

Guide to Future Scheduling

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Introduction

What This Guide is About

This Guide explains the Future Scheduling module.

Who This Guide is For

This Guide will help anyone who coordinates and builds a Schedule Master to schedule students for next year's classes. This typically includes registrars and administrators, but might also include teachers, counselors, and anyone else involved in the future year scheduling process.

What This Guide Contains

The Guide explains the functions necessary for collecting, recording, processing and managing the information needed to generate class and individual student schedules for the next academic year or the current academic year.

In this Guide, the future year scheduling process is divided into the following five parts that represent the five distinct areas in the scheduling process.

- Part One Preparing to Schedule
- Part Two Managing Student Requests
- Part Three Building the Schedule Master
- Part Four Scheduling Students
- Part Five Concluding the Scheduling Process

Within each of the five parts the Guide outlines specific steps to complete that part.

What You Should Know Before You Read This Guide

You'll find that the Guide is much more helpful if you understand your Entity's scheduling practices such as how requests are gathered, whether the Schedule Master will be changed from last year, and what method will be used to create student schedules. Additionally, many scheduling terms and many features in the Future Schedule module will make more sense if you have read the *WSIPC Guide to Current Scheduling*.

Before using this Guide, be sure you are familiar with all of the information in the *WSIPC Guide to Web Access*, which helps you understand basic features of Web Access. This Guide assumes that you understand all of the information in the *WSIPC Guide to Web Access*.

Overview of Future Scheduling

What Does Future Scheduling Do?

The Future Scheduling module helps you collect, record, process and manage the information you need to generate schedules for the next academic year, future school years, or future terms within the current school year. Scheduling is a complex process that must accommodate many variables, including the availability of course sections, teacher availability, students' course requests, course prerequisites, and the school's academic requirements.

Using the Traditional Method

This Guide approaches the scheduling process with a “traditional” method of scheduling students in which software schedules students into sections. Using this method, you create a Course Master of available courses, gather students' course requests, create sections for the courses (including assigning a teacher, room and period), and use the software to schedule students. This method usually requires several trial runs before the final scheduling run.

Because this process involves many steps, Appendix A contains a checklist to help you track your progress. In Appendix B, a scheduling process diagram shows a typical scheduling process that uses the traditional scheduling method to produce student schedules. The diagram incorporates the five parts of scheduling that are covered in this Guide.

Dealing With Conflicts

While the Future Scheduling module helps you develop a Schedule Master and generates student schedules, the number of variables makes conflicts inevitable: sections fill up and course demand often does not match expectations. The Future Scheduling process includes several checkpoints to help you spot and correct problems early.

Working in the Correct Entity

Do all Future Scheduling work in the Entity you're scheduling for unless otherwise noted in the Guide. Be sure you are not scheduling in Entity 000. If you try to schedule in Entity 000, some features are not available.

Selecting the School Year

If the check box Allow Current Year Scheduling or Schedule Multiple Times Per Year is selected in Scheduling Options (WS\OF\FS\PS\CF\SE), you must select a current school year, term or semester, or future year every time you click the Future Scheduling button on the home page. If you are scheduling for the entire current school year, select the entire current school year. If you are scheduling several times per year, select a Term or Semester of the correct school year.

Concepts You Should Know

Before you learn how to use the Future Scheduling module, learn the following pairs of terms used throughout this Guide.

Section vs. Class

The words *section* and *class* appear throughout the Future Scheduling module. Though they technically mean the same thing, there are subtle differences in the way the terms are used. Most areas of Future Scheduling use the word *class* when a process or area involves a student, and the word *section* when a process or area involves a course or the Course Master. For example, a student enrolls in a class, but a course contains sections. For the sake of simplicity, this Guide uses the word *section* in both cases.

Request vs. Scheduled

You should also be aware of the difference between *request* and *scheduled*. These words are not synonyms. For example, a student *requests* a course but is *scheduled* into a section. The difference is that a request reflects a desire to enroll in a section of a course—a potential enrollment—but a scheduled student is actually enrolled in the section.

Course Master vs. Schedule Master

A *Course Master* contains information about an Entity's courses, sections and meets. (A meet defines such things as the day of the week the section is taught.) The *Schedule Master* (also called the Master Schedule) defines the Entity's plan for courses it will offer.

PART ONE: PREPARING TO SCHEDULE

This section describes how to configure an Entity as you prepare to gather and enter student scheduling requests. Preparing to schedule requires the following steps:

- Update Graduation Years and Grade Levels
- Maintain Scheduling Setup and Codes
- Add Students to an Entity
- Maintain Staff
- Verify Scheduling Configuration
- Run Course Master Utilities
- Maintain the Course Master
- Create Scheduling Teams
- Create Scheduling Categories

This section explains each of these steps.

Step 1: Update Graduation Years and Grade Levels

Before you start the Future Scheduling process, the graduation years and grade levels must exist for the school year being scheduled. To add these for the year being scheduled, you clone the information from the previous school year. This links each grade level to its associated graduation year for the specific school year.

Example:

Grade level 12 is associated with graduation year 2011 during the 2011 school year, but during the 2012 school year grade level 12 is associated with graduation year 2012.

NOTE	To change the grade levels offered at the district (for example, to change the labels to P1, P2, P3 and P4, instead of just P), clone the existing grade levels and graduation years from the previous school years and then add and modify them as needed.
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To update Graduation Years and Grade Levels:

1. Go to PS\CA\ST\CF.
2. Click Grad. Yr/Grade Xref Setup.

TIP	To determine whether graduation years and grade level records exist, click Switch School Year and look for the next school year in the School Year list. If it already exists, you can only add to or modify existing records. You cannot clone to an existing year.
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3. Click Clone.

4. In the Clone from School Year box, type the previous school year.
5. In the School Year Low and School Year High boxes, type the school year being scheduled. Enter the same year in both boxes so that only one school year's worth of grade levels and graduation years is created.
6. Click Save. The following message appears:

“## Grade Yr/Grade XRef records were created for each school year from 9999 to 9999.”

7. Click OK.

Step 2: Maintain Scheduling Setup and Codes

The following processes create components of the school year to be scheduled so that the scheduling process can begin. This includes utilities that clone a new Entity Year, Term Definitions, Scheduling Files, Calendar Files and Control Sets from the current school year to the school year being scheduled.

Check the Status of Clone Utilities

Before you clone information, check the status of the clone utilities to see if information has already been processed.

To check the status of clone utilities:

1. Go to WS\OF\FS\PS\UT\SC.
2. In the Switch School Year box, select the school year to be scheduled.
3. Click Apply.
4. Click the plus sign next to one of the process names (utilities).
5. If the utility has been run for the selected year, it is listed under Process Runs with information such as date started, time started, and date finished. To see details about the Processing Options selected when the utility was run, click the plus sign next to the date of one of the Process Runs.
6. Click the plus sign next to the other two utilities to determine whether they have already been run for the selected school year.
7. Click Back.

Run Any Utilities that Have Not Been Run

If any utilities have not been run, follow the procedures below for each utility that has not been run.

Run the Clone Entity Year and Term Definitions Utility

You must create the Entity Year and Term Definitions before the Future Scheduling process can begin. By performing the procedure below, you use the Entity Year and Term Definitions from a previous school year to create Entity Year and Term Definitions for the school year to be scheduled.

To run the Clone Entity Year and Term Definitions utility:

1. Go to WS\OF\FS\PS\UT\CE.
2. Select a year in the School Year to Use box (typically the current school year).
3. Select a year in the School Year to Create box. This is the school year to be scheduled.
4. Click Run. The Clone Term Definitions screen appears and shows terms from the previous school year. The default dates are the dates from the year in the School Year To Create box incremented by one year.
5. Enter the new start and stop dates for the terms and semesters. If your administrators haven't decided on the calendar for the next school year, you can accept the default dates and change them later.
6. Click Run.

CAUTION	If the year selected in the School Year to Create box has already been processed, a message says that an Entity Year record and Term Definitions already exist and that if you choose to continue, existing records are deleted and new ones are created. If you choose to run this utility, you will overwrite existing records and updates that you made the first time you ran this utility.
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The utility is processed through the Print Queue. When it is done, a report appears. The report provides the Process Summary and Record Creation Summary which show when the records were cloned, what values were created, and how many records were created.

Run the Clone Calendar Information Utility

This utility copies Calendar information, Calendar Master, Detail and Terms from one year to another. To generate schedules for the upcoming school year, the Future Scheduling process requires a Calendar Master. After cloning, you can edit specific information such as dates.

To run the Clone Calendar Information utility:

1. Go to WS\OF\FS\PS\UT\CC.
2. Select a year in the School Year to Use box (typically the current school year).
3. Select a year in the School Year to Create box. This is the school year to be scheduled.
4. Select one of the following options in the Calendars To Process box:

Calendar Master Only clones the Calendar Description, Calendar Code, and a Master record containing the start and end dates of the new school year.

Calendar Master & Detail clones the Calendar Description, Calendar code, and the Master record containing the start and end dates of the new school year. It also clones a detail record defining the thresholds for daily attendance.

Calendar Master, Detail & Terms clones the Calendar Description, Calendar Code, Master record and attendance thresholds. It also clones specific terms with their start and stop dates.

TIP	You can run the Calendar Information cloning process several times to clone Calendar information not previously cloned. For example, if you run the utility using the Calendar Master Only option, only Calendar Master information is cloned. If you run the utility again using the Calendar Master & Detail option, only calendar details are cloned because the Calendar Master was already cloned. Once a part of the calendar is cloned, you can't run the utility again to remove that part.
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5. Click Cal Mstr.
6. A message asks how you would like to establish new calendar dates. Do one of the following:
 - Select Previous Year's Calendar. Dates from the previous year's calendar are incremented by a year to create the next year's calendar dates.
 - Select New Term Definition Dates. Dates used to create Term Definitions are used to create next year's calendar dates.

7. Select the check box next to the Calendar Master you want to clone. If the dates shown are not already correct and you know the specific start and end dates, you can edit the dates here. If you don't yet know the dates for the next year, you can edit them later.
8. Click OK.
9. If you selected the Calendars To Process option Calendar Master, Detail & Terms, click Cal Term.
10. Select the check boxes next to the terms to be cloned. As with the Calendar Master dates, you can edit these dates.
11. Click OK.
12. Select the check box Automatically Generate Calendar Days if you want to automatically create daily detail records for the selected calendar. If this option is not selected, the records can be generated later.
13. Click Run.
14. If you decided to generate calendar days, the Calendar Day Generation screen appears. Make selections and click Run. If you select Overwrite Existing Days, a message tells you that calendar days will be generated for dates entered and that any existing days *will* be overwritten with the current information. Read the message carefully and click OK.

The utility is processed through the Print Queue. When it is done, a report shows the number of records created for Calendar Master, Calendar Detail and Calendar Term.

NOTE	If the Calendar Master, Calendar Detail or Calendar Terms for the school year were cloned previously, they aren't overwritten and the number of records created is zero.
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Run the Clone Scheduling Master Files Utility

This process creates a future year scheduling Course Master from the current year scheduling Course Master.

To run the Clone Scheduling Master Files utility:

1. Go to WS\OF\FS\PS\UT\CS.
2. Configure the Clone Schedule Master Files screen (Figure 1). For information about options on this screen, see Table 1.
3. Click Run. If scheduling requests exist for the school year to create, a message says scheduling records exist for the year to be created and that courses with one or more requests will not be processed. Click OK.

The utility is processed through the Print Queue and generates a report that provides the Process Summary and Record Creation Summary which show when the records were cloned, what values were created and how many records were created.

Figure 1 - Clone Schedule Master Files screen

Option	Description
School Year to Use	School year whose details will be cloned (typically the current school year).
School Year to Create	School year to be scheduled.
Records to Clone	Records that will be cloned. Courses Only clones course level information only. Courses and Sections clones course and section information. Courses, Sections and Class Meets clones all areas of a course.
Purge Existing Scheduling Master Information Before Cloning	Deletes the existing Course Master before cloning a new Course Master. This box is available when any option other than None is selected for Records To Clone. Caution: If you select this option and course, section or Class Meet records exist, they are deleted and replaced with records from the Course Master being cloned. Courses with student requests are not deleted.

Option	Description
Overwrite Existing Records	Changes any course, section and Class Meet records in the Course Master for the year being scheduled based on the Records To Clone option you selected. Course, section and Class Meet information for courses with Student Requests aren't overwritten. This box is available when any option other than None is selected for Records To Clone.
Mass Add Control Sets Possible	Runs the Mass Update Control Sets utility after the Clone Schedule Master Files utility is done. This assigns all Control Sets Possible values for the course with <i>all</i> available Control Sets. For more information about this, see the <i>WSIPC Guide to Current Scheduling</i> .
Course/Class Subtables	Clones details from the Course/Class Subtables. The following options are available: All Course and Section Subtables clones all values in any tabled field pertaining to the course and section. This includes fields such as Subject, Department, Scheduling Type, and Co- and Pre-Requisite. Only Subtables Being Used In Courses clones the values in any tabled field that are assigned to any course and section being cloned. For example, if a value of Visual Arts exists in the Subject field but is not assigned to any course being cloned, the value won't be cloned in the Subject table for the Course Master being cloned. The Clone Master Schedule Files utility doesn't run if the option None is selected.

