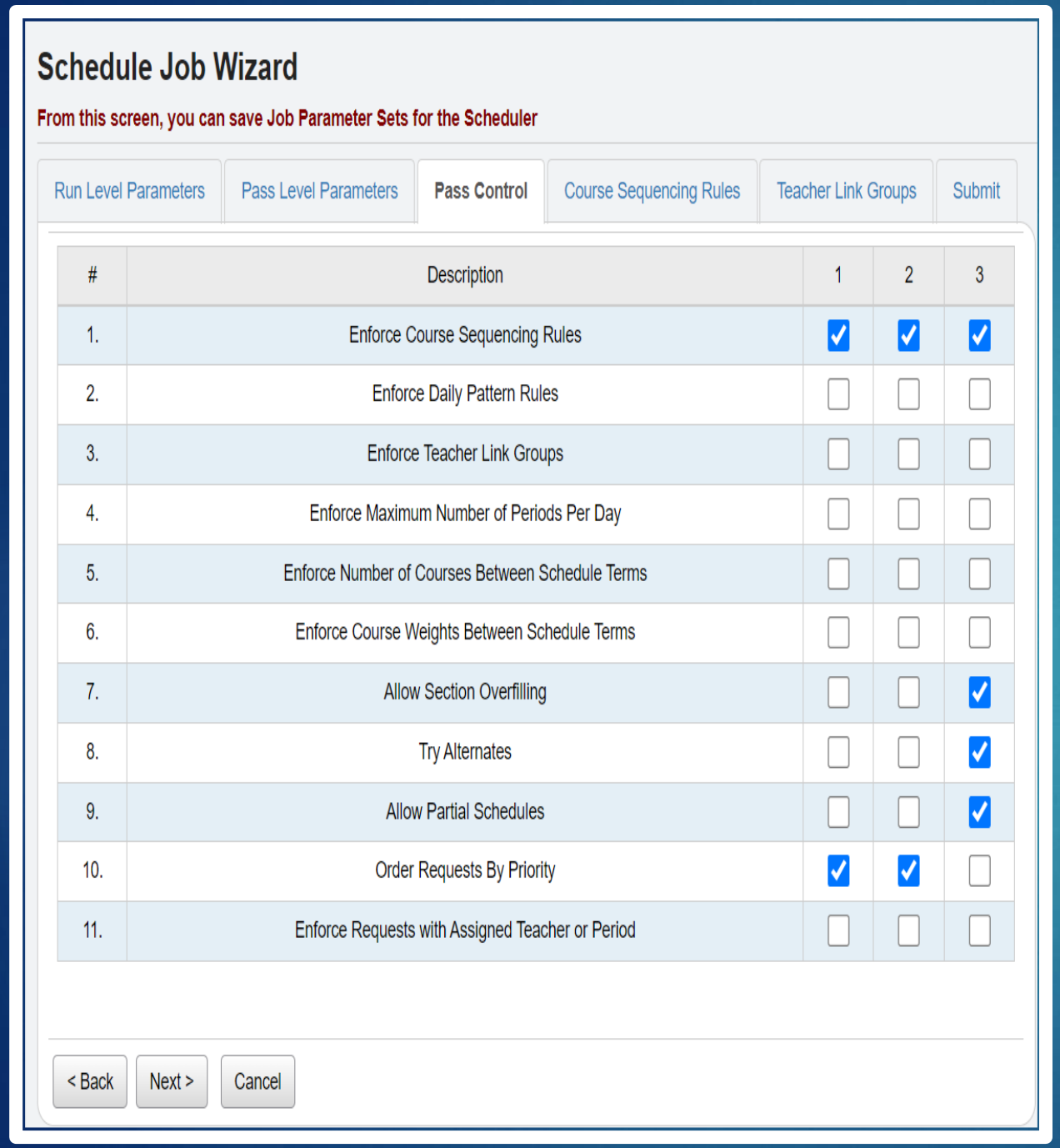


Batch Scheduler
Pass Level Parameters Tab

Max Number of Passes: Defaults to three but can be run as many times as needed.

Max Periods of the Day: If you want to be sure there is room for Study Halls you can use a lower number than the actual periods in a day

It's okay to leave the other fields blank, however, it you want to use them, refer to the Batch Scheduler Checklist, page 23.



Batch Scheduler Pass Control Tab

*The number of Pass Columns will display from what was chosen on the Pass Level Parameter Tab

Enforce Course Sequencing Rules: Select for all passes. If you use course sequencing those rules need to be set up on the next tab, Course Sequencing Rules.