Option	Description
Grading Period	Grading Periods to be cloned. The following options are available: Selecting None will not clone any Grading Period or Class Grading (Grade Bucket) information from Grading Setup. However, this part of the utility can be processed again with a different Grading Period selection, and new Grading Period and/or Class Grading information will be cloned. Grading Periods Only clones only Grading Period information from Grading Setup. This includes the Sem/Term literals, the Grade Sets and the Grading Periods. Course Length Sets and Grading Buckets are excluded for this option. Grading Periods and Class Grading clones Grading Period information and Grade Bucket information which includes Course Length Sets/Class Control Sets and Grade Buckets.

Table 1 – Description of options on the Clone Schedule Master Files screen

Confirm Accuracy of Course Length Sets and Class Control Sets

The Course Length Set specifies the length of time a course meets during the school year (that is, it specifies the course's duration). For example, a Semester Course Length Set defines a class that spans 18 weeks and a Year Course Length Set defines a class that spans 36 weeks.

The Class Control Set specifies which term, semester or trimester a section is offered. For example, it specifies that a section is offered Semester 1. After you've cloned the Course Master Schedule files, you must ensure Course Length Sets and Class Control Sets are accurate.

The steps below provide general guidelines for ensuring Class Control Sets are accurate. For details about how to perform each of these steps, see the *WSIPC Guide to Grading*.

To ensure Course Length Sets and Class Control Sets are accurate:

1. Go to WS\OF\FS\BC\PS\CO\CL.
2. Add additional Course Length Sets as needed and delete sets that are no longer used.
3. Confirm that the default Earned Credit, default GPA Credit and Academic Minutes values for each Course Length Set are accurate.
4. Confirm that the existing number of Normal and Subset Class Control Sets for the existing Course Length Sets are accurate. If you add a new Course Length Set, add new Normal and Subset Class Control Sets.

5. Confirm the following elements of each Class Control Set (Normal and Subset) are accurate: Start Term, Stop Term, Class Start Date, Class End Date and Term Grading Semester Numbers.

Validate the Entity's Grading Setup

After an Entity's grading setup is initially configured, it is cloned from year to year with only minor adjustments unless an Entity is making a major change to its term lengths or grading periods. At least once a year, confirm that the grading setup is accurate. The best time to do this is at the beginning of the future year scheduling process. For information about configuring the grading setup, see the *WSIPC Guide to Grading*.

Step 3: Add Students to an Entity

In this Step, you add students to the Entity in which they will be enrolled during the next school year. You do this to create future year schedules for the students. This Step requires the following processes:

- Run the Mass Add Students to an Entity utility
- Review the Report of Students Added to Other Entities
- Check the Error Report
- Delete Student Enrollment Records from a Receiving Entity

This section describes each of these processes.

Run the Mass Add Students to an Entity Utility

As students advance from one grade level to another, it is necessary to promote a student to the next Entity. For example, a student who advances from Junior High into High School must be promoted from the Junior High Entity to the High School Entity.

To add students to an Entity for scheduling, you use the Mass Add Students to an Entity utility. This utility creates an entry record for students who will attend a different building in the next school year. This entry record allows students to be included in future year scheduling processes. You run the utility from the *sending Entity* to create an inactive entry record in the *receiving Entity*. The entry record does not delete or withdraw students from the sending Entity. Only after Year End and Year Start processing is run in both the sending and receiving Entities are students withdrawn from the sending Entity and activated in the receiving Entity.

Example:	<u>Sending Entity</u>	<u>Receiving Entity</u>
	Pre-School	Elementary School
	Elementary School	Middle School
	Middle School	High School

NOTE	The Mass Add Students to an Entity utility is not typically run at the high school because the outgoing class is graduating and the students are not moving to another Entity. However, a high school may run this utility to move students if a new high school is being opened or new boundaries require students to transfer to another Entity and students need to be scheduled in that Entity.
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You can run this utility several times each year without duplicating entry records for a student in the receiving Entity. A new entry record is created only when a student does not have an active Entry record in the receiving Entity. An *active* entry record has no withdrawal date. If a student already has an entry record in the receiving Entity and that record has a withdrawal date, a new entry record is created.

BEST PRACTICE	After this utility has been run at the beginning of the future year scheduling process, the sending and receiving Entities should agree on a schedule for periodically running this utility until the scheduling process is complete. You may need to run this utility several times during the school year as you prepare for future year scheduling.
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The following two scenarios illustrate timing and frequency aspects of running this utility.

Scenario 1:

A district runs the Mass Add Students to an Entity utility in January as they begin the future year scheduling processes. They run this utility to move all fifth-grade students from the elementary school to the middle school. Students continue to enroll in the district throughout the year. The utility is run once a week to ensure that all newly enrolled fifth-grade students at the elementary school have an entry record at the middle school they will attend next year. The utility is run one last time at the end of the school year. If future scheduling processes are complete at the middle school, any additional students must be scheduled manually.

Scenario 2:

A district runs the Mass Add Students to an Entity utility in March as they begin the future year scheduling processes. New student enrollment in this district is low. Therefore, they re-run the utility at the end of the school year only.

To run the Mass Add Students to an Entity utility:

1. Select the Entity that the students are currently enrolled in (the *sending* Entity).
2. Go to WS\ST\PS\UT\MA.
3. Click Add.
4. Configure the Mass Add Students to an Entity screen (Figure 2). See Table 2 for a description of options on this screen.
5. Click Save and Run.

If you ran the utility in the Preview mode, make any changes to the Student Selection, Criteria Options and/or Student's New Entity Values areas and run the utility using the Run mode.

BEST PRACTICE	Before you add students to the receiving Entity, run the utility in Preview mode so you can review the results for accuracy.
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Home Page | Students | Prod Setup | Utilities | Mass Add Students to an Entity

Template Settings

* Template Description:

☐ Share this template with other users in entity 202

Student Selection

☒ By Range ☐ By Individual Mode: ☒ Preview ☐ Run

Criteria Options

☐ Use Path to determine Entity and School for new record ?

☐ Remove future dual enrollment records outside of the path in all entities ?

☐ Add students to all Schools indicated by their Path

Add Students to Entity:

☐ Set NY Status in Student's Current Entity to Inactive

Student's New Entity Values

☐ Set the new Entity as the Student's Default Entity

Student Status: ☐ Active ☐ Inactive ☐ Use Present Status ☒ Use Present Next Year Status

Next Year Status: ☐ Active ☐ Inactive ☒ Use Present Next Year Status

Membership: ☐ Yes ☐ No ☒ Use Present Membership

Feeder School: Use Present Feeder School

Entry Record Values

School:

Calendar:

Homeroom: (* to carry forward current Student Homeroom)

Advisor: (* to carry forward current Student Advisor)

Asterisk (*) denotes a required field

Figure 2 - Mass Add Students to an Entity screen

Area	Description of Area
Template Settings	Options in this area let you create separate templates for each time you will run the utility and allow other users to run the template after the parameters have been set.
Options In This Area	Description of Options
Template Description	Describes the parameters you save on the Mass Add to an Entity screen. If you create several templates for the district, name each template with the grade level of the student entry records being created or with the sending Entity where the entry records are being created. For example, if you add eighth-grade students from Entity 300 to the high school Entity 400 on 3/30/11, type a Template Description of “Mass Add from 300 to 400 on 3/30.” Each time you use the same template to run the utility, change the date of the Template Description so you know at a glance when it was last run.
Share this template with other users in Entity ###	Allows other users in other Entities in your district to use your template when they run this utility. The template automatically appears in their template list.
Area	Description of Area
Student Selection	Options in this area determine whether the students who will be mass-added to the receiving Entity are selected individually or by a range. Typically, they are selected By Range. The information on the Ranges and Individual screens determines who is added to the receiving Entity from the sending Entity.
Options In This Area	Description of Options
By Range / By Individual	Refines the group of students who will be added to the receiving Entity. Based on whether you select By Range or By Individual, the label of the button in this area becomes Ranges or Individual. By Individual helps if a unique group of students exists that you can't select using the By Range option. See “Range Screen options” below this table for a description of options on the Ranges screen.

Preview	Allows you to see which students will be enrolled in the receiving Entity if you run the utility. If you run the utility with the Preview option selected, the utility does not process the students—it simply provides a report.
Run	Generates the Report of Students Added to Other Entities and an entry record is created in the receiving Entity for the students on the report.
Area	Description of Area
Criteria Options	Options in this area primarily determine where and how the enrollment record is created.
Options In This Area	Description of Options
Use Path to determine Entity and School for new record	Selects students for mass-adding according to their path information. This option works only if there is a path in either the address record for the student in the Path box or in the Student Path box on the General/School Path tab. If a student doesn't have a path and this option is selected, they are processed based on the value in the Next Year School box on the student record. For more information about this option, click the question mark on the screen.
Remove future dual enrollment records outside of the path in all entities	If a student has more than one enrollment record dated in the future (that is, where the date is greater than today's date) that isn't part of their path, that record is removed. Click the question mark to read about the action taken on the enrollment record. The Use Path to determine Entity and School for new record check box must be selected for this option to be available.
Add students to all Schools indicated by their Path or Schools	Creates an entry record for the student according to their path. Only one entry record per student is created. If you select the option Use Path to determine Entity and School for new record, you must also select one of these options or the utility will not run. Instead of selecting the Add students to all Schools indicated by their Path checkbox, you can click the Schools button and use this feature to exclude specific schools from the list of available schools. If a student's path includes a school that is not selected using the Schools button, an entry record isn't created for the student(s). This option allows a district to specify which schools are included when determining which schools to create entry records for.

Add Students to Entity	Entity to which the students are added (the <i>receiving</i> Entity). If you selected the option Use Path to determine Entity and School for new record, this option is not available. You must select a receiving Entity to add the student entry record to unless you have selected the option Use Path to determine Entity and School for new record.
Set NY Status in Student's Current Entity to Inactive	Changes the student Next Year status to inactive in their current school year Entity. You can use this status to prevent students who are moving to another Entity from appearing on reports. You might select this option if you are adding students to a receiving Entity for the next school year for future year scheduling. You can also wait and have the students' Next Year Status set to Inactive (at the sending Entity) during Year End processing.
Area	Description of Area
Student's New Entity Values	Options in this area of the screen determine the values used when the entry record is created in the receiving Entity.
Options In This Area	Description of Options
Set the new Entity as the Student's Default Entity	Sets the new Entity as the Student's Default Entity. Do not select this option if you are adding students to a receiving Entity for the next school year for future year scheduling. Students must keep their current Entity in the sending Entity as their Default Entity for the remainder of the current school year. The year-end process changes the student's Default Entity when applicable for the next school year. Note: The only valid reason to select Set the new Entity as the Student's Default Entity is if the Mass Add Students to an Entity utility is being run to add students to an Entity for the <i>current</i> school year.
Student Status	Student's status in the receiving Entity for the remainder of the current school year. The selection for this option is typically Inactive.
Next Year Status	Student's status in the receiving Entity for the next school year. The selection for this option is typically Active.

Membership	Allows you to select the Current Year Member setting at the receiving Entity. The selection for this option is typically Use Present Membership. For more information about this option, see “Membership” below this table.
Calendar	Allows you to carry over a student’s calendar from their sending Entity to their receiving Entity. This requires the receiving Entity to have the same calendar codes as the sending Entity. Because this is typically is not the case, Washington State users should not use this option. (This option was created for another state.) This option only appears if you select the Allow users to access advanced settings checkbox in Student Management Configuration (PS\CA\ST\CF\Entry-Withdrawal Settings) and you have selected the Use Path to determine Entity and School for new record checkbox.
Attempt to Carry Over Course Requests to New Entity	Attempts to carry over a student’s course requests from the sending Entity to the receiving Entity. This requires the receiving Entity to have the same course key codes as the sending Entity. Because this is typically is not the case, this option is not recommended for use by Washington State users. (This option was created for another state.) This option only appears if you select the Allow users to access advanced settings checkbox in Student Management Configuration (PS\CA\ST\CF\Entry-Withdrawal Settings) and you have selected the Use Path to determine Entity and School for new record checkbox.
Feeder School	Updates the student’s Feeder School box on the School Path sub-tab of the General tab in Student Profile when the student’s new entry record is created in the receiving Entity. The description Use Present Feeder School next to the box means that if this box is empty, the current value in the Feeder School box is used. Leaving the box empty does not blank out the value in the Feeder School box. To update the Feeder School box for students in the receiving Entity with the sending Entity value, select the sending Entity value.
Entry Record Values	Determines how the entry record is created on the Entry/With tab at the receiving Entity. For more information about creating enrollment records using Entry Default Values, see the <i>WSIPC Guide to Student Demographics</i>.

School	School the student(s) will be assigned to in the receiving Entity. This box does not appear if the option Use Path to determine Entity and School for new record is selected.
Calendar	Calendar student is assigned to in the receiving Entity (as part of their new Entry record). This option is unavailable if the option Use Path to determine Entity and School for new record is selected.
Homeroom	Value that will be assigned to the student(s) in the receiving Entity. Entering an asterisk (*) in the Homeroom box carries the current Homeroom assignment in the sending Entity forward to the receiving Entity. If the Homeroom value does not exist in the receiving Entity table, the Homeroom number is added to the table in the receiving Entity. The Homeroom School and teacher assigned to the Homeroom isn't carried forward to the receiving Entity. The Homeroom box does not appear if the option Use Path to determine Entity and School for new record is selected. Tip: You can use this box (or the Advisor box) to sort next year scheduling documents for distribution to students in their current Entity, sorted by their current Homeroom assignment or current Advisor assignment. This is particularly useful for incoming students because their documents must be distributed at the sending Entity according to their current Homeroom or Advisor assignment. After next year scheduling is done, you can update this box to the student's new Homeroom and/or Advisor.
Advisor	Value that will be assigned to the student(s) at the receiving Entity. To carry the current Advisor assignment in the sending Entity forward to the receiving Entity, enter an asterisk (*). If the Advisor does not exist in the receiving Entity, the Advisor is added to the Staff table in the receiving Entity with a status of inactive. The Advisor box field does not appear if the option Use Path to determine Entity and School for new record is selected. See the Tip in the Homeroom description above for more information about the Advisor box.

Table 2 – Description of options on the Mass Add Students to an Entity screen.

Membership

As stated in Table 2, the Membership option allows you to assign the Current Year Member status for students at the receiving Entity. The selection for this option is typically Use Present Membership. A student does not appear on reports at the receiving Entity for the current school year even if Current Year Member status is Yes because the entry date of the enrollment record falls outside the current school year's calendar master. If you add students to the receiving Entity with a Current Year Member status of No, you must update the box during the Year End/Start processes.

Understanding Range Screen Options

As stated in the entry for the By Range/By Individual option in Table 2, the Range screen defines which students are selected to be added to the receiving Entity. The sections below Figure 3 describe the options available on the screen.

Ranges

	Low	High
Default Entity:	000	9999
Student Key:		ZZZZZZZZZZ
Feeder School:		ZZZZZZZZZZ
Grad Yr/Grade:	0000	9999
NY Grad Yr/Grade:	0000	9999
Next Year School:		ZZZZ
Student Path:		ZZZZZZZZZZ
Student Status:	☐ Active ☐ Inactive ☒ Both	
Next Year Status:	☒ Active ☐ Inactive ☐ Both	
Current Year Member:	☐ Member ☐ Non-Member ☒ Both	
	☒ All Schools	Schools
	☒ All Calendars	Calendars

Figure 3 – Mass Add Students to an Entity utility, Student Selection - By Range screen

Default Entity

You can use the Default Entity to ensure that only students that only students in the sending Entity who are assigned a specific Default Entity are selected. To do this, always enter the sending Entity number in both the Low and High boxes. For example if you work at a middle school and a student from another middle school takes a class at your Entity, your Entity is NOT their Default Entity and you would not include that student in your Mass Add process because that student is not your responsibility.

Student Key

These boxes are often left at the default values (blank and ZZZZZZZZZZ) because the Student Key isn't the best way to narrow the range of selected students.

Feeder School

This box is located on the School Path sub-tab under the General tab in Student Profile. When running the Mass Add Students to an Entity utility, Feeder School can be used to select a group of students who all came from a particular school and will all attend the same school next year. These students can all be added to the receiving Entity as a group.

Grad Yr/Grade

This box is located on the School Path sub-tab under the General tab in Student Profile. It represents the year the student is expected to graduate. Grad Year/Grade can be used to select the outgoing class or other graduation year/grade that needs to be added to the receiving Entity for the next school year. This box is often used in conjunction with the NY Grad Year/Grade box.

NY Grade/Grad Yr

This box is located on the Profile sub-tab under the General tab in Student Profile. It is the graduation year assigned to the student for the next school year. The value in this box differs from the value in the Grad Year/Grade box if a student will be retained or advanced through year-end processing. In Entities where the Grad Year and the NY Grad Year may be different, using the NY Grad Year box helps you select only those students for whom the Grad Year and the NY Grad Year match (students not being retained or advanced).

EXAMPLE Students in the fifth grade (Grad Yr 2018 in school year 2011) are marked for retention and their NY Grad Year has been adjusted by one year (2019). When the Mass Add Students to an Entity utility is run to select next year's sixth graders, 2018 is entered in the Low and High value boxes for Grad Yr/Grade and for NY Grad Year/Grade. Those students with non-matching values in Grad Yr/Grade and NY Grad Year/Grade are excluded from the process.

Next Year School

This box is located on the School Path sub-tab of the General tab in Student Profile. It specifies which school the student will attend during the next school year.

Student Path

This box is located on the School Path sub-tab of the General tab in Student Profile. It specifies which school path a student will take from elementary school through high school. Districts that have created paths for addresses and/or students should use the Student Path range selection. If a Student Path does not exist for a student, Future Scheduling uses the student's family address record for a path that matches the designated Student Path. See the *WSIPC Guide to Student Demographics* for more information about using Student Paths.

Student Status

This box is located on the Entity Info sub-tab of the Entity tab. It specifies the student's current year enrollment status in the sending Entity. A student status of Active is typically selected because usually you don't want to create an enrollment record in the receiving Entity for students who are no longer active (attending) in your Entity. This box allows you to narrow the range of students selected by their current year status in the sending Entity.

Next Year Status

This box is located on the Entity Info sub-tab of the Entity tab. It specifies the student's enrollment status for the next school year in the sending Entity. Based district business practices, select NY Status Active or Both (Active or Inactive) as appropriate. Use the Next Year Status box to manage student selection and increase the accuracy of who is selected for processing.

Current Year Member

This box is located on the Entity Info sub-tab of the Entity tab. It specifies the student's membership status in the sending Entity. The Current Year Member box can be used to manage student selection and increase the accuracy of who is selected for processing.

All Schools / Schools

The school a student attends as determined by the value entered on the Entry/Withdraw tab. However, you can see this value in several places, including the Entity/Entity Info tab. Because an Entity can contain several schools, you may want to select a setting other than All Schools if students in a school within your Entity are being excluded or if students only in certain schools will be included when the Mass Add Students to an Entity utility is run.

All Calendars / Calendars

The Calendar a student is assigned to is determined by the value on the Entry/Withdraw tab (you can view it on the Entity/Entity Info tab). An Entity may have several Calendars.

Review the Report of Students Added to Other Entities

After you've run the Mass Add Students to an Entity utility, a report verifies the enrollment of students in the receiving Entity (Figure 4 and Figure 5). The report contains all students who met the criteria of the range or individual parameters in the Student Selection section. If you generated the report in Preview mode, an entry record has not yet been created for the students in the receiving Entity. If you generated the report in Run mode, an entry record has been created for the students in the receiving Entity. The end of the report shows totals.

BEST PRACTICE

Print the Report of Students Added to Other Entities for verification. Once the utility has been run and the students are added to the receiving Entity, this report cannot be regenerated.

1stmch14.p 46-2 04.10.06.00.00		WSIPC School District Report of students added to other entities		10/20/10	Page:1 12:54 PM
Current	From	From Feeder	Students added to school School (401) entity 401		
Grade	Entity	School	Student name	Path	NY Sch Address
06	202	202	Allegriniscr, Zane B.	105	City/state/zip
06	202	202	Allemandscr, Claudio	105	
06	202	202	Andradoscr, Harlan	105	
06	202	202	Arvayscr, Ahmed	106	
06	202	202	Ashwellscr, Shameka	105	
06	202	202	Autonscr, Eulah	106	
06	202	202	Ayusoscr, Stephen	105	
06	202	202	Barlagescr, Augustine	105	

Figure 4 - Beginning of the Report of Students Added to Other Entities.

06	202	202	Wiedemannscr, Junita	105
06	202	202	Wikerscr, Dawna	106
06	202	202 8 - FEED000	Younisscr, Ursula	106
Current Students added to school School (401) entity 401				
<u>Grade</u>	<u>202</u>			<u>Totals</u>
06	158			158
	-----			----
	158			158
***** End of report *****				

Figure 5 – End of the Report of Students Added to Other Entities showing totals.

If the report is blank (no report title, column header information or students appear), no students were selected. If this is the first time you've run the utility with these parameters and the report is blank, the parameters are probably incorrect. Check the parameters and run the utility again. If you've successfully run the utility before with the same parameters, the blank report means no new students qualify under the parameters since the utility was last run.

If two lines of totals appear at the bottom of the report for the same Current Grade level (Figure 6), the Grad Year does not match the NY Grade Year for one or more students. This should be corrected. You can correct this by creating a Data Mining report that includes the current year Grad Year and the next year Grad Year for the grade level in question.

Current	Students added to school School (401) entity 401		
<u>Grade</u>	<u>203</u>		<u>Totals</u>
06	1		1
06	129		129
	-----		----
	130		130
***** End of report *****			

Figure 6 – Two lines of totals appear at the end of the Report of Students Added to Other Entities report, meaning the Grad Year does not match the NY Grad Year for one or more students.

Check the Error Report

When you run the Mass Add Students to an Entity utility, the Mass Add to Entity Error Report (Figure 7) may appear instead of the Report of Students Added to Other Entities. The Mass Add to Entity Error Report lists errors you must correct before you can generate the Report of Students to Other Entities.

The Mass Add to Entity Error Report may appear for the following reasons:

- A calendar is not created at the receiving Entity for the next year.
- A School does not have a valid grade level range entered. To correct this, go to WS\OF\PS\CO\SC>Edit.
- The School has no Default Entity selected. To correct this, go to WS\OF\PS\CO\SC\Entity-School Cross-Reference.

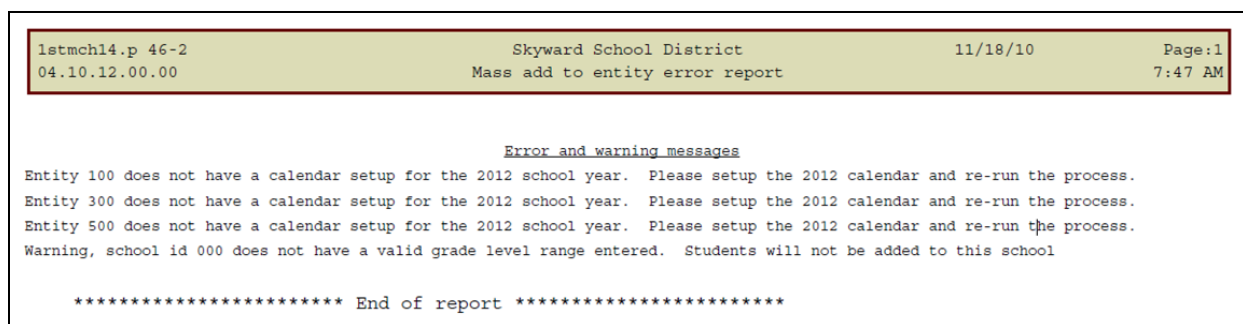


Figure 7 – Mass Add to Entity Error Report

After you close the report, a message states that students were not added to the new Entity and instructs you to check the errors listed on the report or check the report parameters. Once you correct the error(s) listed, you can run the Mass Add Students to an Entity utility.

Delete Student Enrollment Records from a Receiving Entity

If students were erroneously added to the receiving Entity, you must delete them from the receiving Entity. This typically occurs when a group of students selected on the utility range screen includes students who shouldn't be added to the receiving Entity. It also occurs if a student who was supposed to attend the receiving Entity in the next school year will not attend that Entity.

TIP	Sometimes it is easier to run the utility for the entire group of students and then delete the students who are exceptions than to find selection criteria that narrows the range of students.
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To delete student enrollment records from a receiving Entity:

1. Go to WS\ST\PR.
2. In the Entity box, select the receiving Entity.
3. Click Student or enter the student's alpha key in the Student box.
4. Click Delete in the upper-right corner of the screen in the Student Actions box between Add and Transfer. The following message appears:

“<Student Name> is currently enrolled, do you wish to continue?”
5. Click OK. A message shows student data in Entity tables and student data in common tables and states that common tables will not be deleted.

6. Click Delete. This deletes the student from the receiving Entity, not the Name Table. In other words, the student is not deleted from any other Entity (the original sending Entity for example) that they are enrolled in. The following message appears:

“Are you sure you want to delete information for <Student Name>?”