Allow Section Overfilling: Typically selected on the final pass.

Try Alternates: Typically selected on final pass.

Order Requests by Priority: This is referring to course priority and typically used in pass 1 & 2.

Batch Scheduler

Course Sequencing Rules

This tab is not typically used by schools but is explained on page 27 of the Batch Scheduler Checklist.

The Batch Scheduler does not look at pre and co-requisites and assumes that student APPROVED requests have met the criteria set forth by the course.

The course sequencing rules tab allows the school the option to tell SI that certain courses(primary) need to be taken in the same schedule term, an earlier schedule term, or later schedule term than other(secondary) courses.

Okay to leave blank

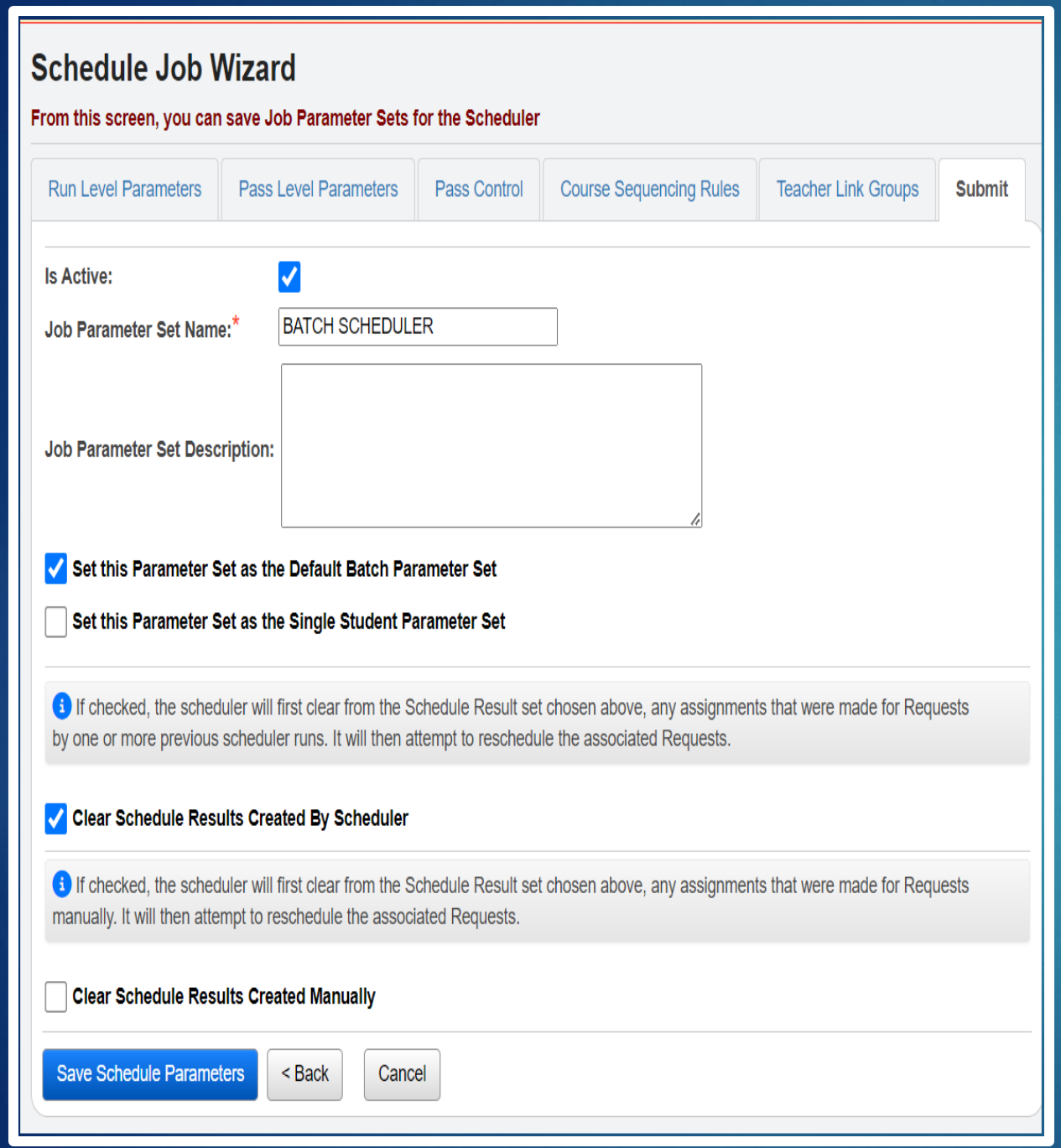
Teacher Link Groups

This tab is not typically used by schools but is explained on page 28 of the Batch Scheduler Checklist.