7. Click Yes.

BEST PRACTICE	Run the Mass Add Students to an Entity utility as part of next year scheduling preparation. Run it again at regular intervals or at the end of the school year to ensure all students who are moving to another Entity are added to their next year receiving Entity. The sending Entity and the receiving Entity should agree on when this utility is run so the scheduling process isn't impacted. Also run the Entry Withdrawal Report (WS\ST\RE\EW) for the grade level(s) leaving the sending Entity (usually just the outgoing class). The date in the Withdrawal Date LOW field should be the same as the date the Mass Add Students to an Entity utility was initially run. Leave the value in the High field as 12/31/99. This provides a report of students who withdrew from the sending Entity after the Mass Add Students to an Entity utility was first run. The receiving Entity should review the report and delete those students from their Entity as appropriate.
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Step 4: Maintain Staff

Before you schedule for the next year, a staff record must exist for every teacher who teaches at your Entity. If the Student and Finance databases are combined, the Human Resources department must enter new staff records. After new staff records are entered, the record must be assigned to your Entity before you can assign the teacher to a course and section. Once a teacher is assigned to your Entity (that is, a Staff Entity record is created), you can then update the teacher's scheduling availability and department information.

Updating and Maintaining Staff Records

Anyone who teaches at your Entity must have a Staff Entity record. Staff Entity records are created in Staff Profile (WS\OF\SF). Once Staff Entity records exist for all teachers, ensure that the Next Year Status box is set to Active at your Entity for each teacher. Staff status is updated in Staff Entity Maintenance (WS\SF\SF\Entity).

RECOMMENDATION	If hiring decisions have not been made and you don't know the names of the teachers, you can create a generic staff record to represent the position that will exist. Example: “Math Teacher #1 (to be hired).” You can also use another staff member who is not a teacher (such as a principal) to represent each teacher not yet hired. When the teachers have been hired and their staff records created, you can use the Mass Change Course Master Fields utility to update the meet.
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Add a Department to Staff Records

Adding a Primary Department to a staff record lets you group staff by this selection if you are building the Schedule Master using the Interactive Scheduling Board (this tool is discussed later in the Guide). A Primary Department is added in Staff Department Maintenance (WS\SF\SF\Department).

Create Do Not Schedule Time Entry Record(s)

If a teacher is not available to teach for a specific period of the day, add it to the teacher's schedule as a Do Not Schedule Time Entry record. For example, if a teacher instructs band in the morning at one Entity and choir at another Entity in the afternoon, create a Do Not Schedule Time Entry record at one Entity for the morning and the other Entity for the afternoon.

CAUTION When you create a Do Not Schedule Time Entry record, you create a scheduling restriction.

To create a Do Not Schedule Time Entry record:

1. Go to WS\SF\SF.
2. Click the plus sign next to a staff member.
3. Next to Schedule, click View Schedule Matrix for Current/Next Year and Edit 'Do Not Schedule' time.
4. Click Add 'Do Not Schedule' Records.
5. Select the periods, days and terms for which the staff member cannot be scheduled.
6. Enter a reason in the Reason box explaining why the staff member cannot be scheduled.
7. Click Save.

Step 5: Verify Scheduling Configuration

Because scheduling configuration is complex, use caution in this area. Changing settings for Entities can cause problems with grading and attendance entry. It can also impact the display and reporting of information already entered. When editing this area for the purposes of scheduling for the next academic year, select the next school year, not the current school year.

Some areas used in scheduling configuration have both future year scheduling and current year scheduling options. Only settings specific to future year scheduling are explained in this section. For more information on options related to current scheduling, see the *WSIPC Guide to Current Scheduling*.

To verify the scheduling configuration, perform the following three processes:

- Review the Scheduling Entity Year Setup
- Select Scheduling Configuration options
- Choose Scheduling Lock options

This section describes each of these verification processes.

Review Scheduling Entity Year Setup

This process allows you to change any year-specific Entity scheduling settings. You must configure the following areas in this section of the scheduling configuration:

- Maximum Semester, Term and Period Values
- Entity Year Options
- Scheduling Options
- Term Definitions
- Course Defaults

This section explains how to configure each of these areas.

CAUTION	A Summer School area also exists. The features in this area are not yet fully developed. Do not use them.
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Check Maximum Semester, Term and Period Values

Check the Maximum Semester, Term and Period Values area of Entity Year Setup if any of the following have changed from last year's configuration:

- Day Type (Weekdays or Day Rotation)
- Number of Periods in a school day
- Number of scheduled Terms/Semesters in a school year
- How future year scheduling changes are tracked
- Grade Level ranges offered at an Entity

To check Maximum Semester, Term and Period Values:

1. Go to WS\OF\FS\PS\CF\SE.
2. Click the plus sign next to the next school year.
3. Next to the Maximum Semester, Term and Period Values heading, click Edit Maximum Values.

4. Change values as needed on the screen (Figure 8). See Table 3 for details about options on the screen.
5. Click Save.

The screenshot shows a web application interface for 'Scheduling Entity Year Setup'. The breadcrumb trail at the top is: Home Page | Office | Future Scheduling | Prod Setup | Configuration | Scheduling Entity Year Setup. The main form is divided into several sections:

- Scheduling Entity Year:** Entity: 420 NY Scheduling High School 420, School Year: 2011-12. Buttons: Save, Back.
- Day Type Option:** Day Type: Weekdays (dropdown), Day in Rotation: 0, Day Label: MTWRF.
- Maximum Semester/Term/Period Values:**

Display	Scheduling
Semesters: 2	
Terms: 4	Terms: 4
Periods: 10	Periods: 10
- Scheduling Change Tracking Options:**

	Current Year	Future Year
Track Student Schedule Changes:	☒ Track	☐ Track
Allow Selective Tracking of Schedule Changes:	☐ Track	☐ Track
- Entity Grade Range:** Low: 0 High: 12

Figure 8 - Scheduling Entity Year Setup / Maximum Semester, Term, and Period Values screen

Option	Description
Day Type	Determines whether your Entity operates on a normal weekday schedule or an alternating/rotating day schedule. If your Entity operates on a normal weekday schedule (MTWRF), select Weekdays in the Day Type box. If your Entity operates on a day rotation (Day 1, Day 2, Day 3), select Day Rotation in the Day Type box. If you select Day Rotation, the Day in Rotation box becomes available.
Day in Rotation	Number of days in your rotating/alternating day schedule. This value will be zero for the Day Type of Weekdays.
Day Label	Label for the Day Type of Weekdays (MTWRF) or Day Rotation (Alphabetic or Numeric). If Alphabetic is selected for Day Type of Day Rotation, you must enter alphabetic characters that match the number of days in the day rotation. This label appears whenever meet information is displayed to identify the days in your Entity's schedule.

Maximum Semester/Term/Period Values (Display and Scheduling)	Defines how the school year is set up for display and scheduling areas of these specific values. Enter the maximum number of Semesters, Terms and Periods to use for future year scheduling. In most cases the values that appear in the Scheduling and Display boxes are the same.
Track Student Schedule Changes	Determines whether a transaction record is created for each add, drop, and section change for all transactions for Future Year scheduling. It also forces you to set your default parameters in the future year Scheduling By Student area (WS\OF\FS\SS\BS). Typically, you won't select this option in the Future Year area because so many changes are made during the current school year on next year scheduling records that these transaction records are not useful.
Allow Selective Tracking of Schedule Changes	Activates a prompt that asks the user whether an individual student's transaction record should be created. The verification prompt appears in the Future Scheduling By Student area after you select a course and add it to the student's schedule. The Allow Selective Tracking of Schedule Changes (Future Year) check box is only available when the Track Student Schedule Changes (Future Year) check box is selected.
Entity Grade Range	Specifies the default Entity Grade Ranges values that automatically appear in the Grade Range boxes when you add a new course to the Course Master (WS\OF\FS\BC\CM).

Table 3 – Description of options on the Scheduling Entity Year Setup / Maximum Semester, Term, and Period Values screen

Verify Entity Year Options

Determine whether any of the following Entity Year options have changed from last year's configuration in the Entity Year Options area of Entity Year Setup:

- Team Scheduling
- Scheduling Categories
- Online Arena Scheduling
- Advisor Schedule Verification
- Zero Period Mod for Scheduling
- Advanced Master Schedule Builder
- Use of Audit/Variable Credits
- Base P223 on Schedule
- Use of a Drop/Withdrawal Grade Mark Code

To verify Entity Year options:

1. Go to WS\OF\FS\PS\CF\SE.
2. Click the plus sign next to the next school year.
3. Click Edit Entity Year Options next to the Entity Year Options heading.
4. Confirm that the configuration is correct. See Table 3 below for details about options on the screen.

NOTE	The Use Tracks check box and the Number of Tracks Used box are designed for year-round schooling. This feature is currently not available.
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5. Click Save.

Figure 9 – Scheduling Entity Year Setup / Entity Year Options screen

Options	Description
Use Team Scheduling	Specifies whether you will use Scheduling Teams as part of your scheduling process. Scheduling Teams let you assign a code to a student and to course/sections to ensure a student's enrollment into a specific section that corresponds to their team assignment. This option is typically used to assign a group of students that should be in the same classes together or have the same teacher or groups of teachers for their courses. See "Step 8: Create Scheduling Teams" for more information.
Use Zero Period Mod for Scheduling	Determines whether period zero displays wherever there is a Matrix option to view schedules.

Base P223 on Schedule	Determines whether the Monthly School District Enrollment Report (P223) calculations are based on students' schedules. Otherwise, the calculation is based on the enrollment FTE as defined on the student's Entry/Withdrawal tab in Student Demographics. If the calculation is based on the student's schedule, each section in the Course Master must have correct data in the Minutes Per Week box.
Use Scheduling Categories	Specifies whether you intend to use Scheduling Categories as part of your scheduling process.
Use Online Arena Scheduling	Specifies whether you intend to use Online Arena Scheduling in Family and Student Access. This feature is typically used in Future Scheduling.
Use Advance Master Schedule Builder	Activates the Future Scheduling Advanced Master Schedule Builder (AMSB) for the next school year. After this check box has been selected, new utilities, tabs and fields appear in the Course Master and other areas of Web Access.
Used Drop/Withdrawal Grade Mark Code	Specifies which Grade Mark value is used to automatically fill in a Grade Bucket when a student drops (withdraws from) a section. If the Grade Mark you enter in this box doesn't exist in the Grade Mark table, the code is automatically added to that table.
Use Period Redefinition	Activates the Period Redefinition box for each period in the Scheduling Period Times table (WS\OF\FS\BC\PS\CO\SP). Period Redefinition associates a specific Display period and time with a specific Scheduling period. This is typically used when an Entity has a period or periods that Meet over a split lunch hour. For example, if lunch is offered three times during Period 4 at the beginning, in the middle (split) and at the end, create three Scheduling Period Times for Period 4 in the table, but have them all appear with the Period Redefinition of Scheduling Period 4.
Use Scheduling Categories Alphabetically	Causes Scheduling Categories to appear in alphabetical order. If you don't select the option, the Scheduling Categories appear in the order in which they're created. This check box is unavailable unless the Use Scheduling Categories check box is selected.

Use Advisor Schedule Verification	Activates the use of the student's scheduling status to approve a student's schedule and activates the use of messages. Both features are typically used with Online Arena Scheduling. If this check box is selected, the Scheduling Status heading appears on the Scheduling By Student screen (WS\OF\FS\SS\BS) for each student.
Use Audit/Variable Credits	Determines whether a variable credit for a course can be assigned to a student. This means the student receives more credits or fewer credits than are normally earned after successfully completing a course.

Table 4 – Description of options on the Scheduling Entity Year Setup / Entity Year Options screen.

Manage Scheduling Options

Review the Scheduling Options area of Entity Year Setup if you will use any of the following scheduling options differently from the way you did last year:

- Limitation of Special Education enrollment in sections
- Use of Security to Exceed Class Maximum Enrollment
- Allowing Grades to be Moved to a Different Course
- Using Additional Student Class Seat Counts
- Allowing Students to be Double-Scheduled
- Allowing Change of Class Sections Numbers
- Allowing Delete of Classes when Grades are Present
- Scheduling Multiple Times Per Year (for Current School Year)
- Meeting Time Type is not Instructional (not recommended)

To manage Scheduling Options:

1. Go to WS\OF\FS\PS\CF\SE.
2. Click the plus sign next to the next school year.
3. Click Edit Scheduling Options next to the Scheduling Options heading.
4. Verify that the configuration on the Scheduling Entity Year Setup screen (Figure 8) is correct. See Table 5 for details about options on this screen.
5. Click Save.

Home Page | Office | Future Scheduling | Prod Setup | Configuration | Scheduling Entity Year Setup

Scheduling Entity Year Setup

Entity: 420 NY Scheduling High School 420 School Year: 2011-12

Scheduling Options

☒ Allow Limited Special Ed Enrollment in Sections
 ☒ Use Additional Student Class Seat Counts
 ☐ Allow Change of Class Section Number

☐ Use Security To Exceed Class Maximum
 ☒ Allow Students to be Double-Scheduled
 ☐ Allow Delete of Class With Grades Present

☐ Allow Grades to be Moved To Different Course

Schedule Multiple Times Per Year

☐ Schedule Multiple Times Per Year
 Schedule By: ☒ Semester ☐ Term
 ☐ Allow Current Year Scheduling

Meeting Time Type

☒ Instructional
 ☐ Lunch
 ☐ Recess
 ☐ Study Hall
 ☐ Other

Save Back

Figure 10 – Scheduling Entity Year Setup / Scheduling Options screen

Option	Description
Allow Limited Special Ed Enrollment in Sections	Enables the Max Special Ed Enroll % box on all sections in the Course Master (WS\OF\FS\BC\CM). This feature allows you to limit the percentage of Special Education students that any auto-scheduling program can schedule into a section.
Use Security To Exceed Class Maximum	Specifies that only a system-wide user or a user with a level 5 access to Scheduling By Student (WS\OF\FS\SS\BS) or Scheduling by Class (WS\OF\FS\SS\BC) can exceed the section enrollment limit. Any user, regardless of security, can overload a class enrollment limit if this check box is not selected.
Allow Grades to be Moved To Different Course	Activates the Move Grades to Different Course utility in Scheduling By Student (WS\OF\FS\SS\BS). This utility moves a student's grades from one course to another.
Use Additional Student Class Seat Counts	Allows you to reserve more than one seat when enrolling a student into a section. When this check box is selected, you can enter an additional seat count percentage value in the Addl Seat Count box on a student's Entity Info tab in Student Profile. This feature is typically used for Special Education students to account for more than one physical seat for them in a class.

Allow Students to be Double-Scheduled	Allows you to enroll a student into more than one class for a specific term and specific period in Scheduling By Student (WS\OF\FS\SS\BS). If the check box is not selected, you can't double-schedule a student into two different classes for the same period and the same or overlapping terms. If you try to do this, the program prompts you to drop the student from any conflicting classes before allowing you to add the new (conflicting) section.
Allow Change of Class Section Number	Lets you change the section Number initially assigned to the section. Do not use this feature if, during the year, Arena Scheduling Cards/Labels have been printed or information has been exported to a third-party gradebook program.
Allow Delete of Class With Grades Present	Allows you to delete a section from a student's schedule even if grades are present, including when you use the Mass Delete Schedule utility (WS\OF\FS\SS\BS). A class cannot be deleted if Gradebook grades are present, regardless if this option is selected.
Schedule Multiple Times Per Year	Allows an Entity to use the mass-scheduling tools in the current school year to schedule (or re-schedule) the entire current school year or a current or future semester or term. This feature allows an Entity to wait until after Year End processes have taken place to perform an Actual Scheduling Run for the current school year (either for the entire year or a single semester or term).
Allow Current Year Scheduling	Select the Allow Current Year Scheduling check box if your Entity wants to schedule for the current year. Select the Schedule Multiple Times Per Year check box and then select Schedule By either Semester or Term and select the Allow Current Semester Scheduling or Allow Current Term Scheduling check box if your Entity wants to schedule several times each year.
Meeting Time Type	Specify which Meet records with the selected Meeting Time Types should be counted for attendance calculations. When you create a Meet record in the Course Master, you can link that Meet record to one of the following Time Types: Instructional, Lunch, Recess, Study Hall or Other. If the Meet record is identified as any Time Type other than Instructional, you can count that Time Type for attendance calculations by selecting the corresponding check box in this area. This information is usually used for reporting purposes only.

Table 5 – Description of options on the Scheduling Entity Year Setup / Scheduling Options screen.

Review Term Definitions

In the Term Definitions area, your Entity defines its semester and term information, including the date ranges associated with each semester (trimester) and term. Term Definitions affect the date range within which all other date-sensitive items must fall, such as calendar and Control Sets. An Entity must build terms within its semesters (or trimesters) whether or not the Entity intends to use those terms for scheduling or grading.

Before you start the future year scheduling process, ensure the accuracy of Term Definitions including all Start Term, Stop Term, Start Date and Stop Dates. See the *WSIPC Guide to Grading* to learn how to set up Term Definitions.

To review Term Definitions:

1. Go to WS\OF\FS\PS\CF\SE.
2. Click the plus sign next to the School Year to be scheduled.
3. Next to the Term Definition heading, click the plus sign.
4. Click Edit next to the Term Definition to be revised.
5. Make revisions as needed.
6. Click Save.

Determine Course Defaults

The Course Defaults area allows you to define certain default values for some course, section and Meet fields. These values then default on the course, section and Meet screens the first time you add a course, section or Meet to the Course Master. Review the defaults and update them as needed.

To determine Course Defaults:

1. Go to WS\OF\FS\PS\CF\SE.
2. Click the plus sign next to the school year to be scheduled.
3. Next to the Course Defaults heading, click Edit Course Defaults.
4. Review the default values selected on the Course/Class/Class-Meet Default Maintenance screen. Change default values as needed.
5. Click Save.

Select Scheduling Configuration Options

Scheduling Configuration Options affect various areas of Current and Future Scheduling. Two options are specific to Future Scheduling:

- Enable Batch Processing of Future Scheduling Transactions
- Default Future Year value for “Prompt for Effective Date”

To select Scheduling Configuration Options:

1. Go to WS\OF\FS\PS\CF\SC.
2. Examine the Scheduling Setup screen (Figure 11) and change values as needed. See Table 6 for details about options on this screen.
3. Click Save.

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Scheduling Setup Options:

- ☐ Automatically Add Students to the Activities that are Linked to a Course
- ☐ Require Courses to be Assigned to a Curriculum Master
- ☐ Assign Default Building/Room from Teacher's Staff Entity Record
- Require Level 5 Access to Update a Course Master's**
 - ☐ Earned Credits
 - ☐ GPA Sets and GPA Credits
 - ☐ Curriculum
 - ☐ Course Key
 - ☐ Short Description
 - ☐ Long Description
- ☒ Record Course, Class Section, and Class Meet Field changes
- ☐ Allow Assignment of Non-Staff Personnel from any Entity as Teachers
- ☐ Enable Batch Processing of Future Scheduling Transactions
- ☐ Allow 'Weekday by Term' View in Scheduling by Student
- ☐ Allow Use of NCES Course Codes
- ☐ Allow Editing of NCES Course Codes on the Course Record
- ☒ Allow Use of State Course Codes
- ☐ Allow Editing of State Course Codes on the Course Record
- ☐ Show Room Usage on Scheduling screens

Default Current Year value for "Prompt for Effective Date": No

Default Future Year value for "Prompt for Effective Date": No

Save Back

Figure 11 – Scheduling Setup screen

Option	Description
Automatically Add Students to the Activities that are Linked to a Course	Allows you to link an activity to a course by placing an Activity Code into the Activity Link box on the course in the Course Master (WS\OF\FS\BC\CM). If you select this check box, a student enrolled into a section is automatically added to the linked activity on the course.
Require Courses to be Assigned to a Curriculum Master	Prevents you from entering a new course into the Course Master without assigning a Curriculum Master to it.
Assign Default Building/Room from Teacher's Staff Entity Record	Prompts you to add the building and room information associated with a teacher when you add the teacher to a Meet record. This applies to moving chips in the Interactive Scheduling Board, when the View is By Teacher. For this functionality to work, a teacher must be assigned to a building and room in Staff Profile (WS\SF\SF\Entity).
Require Level 5 Access to Update a Course Master's	Requires a Security Level 5 access to change any of the values for the following fields on the Course Master: • Earned Credits • GPA Sets and GPA Credits • Curriculum • Course Key • Short Description • Long Description
Record Course, Class Section, and Class Meet Field changes	Tracks changes made to the course, section and Meet. To view changes, click the History selection that is enabled for Course Details next to each section and Meet.
Allow Assignment of Non-Staff Personnel from any Entity as Teachers	Allows you to assign staff from another Entity to a Meet record in your Entity.
Enable Batch Processing of Future Scheduling Transactions	Activates a daily batch process for scheduling transaction records with future dates. Example: A transaction record exists for a course that will be dropped from a student's schedule next Monday. The course is dropped next Monday when the transaction is processed.

Allow 'Weekday by Term' View in Scheduling by Student	Adds the Switch to Weekday by Term View link in Scheduling By Student (WS\OF\FS\SS\BS) that appears when you view a student's schedule. This feature lets you view a student's schedule by term, by period or by day of the week. The typical Scheduling By Student view is the List View. If both views are available, you can toggle back and forth between them.
Allow Use of NCES Course Codes	Activates the Federal Details area of a course in the Course Master (WS\OF\FS\BC\CM). If your Entity uses NCES course codes, you must select this option.
Allow Editing of NCES Course Codes on the Course Record	Determines whether you can add or edit an NCES course code on a course in the Course Master (WS\OF\FS\BC\CM).
Allow Use of State Course Codes	Activates the State Details area of a course in the Course Master (WS\OF\FS\BC\CM). If your Entity uses State Course Codes, you must select this option.
Allow Editing of State Course Codes on the Course Record	Determines whether you can add or edit a State Course Code on a course in the Course Master (WS\OF\FS\BC\CM).
Default Current Year value for "Prompt for Effective Date"	Activates the Prompt for Effective Date option on the Default screens in both the Scheduling By Student and Scheduling By Class areas of Current Scheduling for a user that has never saved these screen defaults.
Default Future Year value for "Prompt for Effective Date"	Activates the Prompt for Effective Date option on the Default screens in both the Scheduling By Student and Scheduling By Class areas of Future Scheduling for a user that has never saved these screen defaults.

Table 6 – Scheduling Setup screen options

Choose Scheduling Lock Options

The Scheduling Lock Options area contains three options: Lock auto Scheduler, Lock Unschedule Utility and Lock Course Master Editing. The person who selects a Lock Option is the only one who can access the program to unlock the option. Lock Options are school-year specific.

- Lock Auto Scheduler prohibits anyone from using the Auto Scheduler and the Alternate Scheduler.
- Lock Unschedule Utility prohibits anyone from using the Unschedule Student Classes utility.
- Lock Course Master Editing prohibits anyone from using the Master Schedule Builder. In addition, no one can make Course Length, Control Set, and/or Class Meet changes to any section in which students are enrolled. If no students are enrolled in a section, you can make changes.

To choose a Scheduling Lock Option:

1. Go to WS\OF\FS\PS\CF\SL.
2. Select an option in the Year box.
3. Select the appropriate Lock Option(s).
4. Click Save.

NOTE	When another user accesses the Scheduling Lock Options, a message appears advising them that specific Terms have been locked by a specific user (the name of the user who performed the lock is listed), and that the options cannot be modified. Even if only one option has been locked, the user can't lock other options. If someone tries to access an area locked by another user, a message states that the area is locked for specific Terms of the school year by a specific user (their Secured User name is listed).
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Step 6: Run Course Master Utilities

The Build Course Master Utilities area contains utilities that you must run because they affect information in the Course Master. It also contains several optional utilities. These required and optional utilities are described below in the order in which they should be run.

To run the Course Master Utilities:

- Go to WS\OF\FS\BC\PS\UT.

Create a Course Master Backup

To create a Course Master backup, you run the Create a Schedule Master Save Point utility. This is optional but highly recommended. This utility saves the Schedule Master and all associated Schedule Master detail records. You can run a utility later to restore to a selected Schedule Master. However, only changes to the Class Meeting Pattern information are restored. Changes to section and course information are not restored. For examples of data that is saved and restored, see Figure 12 in the “Restore to a Selected Course Master Backup” section.

You should create a Course Master backup at key points during the future year scheduling process. Create your first backup as soon as the Course Master has been cloned from the prior year, *before any changes have been made to any of the Class Meet Patterns*. After this, it is up to the scheduling team to make backups along the way as they reach decisions in the process. Create a Course Master backup before moving periods and teachers around so that you can restore to the backup.

TIP	See “Restore to a Selected Course Master Backup” for more information about how to perform a restore.
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To create a Course Master backup:

1. Go to WS\OF\FS\BC\PS\UT\SP.
2. Click Add.
3. Enter a description in the Description box. This describes at what point the backup was taken and the state of the Course Master so that if you want to perform a backup, you are certain about which backup to select.
4. Click Save.

The backup is processed through the Print Queue and generates a report. The report lists the details of the backup, including the date, time, Entity, school year, description, and the person who created the backup.

Run the Mass Change Course Master Fields Utility

Running the Mass Change Course Master Field utility is optional. It mass-updates course, section and meets information. This utility has two parts. In the first part, you select which course, section and Meet will be updated. In the second part, you enter the current value that is in the field or fields to be updated and the new value you want to replace it with.

Calculate Student Section Counts

The Re-synchronize Student Class Counts utility corrects the values in the Current Requests box on the Course Master and the Number of Requests box for each section in the Course Master. As you add and drop sections and requests from a student's schedule, these counts should update automatically. However, if you think the counts may be off, run this utility. In addition, after you have cloned the Schedule Master from the current school year to next school year, run this utility to re-set the counts.

Update Control Sets Possible

You don't need to run this utility if you will use the Advanced Master Schedule Builder (AMSB), but you must run the utility if you will use any other method to build the Schedule Master.