Teacher Link Groups are used when a school wants the students to have the same teacher for multiple courses but doesn't necessarily mind which course sections they are scheduled into-only that the teacher is the same.

For instance, Chemistry and Chemistry Lab could be linked so the student got the same teachers.

Okay to leave blank



Batch Scheduler Submit Tab

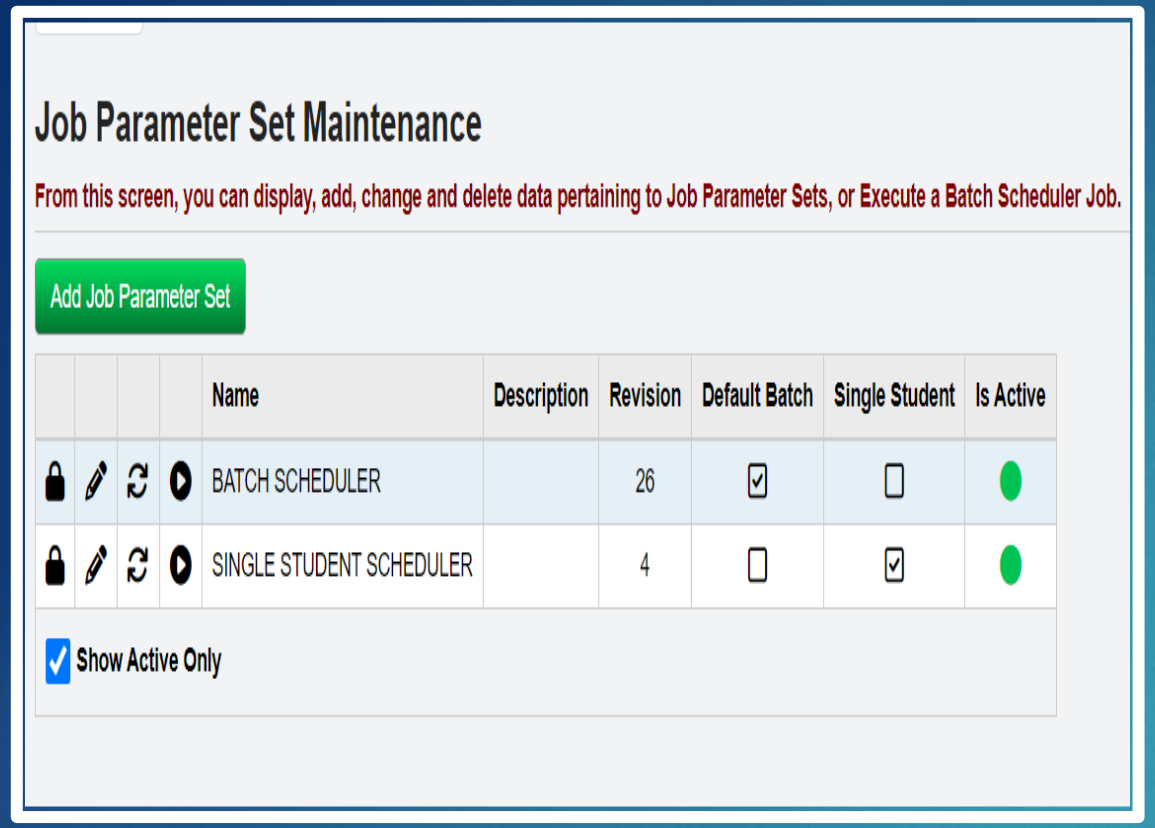
Job Parameter Set Name: Give a name, keep it simple and identifiable. Ie: Default Batch Scheduler