A Control Set (also called a Class Control Set) specifies which specific term, semester or trimester a section is offered. Control Sets Possible specifies all possible Control Sets for all sections of the course. It is important that this information is correct because the Master Schedule Builder considers the possible Control Set information when building and placing Course Master sections in the Schedule Master. This is done to create the best Schedule Master possible with the least chance of scheduling conflicts.

The Update Control Sets Possible Utility scans all active courses in the Course Master and assigns the Control Sets Possible values for that course. You can update the Control Sets Possible field with all possible (available) Control Set values in your Entity or with only those Control Set values already assigned to existing sections of the course. The utility also removes any incorrect Control Set Possible values.

This utility was probably run when you cloned the Schedule Master from the current year to next year in "Step 2 – Maintain Scheduling Setup and Codes." However, if you clone courses from another Entity or add courses to your Course Master, you may want to re-run this utility. If you did not run this utility when you cloned the Schedule Master from the current year, run it now.

The Equally Distribute Section Percentage to Assigned Control Sets check box appears on this utility's screen only if the Use Advanced Master Schedule Builder check box is selected in Entity Year Setup (WS\OF\FS\PS\CF\SE).

NOTE	For more information about this option, see the AMSB training document. Currently, this document is available only to Data Center Coordinators.
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Restore to a Selected Course Master Backup

This utility restores to a saved Course Master. Run this utility if unwanted changes are made to the Course Master for the year being scheduled. This utility restores only Class Meeting Pattern information. The restore does not affect changes you make to section and course information after a backup is made. If you add a section to a course after saving and then process a restore, the section is not removed. If you delete a section after saving and then a restore is processed, the section is *not* restored. The restore works this way because you are making changes to create a Schedule Master's Class Meeting record (such as what period the class is taught in and who teaches the class) to refine the schedule. Therefore, this is the information that is saved and restored.

Figure 12 shows data included in a Course Master Backup and Course Master Restore. Changes made after the backup was created and changes reinstated from the restore are in red italics.

Course/Section/Meet in the Course Master before Backup	<i>Course Master Backup Created</i>	Changes made to Course/Section/Meet in Course Master after backup	<i>Course Master Restored To A Backup</i>	Course/Section/Meet in Course Master after restore
ABC100 - “Normal” Schedule Type - Section 01 - Meet MWF Period 01		ABC100 - “Normal” Schedule Type - Section 02 - Meet MTWRF Per. 02		ABC100 - “Normal” Schedule Type - Section 02 - Meet MWF Per. 01
ABC200 - “Manually Schedule” Schedule Type - Section 01/Max Stu = 10 - Meet M-W-F Period 01		ABC200 - “Normal” Schedule Type - Section 01/Max Stu = 5 - Meet MTWRF Per. 02		ABC200 - “Normal” Schedule Type - Section 01/Max Stu = 5 - Meet MWF Per. 01
(Nothing exists)		added ABC300 - default course info. - no section - no meet pattern		ABC300 - default course info. - no section - no meet pattern
(Nothing exists)		added ABC400 - default course info. - Section 01 - Meet MTWRF Period 01		ABC400 - default course info. - Section 01 - Meet MTWRF Period 01
ABC500 - “Normal” Schedule Type - Section 01 - Meet MTWRF Period 01		ABC500 - “Normal” Schedule Type - Section deleted - Meet deleted when section deleted		ABC500 - “Normal” Schedule Type - no section - no meet pattern
ABC600 - “Normal” Schedule Type - Section 01 - Meet MTWRF Period 01		ABC600 - Course deleted - Section deleted - Meet deleted		ABC600 - no course - no section - no meet pattern

Figure 12 – Example of data included in a Course Master Backup and Course Master Restore.

To restore to a selected Course Master Backup:

1. Go to WS\OF\FS\BC\PS\UT\PS.
2. Select a Schedule Master to restore. This is a previously saved Course Master that was saved using the Create a Schedule Master Save Point utility.
3. Click **Restore**. A message asks if you are sure you want to restore class meeting patterns from the highlighted Schedule Master.
4. Click **OK**.

The Class Meeting Patterns are restored to the selected Schedule Master. When the utility is done, a report lists course and section changes that have occurred since the save process for the Course Master backup that was selected.

Step 7: Maintain the Course Master

Modifying or “cleaning up” the Course Master is an important part of the scheduling process. You add or clone new courses, modify existing courses, and inactivate courses and sections that will not be offered again. The Course Master contains an Entity’s course, section and Meet information. This section shows you how to work with each of these components of the Course Master.

You can maintain the Course Master using the following processes:

- Run the Clone Course Master Files from Another Entity utility
- Add, Edit and Delete a Course, Section and Meet
- Clone a Course in the Course Master
- Build a Course Time Table
- Assign a Co-Requisite to a Course and Section
- Assign a Prerequisite to a Course
- Generate the Validation Report

This section explains each of these processes. Only settings that affect Future Scheduling are discussed. For information about other settings, see the *WSIPC Guide to Current Scheduling*.

Clone the Course Master from One Entity to Another

The Clone Schedule Master Files to Another Entity utility (WS\OF\FS\BM\PS\UT\CS) clones a Course Master (or parts of a Course Master) from one Entity to another within the same or different school years. If you use this utility to clone courses that another Entity already maintains and that you need in your Course Master, you will save time by not having to add new courses from scratch.

To clone the Course Master from one Entity to another:

1. Begin in the Entity from which you want to clone courses.
2. Go to WS\OF\FS\BM\PS\UT\CS.
3. Configure the Clone Schedule Master Files screen (Figure 13). See Table 7 for a description of options on this screen.
4. Click Run. If scheduling requests exist for the school year to create, a message says scheduling records exist for the year to be created and that courses with one or more requests will not be processed. Click OK.

The utility is processed through the Print Queue and generates a report that provides the Process Summary and Record Creation Summary which show when the records were cloned, what values were created and how many records were created.

Figure 13 - Clone Schedule Master Files screen

Option	Description
School Year to Use	School year you want to clone from (typically the current school year).
School Year to Create	School year of the Course Master to be cloned into. This should be the next school year.
Entity / To	Entity or range of Entities to clone the courses into. Data cannot be cloned into the current Entity.

Option	Description
Course / To	Select a course range if you want to clone only a select range of courses. This works well, for example, when cloning only Transfer courses where the Course Code for Transfer courses begins with TR, or Math courses that begin with MTH.
Status	Status of courses that will be cloned.
Records to Clone	Records that will be cloned. Courses Only clones course level information only. Courses and Sections clones course and section information. Courses, Sections and Class Meets clones all areas of a course.
Purge Existing Scheduling Master Information Before Cloning	Deletes the existing Course Master before cloning a new Course Master. This box is available when any option other than None is selected for Records To Clone. Select this option if you want to delete the existing Course Master before cloning a new Course Master. Caution: If you select this option and course, section or Class Meet records exist, they are deleted and replaced with records from the Course Master being cloned. Courses with student requests are not deleted.
Overwrite Existing Records	Changes any course, section and Class Meet records in the Course Master for the year being scheduled based on the Records To Clone option you selected. Course, section and Class Meet information for courses with Student Requests aren't overwritten. This box is available when any option other than None is selected for Records To Clone.

Option	Description
Course/Class Subtables	Clones details from the Course/Class Subtables. The following options are available: All Course and Section Subtables clones all values in any tabled field pertaining to the course and section. This includes fields such as Subject, Department, Scheduling Type, and Co- and Pre-Requisite. Only Subtables Being Used In Courses clones the values in any tabled field that are assigned to any course and section being cloned. For example, if a value of Visual Arts exists in the Subject field but is not assigned to any course being cloned, the value won't be cloned in the Subject table for the Course Master being cloned. The Clone Master Schedule Files utility doesn't run if the option None is selected.
Grading Period	Grading Periods to be cloned. The following options are available: Selecting None will not clone any Grading Period or Class Grading (Grade Bucket) information from Grading Setup. However, this part of the utility can be processed again with a different Grading Period selection, and new Grading Period and/or Class Grading information will be cloned. Grading Periods Only clones only Grading Period information from Grading Setup. This includes the Sem/Term literals, the Grade Sets and the Grading Periods. Course Length Sets and Grading Buckets are excluded for this option. Grading Periods and Class Grading clones Grading Period information and Grade Bucket information which includes Course Length Sets/Class Control Sets and Grade Buckets. The Clone Master Schedule Files utility <i>will</i> run if the option None is selected.

Table 7 - Description of options on the Clone Schedule Master Files screen

Add, Edit or Delete a Course, Section and Meet

Before future scheduling processing, review relevant fields and areas on the course, section and meet. This ensures that requests are entered as accurately as possible, that the best Schedule Master is built, and that scheduling runs as smoothly as possible. This review requires you to examine all courses, sections and meets cloned from the previous school year and/or another Entity and determine whether new courses, sections and meets need to be added.

Add, Edit or Delete a Course

A course represents specific curriculum taught in the classroom. Courses are Entity-specific and are the main components of a Course Master. When you work with a course in the Course Master, there are five areas to consider:

- General Properties
- State and/or Federal Details
- Section Defaults
- Master Builder Settings
- Washington State Specific

To add, edit and delete a course:

1. Go to WS\OF\FS\BC\CM.
2. Click Add Course or highlight a course and click Edit Course or Delete Course depending on the action you want to take.

CAUTION Delete a course only if you're sure you won't use it in the future. If you think you might use it later, inactivate it. A course cannot be deleted if students are enrolled in sections attached to the course.
--

3. Whether you are adding or editing a course, the next screen (Figure 14) contains up to five areas. Review the options related to Future Scheduling. See Table 8 for a description of relevant options in each area.
4. Click Save.

[Home Page](#) | [Office](#) | [Future Scheduling](#) | [Build Course Master](#) | [Course Master](#) | [Add Course](#)

Entity: 420 NY Scheduling High School 420 School Year: 2011-12 Curriculum:

* Course Key: * Short Description: * Long Description:

[Save](#)
[Save and Add Section](#)
[Back](#)

General Properties:

Course Length Set: SM - SEMESTER Subject: * Grade Ranges: 00 - 12
 Grade Set: SEMESTER Type: Fees: \$0.00
 Course Status: Active Department: Academic Minutes: 0
 Elective/Required: Elective CIP Code: Earned Credits: 0.500
 Category: Regular Report Card: ☒ Available To Online Scheduling
 Schedule Type: Normal Lock Group: ☐ Prohibit Student from Dropping
 Scheduling Priority: 0 - Lowest Priority Current Requests: 0 ☒ Core Academic Subject
 Grading System: Average Maximum Seats Available: 0 ☒ Grade Course
 Grading Type: Graded Estimated Nbr of Sections: 1 ☒ Keep Attendance
 Team Sched Priority: 0 = No Priority Actual Nbr of Sections: 0 ☐ Repeatable For Credit
 Transcript GLO: ☐ Include Tran GLO in GPA
 Normal * GPA Set 1: 1 REGULAR GPA Credits 1: 0.500

Qualifications: [Add a Qualification](#)

Position Description	Position	Subject Description	Subject
No Qualifications Selected			

State and Federal Details:

NCES Code:
 NCES Credit Value: 0.00 NCES Course Sequence: 0 of 0
 State Course Code:
 Content Area Code:

Section Defaults:

Note: The Values Entered Below Will Be The Default Field Values For All New Sections Of This Course.

Calendar:

Minimum Number Of Students: 0
 Optimum Number Of Students: 0
 Maximum Number Of Students: 0
 Number Of Days: 5
 Number Of Periods: 1
 Number Of Teachers: 1

☐ Use Meeting Times
☐ Block Section

Room Type(s): [Add Room Type](#)

Priority	Description
----------	-------------

Master Builder Settings:

Washington State Specific:

☐ CADR Core Course ☐ Direct Transcription Available
☐ Running Start ☐ College in High School
☐ Tech Prep ☐ International Baccalaureate
☐ Articulated Tech Prep ☐ Honors Option
☐ Cambridge Program ☐ Online Course

Advanced Placement:
 Comment:

Asterisk (*) denotes a required field

Figure 14 – Course Properties screen

Area	Description of Area
General Properties	This area defines the course for Current and Future Scheduling.
Options in This Area	Description of Options
Course Length Set	Length of time a course meets during the school year. For example, a Semester Course Length Set defines a class that spans an 18-week period.
Course Status	Determines whether a course is Active or Inactive. If a course will not be offered during the next school year but may be offered in a future school year, it is typically inactivated but not deleted from the Course Master. This is because you can make an inactive course active again without recreating the course.
Elective/Required	Defines which courses a student must take versus those they have an option to take. This information can be used on certain reports to help students differentiate between required and elective courses. This box is also used by the Auto Scheduler to schedule students into a required course before scheduling them into an elective course.
Schedule Type	Defines how a student is typically enrolled into the course. Most courses have a Schedule Type of Normal. You can also use Normal, Manually Scheduled and Special Education when creating a Course Availability List because you can restrict which courses appear on the availability list according to their Course Scheduling Type. The Course Availability list is located at WS\OF\FS\RP\PS\UT\CA. <i>Manually Scheduled Courses</i> Prevents the Walk-In Scheduler and the Auto Scheduler from scheduling a student into the course. In other words, a student must be hand-scheduled into a Manually Scheduled course. <i>Special Education Courses</i> Defines courses offered only to Special Education students. Prevents the Auto Scheduler from scheduling a student into the course. A student must be hand-scheduled into a Special Education course. <i>Dropped Courses</i> Identifies a course no longer offered. For example, if ENG 101 is longer offered, select the Dropped Courses and run the Student Request Report (WS\OF\FS\ RP\RE\SS) to see which students have requested courses that are marked as Dropped because you must move them to a new course.

Scheduling Priority	Specifies which courses receive scheduling preference when the Walk-In Scheduler or the Auto Scheduler is used. For example, if a student requests a course with a Scheduling Priority of 9 and a course with a Scheduling Priority of 1, the Auto-Scheduler schedules the course with the Priority of 9 before the course with the Priority of 1.
Team Sched Priority	Priority that a Team-Scheduled course receives compared to a non-Team Scheduled course when students are scheduled into their sections by the Auto Scheduler. This option appears on the screen only if the Use Team Scheduling check box is selected in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE).
Control Sets Possible	All possible Control Sets (for example, Semester 1, Semester 2) for all sections of the course. In other words, if a section of the course can be offered either Semester 1 or Semester 2, then the Control Sets Possible box contains S1- S2. This box does not appear if Use Advanced Master Schedule Builder is selected in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE). Control Sets Possible information is used to help build a Schedule Master.
CIP Code	State Vocational code. All Vocational courses must have a corresponding CIP code in this box. For this option box to be available, a course must first be marked with a Type that is Vocational. The CIP code values are year-specific, are defined by OSPI, and are maintained by WSIPC.
Lock Group	Flags two or more courses of the same course length that a student should not take at the same time. (A year-long course cannot be attached to a Lock Group.) To use a Lock Group, you must create a Lock Group Code and assign the courses that are not to be taken at the same time to the same Lock Group Code. <i>Example:</i> ENG 101 and ENG 102 are offered both Semester 1 and Semester 2. These two courses share a Lock Group Code. A student requests both of them. The student is scheduled into each course in a different semester.
Current Requests	Number of students scheduled into or requesting this course. The value in this box updates automatically when a student requests the course or is scheduled into it.
Maximum Seats Available	Shows the total Maximum Students values found on each section of this course. The value in this box updates automatically.

Estimated Nbr of Sections	Estimated total number of sections you think this course should have. This information helps build a Schedule Master.
Actual Nbr of Sections	Actual number of sections that exist for this course, updated automatically as you add or delete sections. This information helps build a Schedule Master.
Grade Ranges	Grade level of students who should take this course. These ranges do not prevent students from being enrolled in this course if their grade level is outside the range. This option can be used to restrict courses that appear on the Course Availability List.
Fees	Fee a student may be required to pay for this course. This value does not affect Fee Management—it is for reporting and informational purposes only.
Academic Minutes	Total number of minutes this course meets for instruction over a one-week period. The value in this box defaults into the Minutes Per Week box on the sections of the course. This value affects the P223 state report if your Entity bases that report's calculations on the student's schedule.
Earned Credits	Typical earned credit value a student earns after successfully completing this course.
Available to Online Scheduling	Determines whether a course is available for Online Arena Scheduling. This check box appears only if the Use Online Arena Scheduling check box is selected in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE).
Prohibit Student from Dropping	Determines whether a student can drop the class when using Online Arena Scheduling in Student Access. This check box appears only if the Use Online Arena Scheduling check box is selected in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE) and if the Available To Online Scheduling check box is selected for the course.
GPA Credits	Typical GPA credit value a student earns after completing this course. This value affects a student's GPA calculation. The GPA Credits box and the Earned Credits box typically contain the same value.

Area	Description of Area
State and Federal Details	This is the second area on the screen. This area appears only if the Allow Use of State Course Codes or the Allow Use of NCES Course Codes check boxes are selected in Scheduling Configuration Options (WS\OF\FS\PS\CF\SC). The name of the heading for the area is determined by which check boxes are selected. If only Allow Use of NCES Course Codes is selected, the heading is Federal Details. If only Allow Use of State Course Codes is selected, the heading is State Details. If both are selected, the heading is State and Federal Details.
Options in this Area	Description of Options
State Course Code	Specifies the state-defined course code for this course. State Course Codes are defined by OSPI and the table is updated by WSIPC. State Course Code information is reported in CEDARS.
Content Area Code	Content area for this course. Content Area Codes are defined by OSPI and the table is updated by WSIPC. Content Area Code information is reported in CEDARS.
Area	Description of Area
Section Defaults area	Section Defaults is the third area on the course screen. If all sections for a course will have the same basic parameters, you can save time by creating section defaults. The information in this area is automatically assigned to new sections created for this course.
Area	Description of Area
Master Builder Settings area	Master Builder Settings is the fourth area on the course screen. This area appears only if the Use Advanced Master Schedule Builder check box is selected in Entity Year Options (WS\OF\FS\PS\CF\SE). If your Entity does not use Advanced Master Schedule Builder and this area appears, consider clearing this check box.
Area	Description of Area
Washington State Specific area	Washington State Specific is the fifth area on the screen. Information in this area is used for CEDARS reporting and on the Washington State Standardized Transcript. To ensure these reports are accurate, select all check boxes that apply to the course and select the correct code. If any of these check boxes are selected, a designator appears next to the course on the Washington State Standardized Transcript.

Table 8 – Description of areas and options on the Course Properties screen.

Add, Edit or Delete a Section

A section is attached to a course. Students are scheduled into sections, not courses. A section contains information that defines its enrollment capacity, the terms during which the section occurs, attendance and grading methods, and other information.

Unlike reviewing a course in the Course Master, which requires you to review information in several areas, when you review a section of a course you look at information for only two areas: General Properties and Washington State Specific.

When you view a course in the Course Master (WS\OF\FS\BC\CM), the information from the section's General Properties area appears under the Section Details heading.

CAUTION Delete a section only if you're sure you won't use it in the future. If you think you might use it later, inactivate it. You can't delete a section if students are enrolled in it.

To add, edit or delete a section:

1. Go to WS\OF\FS\BC\CM.
2. Click the plus sign to the left of a course.
3. Do one of the following:
 - To add a new Section, click Add Section next to the Section Details heading. Review the boxes on the screen related to Future Scheduling. See Table 9 for a description of these options.
 - To edit or delete a Section, click the plus sign next to Section Details heading and click Edit or Delete next to the section you want to edit or delete.
4. Click Save.

Home Page | Office | Future Scheduling | Build Course Master | Course Master | Edit Section

Entity: 420 NY Scheduling High School 420 School Year: 2012 Course Key: AGRICU AGRICULTURE Save
 Status: Active Number of Requests: 0 Section: 01 Back

General Properties:

Class Status: Active Minimum Students: 15 Attendance Method: Mixed
 * Class Control Set: T1 TERM ONE Optimum Students: 20 Assign Seats
 * Calendar: 420 420 CALENDAR Maximum Students: 25 Rows: 000 Columns: 000
 Scheduling Team: Scheduling Category: Grading Method: Mixed
 Bell Schedule: Exclude from the Automatic Posting of Gradebook Grades

Corequisite Information:

Corequisite: METEOR Same Teacher: No Same Period: No Same Term

Student Count By Term:

	Term 1	Term 2	Term 3	Term 4
Enrolled	0.00	0.00	0.00	0.00
Females	0.00	0.00	0.00	0.00
Males	0.00	0.00	0.00	0.00
Addl. Seats Used	0.00	0.00	0.00	0.00
Spec Ed Students	0.00	0.00	0.00	0.00

Bilingual Use Class Meeting Time Override Max Special Ed Enroll %: 100.00
 Building: Number of Days: 0 Number of Periods: 0 Number of Teachers: 0
 Block Section Section Locked From Master Builder Control Set Locked From Master Builder

Room Type(s): Add Room Type
 Priority Description

Washington State Specific:
 * Minutes Per Week: 0

Asterisk (*) denotes a required field

Figure 15 – Section Properties screen

Area	Description of Area
General Properties	General information about the section.
Options in this Area	Description
Class Status	Specifies whether a class is Active or Inactive. If a class is available to enroll students into, select Active. Otherwise, select Inactive.
Class Control Set	Determines which specific term, semester or trimester a section is offered (for example, Semester 1 or Term 3).

Scheduling Team	Scheduling team assigned to the section. Scheduling Teams ensure that only certain students (those that share the assigned team) can be scheduled into this section by the automated scheduling processes. See “Step 8: Create Scheduling Teams” for more information about Scheduling Teams.
Minimum Students	Defines the section’s seat capacity. Used in automated scheduling processes.
Optimum Students	Defines the section’s seat capacity. Often used to justify whether the section should be offered.
Maximum Students	Defines the section’s seat capacity and prevents users from enrolling more students into the section than the value allows. With proper security and setup, you can enroll more students into the section than this maximum value allows.
Scheduling Category	Appears if the Use Scheduling Categories check box in Entity Year Options is selected (WS\OF\FS\PS\CF\SE). This specifies which Scheduling Categories are assigned to the section. More than one Scheduling Category can be assigned to a section. See “Step 9: Create Scheduling Categories” for more information about Scheduling Categories.
Corequisite Information	Specifies a corequisite section to pair with this section. This area of the screen does not appear when you initially add a section and is available when you edit a section only if a corequisite has been set up in the Course Master. Corequisite information is used during the student request process and by the Auto Scheduler.
Student Count by Term	Number of female, male and total enrolled students in this section by term. It does not appear when you add a section (only when you edit a section).
Number of Days	Number of days per week a section meets. This value is used by the Master Schedule Builder.
Number of Periods	Number of periods per day a section meets. This value is used by the Master Schedule Builder.
Number of Teachers	Number of teachers a section requires for its Meet records. This value is used by the Master Schedule Builder.
Block Section	Determines whether a multi-period section meets during consecutive periods of the day. This value is used by the Master Schedule Builder.

Section Locked From Master Builder	Prevents the Master Schedule Builder from changing information on the section.
Control Set Locked From Master Builder	Prevents the Master Schedule Builder from changing the Control Set currently assigned to the section.
Room Type(s)	Classroom for the section by its function (for example, Art, Band, Choir, Gym). This information is used by the Master Schedule Builder to assign a room to the Meet record of the section.

Area	Description of Area
Washington State Specific	Options specific to users in Washington State.
Options in this Area	Description
Minutes Per Week	Specifies the value used for calculating a student's FTE for the P-223 state report if your Entity bases this calculation on the student's schedule.

Table 9 - Section areas and options

Add, Edit, or Delete a Meet

A meet, also called a meet pattern or meeting pattern, is primarily used to define the following:

- Teacher who teaches the section
- Days of the week the section is taught
- Period(s) of the day the section is offered

Meets can allow additional flexibility. For example, if two different teachers are assigned to different terms of the same section, you create two meet records for the section. If a section is a block section (that is, it is offered over two periods during the day), you create two meets for the section—one for each period.

To add, edit or delete a meet:

1. Go to WS\OF\FS\BC\CM.
2. Click the plus sign next to the course.
3. Next to the Section Details heading, click the plus sign.

4. Do one of the following:

- To add a meet, click Add Meet next to a Section. Review the boxes on Class Meet properties screen (Figure 16) related to Future Scheduling. See Table 10 below this procedure for a description of relevant options on this screen.
- To edit or delete a meet, click Edit or Delete next to the meet.

5. Click Save.

Home Page | Office | Future Scheduling | Build Course Master | Course Master | Add Class Meet

Course

Entity: 420 NY Scheduling High School 420

Class: AGRICU/01 AGRICULTURE

Control Set: T1 Class Status: Active

Start and Stop Terms

* Display Term Start: 01 * Stop: 01 * Scheduling Term Start: 01 * Stop: 01

Meet Pattern

* Display Period: 05 Display: ☒ M ☒ T ☒ W ☒ R ☒ F ☐ S

* Scheduling Period: 05 Scheduling: ☒ M ☒ T ☒ W ☒ R ☒ F ☐ S

* Attendance Period: 05 Attendance: ☒ M ☒ T ☒ W ☒ R ☒ F ☐ S

Lunch Code

☒ None ☐ Group A ☐ Group B ☐ Group C ☐ Group D ☐ Group E ☐ Group F

Building: Room: Type:

Teacher:

Teacher Type ?