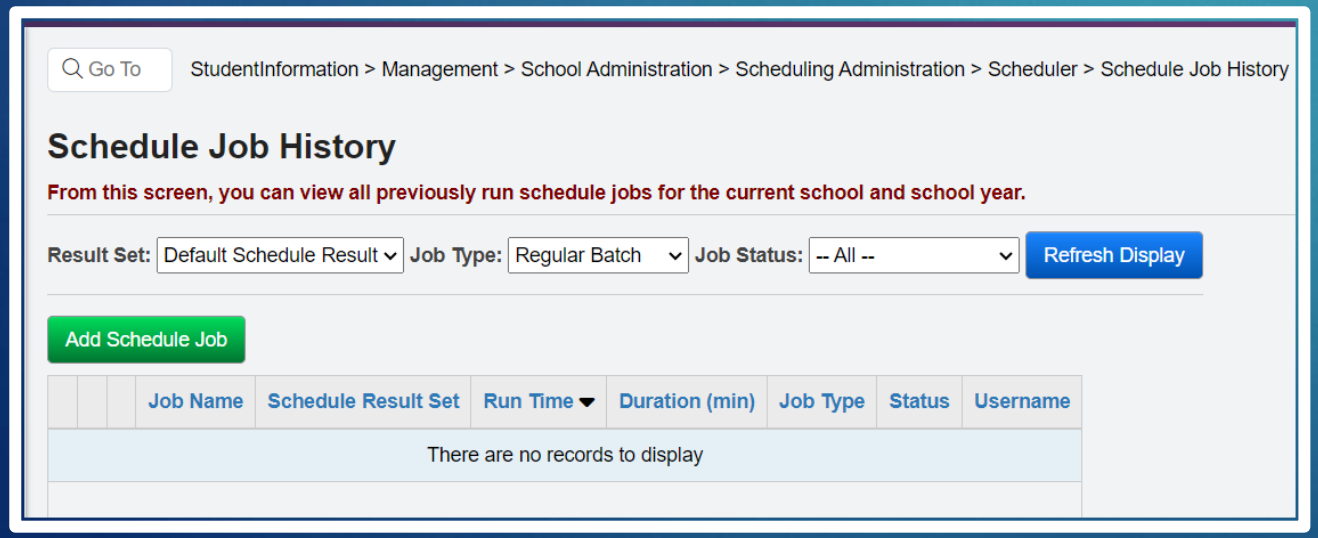
Set this Parameter as the Default Batch Scheduler Set: Select this box

Clear Schedule Results Created by Scheduler: Typically selected. This will clear assignments made by previous runs of the scheduler, so the student gets the best possible schedule.

Clear Results Created Manually: Do NOT select this box. It will clear all manually created assignments given to students.

Save the Schedule Parameters-Be sure to save the settings you have created.





Run the Batch Scheduler

When you are ready to run the scheduler, return to the Job Parameter Set Maintenance Screen.

Be sure you are working in the correct school year.

Click on the button.

On the Schedule Job History page, hit the refresh display button.

The job will show complete.

Schedule Job History

From this screen, you can view all previously run schedule jobs for the current school and school year.

Result Set: -- All -- **Job Type:** Regular Batch **Job Status:** -- All -- Refresh Display

Add Schedule Job

			Job Name	Schedule Result Set	Run Time ▼	Duration (min)	Job Type	Status	Username
Stats	Job Params	Rerun Job	8-10-23	Default Schedule Result	08/10/2023 10:27 AM	1	Batch	Complete	FRUCHEYT
Stats	Job Params	Rerun Job	Run # 2	Default Schedule Result	06/01/2023 11:30 AM	1	Batch	Complete	FRUCHEYT
Stats	Job Params	Rerun Job	Run # 1	Default Schedule Result	05/09/2023 09:45 AM	1	Batch	Complete	FRUCHEYT

Click on the Stats link to see how many students were fully scheduled. Make whatever adjustments may be needed. Then you can re-run the Batch Scheduler and update the schedule results by returning to the Job Parameter Set Maintenance Page and selecting the button again.

NOTE: If you need to delete an assignment from the student Course Section Assignment page, it does not delete it from the Request Page. You will want to delete the request as well as the assignment from the students Requests and Assignment page to ensure it is removed from both places.

You can re-run the Batch Scheduler as many times as needed until the schedules are as clean as possible.

Schedule Study Halls

Using the Study Hall Wizard to fill in the student schedules. This will only run for students who have an overall active status and at least one course request. (see page 55 of checklist)

StudentInformation > Management > School Administration > Scheduling Administration > Scheduler > Study Hall Wizard

Don't run until:
-You are sure the Batch Schedule not longer needs to be run.
-You have resolved the majority of students' conflicts
-You are ready to fill in the rest of the students' open periods with study halls

Note: The scheduler will look for course type Z-Study Hall.

Once the scheduler is run, you will go to the Schedule Job History to view the results, same as you do for the batch scheduler. (Select the job type, Study Hall Batch and refresh)

There is a Study Hall Wizard checklist in the Learning Center you can refer to as well.