☒ Primary ☐ Alternate

☒ Display This Class Meet On Student Schedules

☐ Allow Access to EA+

☐ Allow Access to Gradebook

Class Meeting Time Override

Start Time: 12:00 AM Stop Time: 12:00 AM

Class Meet Type

☐ Instructional ☐ Lunch ☐ Recess ☐ Study Hall ☐ Other

Master Builder Locks

☐ Lock Periods

☐ Lock Days Meet

☐ Lock Building-Room

☐ Lock Teacher

Asterisk (*) denotes a required field

Figure 16 – Class Meet properties screen

Option	Description
Display and Scheduling Term Start and Stop	Specifies which terms the Meet spans. This allows scheduling to be more flexible. For example, if a two-term section is taught during Semester 1 and a different teacher instructs each term, you create a meet for each Term and attach a different teacher to each meet. Typically, the Display and Scheduling Term Start and Stop ranges have the same values.
Display, Scheduling and Attendance Period	Specifies which period of the day you want the meet to do the following: • Display on student schedules • Schedule the student • Record attendance associated with this Meet Typically, the value in these three boxes is the same. The value represents the period during the day when this section truly meets. These boxes can contain different values to allow for different display, scheduling and attendance setups.
MTWRF (Weekdays) or Day Rotation values	Days of the week that each of the Display, Scheduling and Attendance periods meet. Typically, the weekday boxes match.
Lunch Code	Associates a lunch code with a meet. The selected Lunch Code appears next to the meet information on a student's printed schedule.
Building/Room	Class location. To assign a room to the meet, a Building must be assigned to the meet. The room information appears on scheduling reports. In general, Rooms are assigned to Buildings, Buildings are attached to Schools and Schools are attached to an Entity through the Entity School Cross-Reference table found in School Codes (WS\OF\PS\PS\CO\SC).
Teacher	Specifies which teacher teaches the section. Because sections can have more than one meet, two teachers can be assigned to a section if each is assigned to a different meet.
Teacher Type	Determines whether the teacher assigned to the meet is the Primary teacher or an Alternate teacher. Each meet must have one Primary teacher per term. While a meet can have only one Primary teacher, there is no limit to how many Alternate teachers can be assigned.

Display This Class Meet On Student Schedules	Determines whether the meet information appears on the student's schedule. If a section has more than one meet, you can clear this check box to suppress the appearance of a meet's information on the student's schedule. This might be helpful if both a Primary and Alternate teacher are assigned to a section but only the meet information for the Primary teacher should appear on the schedule.
Allow Access to EA+	Determines whether the teacher assigned to the meet can view this section in Educator Access Plus. This option is automatically selected for the Primary Teacher Type. You can allow teachers attached to the Alternate Teacher Type to see this class in Educator Access Plus.
Allow Access to Gradebook	Determines whether the teacher attached to the Alternate Teacher Type can view this section's Gradebook in Educator Access Plus. The option is automatically selected for the Primary teacher.
Class Meeting Time Override	Exact meeting time of the class. This was created for another state that receives funding for student attendance defined down to the minute. This area is only available when the Use Class Meeting Time Override check box is selected on the section.
Class Meet Type	Specifies the type of Meet as Instructional, Lunch, Recess, Study Hall or Other. This setting is for reporting purposes only.
Master Builder Locks	Restricts the information specified in the check boxes from being altered by the Master Schedule Builder. This area is only available if the Use Advanced Master Schedule Builder check box is selected in Entity Year Options (WS\OF\CS\PS\CF\SE).

Table 10 – Description of options on the Class Meet properties screen

Clone a Course in the Course Master

Cloning a course can save time if most courses will have the same configuration. When you clone a course, you can also clone the course's section and meet information. Consider cloning a course rather than creating a new course if the course you need will have a configuration similar to an existing course. For example, if you have an English 101 course and need an English 102 course that will be taught by a different teacher, rather than creating the English 102 course from scratch, clone the English 101 course, change the description to English 102, and change the assigned teacher.

To clone a Course:

1. Go to WS\OF\FS\BC\CM.
2. In the Course Details list, locate and highlight the course you want to clone.
3. Click Clone Course.
4. Complete the Curriculum, Course Key, Short Description and Long Description boxes.
5. Select the Information to Clone from check boxes that apply.
6. Click Save.

Build a Course Time Table

The Class Meeting Timetable (WS\OF\FS\BC\CM) helps you build meet records for the sections of a selected course. Using this area, you can build a meet record by selecting a course's section and assigning a teacher, room and period for the current term or for all terms defined in the Entity. Instead of adding Meet records for sections of a course one at a time, you can build them in one area. Although it is possible this option will save time, it is very labor-intensive and in many cases is less effective than building meet records manually.

Pair Alternate Courses

You can pair a course with alternate courses in the Course Master. When this is done, the alternate courses are scheduled for students who are not scheduled into the original course when you run the Schedule Alternate Requests utility in Course Paired mode. For example, if you set Aerobics as an alternate course to Team Sports and run the Schedule Alternate Requests utility in Course Paired mode, it attempts to schedule students into Aerobics if they requested Team Sports but were not scheduled into the class.

When you pair a course with an alternate course, you can use the option Create selected course as an alternate. Selecting this option also pairs the original course as an alternate to the alternate course. For example, if you pair Aerobics as an alternate course to Team Sports and select this option, the software automatically pairs Team Sports as an alternate course to Aerobics.

Assign a Co-Requisite to a Course

Courses are setup as co-requisites so that a student who takes one of the courses should also take the other. Co-requisite courses must have the same Course Length. When linking courses, you can force requests to be scheduled in the same term or semester, scheduled in different terms or semesters, or scheduled randomly by the Future Scheduling module.

To assign a co-requisite to a course:

1. Go to WS\OF\FS\BC\CM.
2. Locate the course that will be a co-requisite of another course and click the plus sign next to that course.
3. Next to the Co-Requisite Details heading, click Add Co-Requisite.
4. In the Co-Requisite Course box, select the course that will be the co-requisite of the course you are editing. Only courses of the same course length appear.
5. Specify whether the courses must be scheduled with the same teacher.
6. Specify whether the courses must be scheduled in the same period.
7. Select the Term/Semester Type.

NOTE	If the length of the courses is Year, there will not be any selections available.
	If the length of the courses is Term the options will be: 1 = Same Term, 2 = same Semester - Different Terms and 3 = Same Semester – Any Term.
	If the length of the courses is Semester the options will be: 1 = Same Semester, 2 = Different Semesters and 3 = Any Semesters.

8. Select the desired Auto Request Co-Requisite option. This method will be in effect for all methods of request entry.

NOTE	If you select Prompt User to Request, the user is prompted to also add a request for the Co-Requisite when the selected course is requested for a student. If you select Automatically Request, the system automatically adds a request for the Co-Requisite course when the selected course is requested for a student. If you select Do Not Automatically Request, the system does not prompt the user or automatically add the Co-Requisite course request. The user must manually enter a request for both courses.
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9. Click Save. After the Co-Requisite has been saved, the details display in the Course browse.

Assign a Co-Requisite to a Section

Co-requisites can be assigned at the section level, ensuring that specific sections—not just the courses—are linked.

To assign a co-requisite to a section:

1. Complete steps 1 through 9 in the previous procedure to assign a Co-Requisite to a course.
2. Select one of the courses that is a co-requisite of another course and click the plus sign next to it.
3. Click the plus sign next to Section Details.
4. Click Edit next to the section that you want to link to a section of the co-requisite course.
5. In the Corequisite Information area, details regarding the co-requisite course appear. You can link a section of the co-requisite course to the selected course/section so that the Auto Scheduler schedules students into a specific section of the co-requisite course. To do this, click the arrow to the right of the Corequisite box and select a section.
6. Click Save. This links the section of the course to the co-requisite section.
7. Repeat steps 1 through 6 for other sections that need to be linked.

Create Prerequisite Requirements for a Course

Prerequisites are assigned to courses to help scheduling processes (such as the Auto Scheduler) identify the order in which semester-long or term-long courses should be scheduled if a student has requests for courses with prerequisites.

The Online Arena Scheduling process honors any prerequisite requirements that have been assigned to courses and will not schedule students into courses if the requirement has not been met. However, not having met the prerequisite in the current or previous years will not stop the student from being scheduled when the Auto Scheduler is run.

NOTE	You must check for prerequisite compliance manually before using the Auto Scheduler. Later in the scheduling process, you will determine whether students have met prerequisite requirements. There is a reporting option and a utility that help determine whether students are eligible to take the courses requested. The Prerequisite Verification Report (WS\OF\FS\RE\PR) and the Prerequisite Verification Utility (WS\OF\FS\SS\BS\Utilities) both check the student's history, Current Year schedule and Next Year requests and reports whether the student has met the prerequisite(s) or is in the process of doing so. The prerequisite report is run for a range of students, whereas the prerequisite utility is run for one student at a time. The report is used before running the Auto Scheduler, and the utility is used before generating a single student's schedule using the Walk-In Scheduler (WS\OF\FS\SS\BS).
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The prerequisite process uses the value in the Control Sets Possible box on the course to determine several things about a course. For example, the prerequisite process uses the Control Sets Possible value to determine if a student who has selected two next-year courses (where one is a prerequisite of the other) can meet the prerequisite.

You must use a Standard prerequisite master, an OR prerequisite master or an AND prerequisite master, which defines how the requirement will be met. A Standard Master is the most simple prerequisite master. For example, this requires a student to take English 9 before English 10. The OR and the AND prerequisite masters are more complex. These masters require a student to take a prerequisite from one or more groups of courses (OR), or from both groups (AND).

Below is an example of two groups of courses from which a student can select:

<u>Group 1</u>		<u>Group 2</u>	
Intro to English	1 credit	English Literature	1 credit
English 9	1 credit	Writing Skills	1 credit
English 10	1 credit	Advanced Writing Skills	1 credit
Honors English 9	1 credit		
Honors English 10	1 credit		

Using these groups of courses an example, the OR and AND prerequisite master are explained below:

OR Students must take one or more courses from Group 1 *or* one or more courses from Group 2 before they can take the course they are requesting.

AND Students must take one or more courses from Group 1 *and* one or more courses from Group 2 before they can take the course they are requesting.

To assign a prerequisite to a course and section:

1. Go to WS\OF\FS\BC\CM.
2. Locate the course that has a prerequisite requirement and click the plus sign next to that Course.
3. Next to the Pre-requisite Details heading, click Add Pre-Requisite.
4. Enter the Pre-requisite Number. This identifies the minimum number of prerequisites a student must fulfill to meet the requirements for the course. For a Standard prerequisite, this is usually 01.

For an OR prerequisite, enter the same number as the standard prerequisite master already created for the first requirement. There is still only one prerequisite that must be met in order to take the course, but there are options as to how the requirement can be met.

For an AND prerequisite, enter a different number than the Standard prerequisite master already created for the first requirement. Example: 02. This is a prerequisite the students must fulfill in addition to the first requirement.

5. Enter a value in Required Credits box. This identifies the credit requirement for the Pre-requisite Option.
6. Enter a description in the Description box for the Pre-requisite Option.
7. Click Save. After the Prerequisite has been saved, the master details appear in the Course browse.
8. For each Pre-requisite Option, click Add Pre-requisite Detail.
9. Select the Entity and school year in which the student could have met the pre-requisite requirement. If the course requirement could have been taken in several different school years and Entity combinations, create multiple Pre-requisite Detail records.
10. Click the arrow to the right of the Pre-requisite box. Select a prerequisite course for the selected Pre-requisite Option.
11. If the course the student is requesting and the prerequisite for that course can be taken at the same time, select the Allow Pre-requisite To Be Taken Concurrently check box.
12. Click Save. After the Prerequisite has been saved, you can see the details in the Course browse by clicking the plus sign next to the prerequisite Master.

Repeat these steps for additional prerequisite detail for each option and then create additional prerequisite options and all details as needed.

Generate the Validation Report

Run the Course Validation report (WS\OF\FS\BC\RE\CV). It searches every course in an Entity's Course Master for the selected school year and shows any warnings and errors due to incorrect data or incorrect relationships among courses, sections and meet records. To run the report, you only need to provide a template description and verify the school year.

Items identified as errors on the report must be changed before scheduling will work properly. Changing items identified as warnings is optional, but you should change them because it improves the integrity of the scheduling data.

Examples of errors:

- A section has no meets.
- A course has requests but no sections.
- A co-requisite section is not set up correctly (for example, a section is not offered the same term/semester).

Examples of warnings:

- A section has a Maximum Number of Students value of zero.
- A value has not been selected in Control Sets Possible for the course.
- A section's control set value is not listed in the Course's Control Sets Possible values.
- The Estimated Number of Sections does not equal the Actual Number of Sections.
- A course has an invalid Curriculum Code.
- A Co-Requisite course is required to have a section during a specific period or term/semester, but one is not offered.
- A prerequisite is not set up correctly (for example, a required course is not offered before the identified course or is not offered this year, so the student cannot meet the requirement).

The Course Validation Report in Figure 17 shows examples of errors and warnings.

isocrs01.p 06-2 04.10.06.00.00		NY Sched HS 400 (Instructor) COURSE VALIDATION REPORT		11/12/10	Page:1 1:09 PM
Course	Entity	Year	Course Description		
ADVPHO	400	2012	ADVANCED PHOTOGRAPHY	Warning: Estimated number of sections does not equal the actual number of sections. Warning: Section 01 does not have a corequisite section that is offered the same semester. Warning: Section 02 has a max number of students of 0.	
AGRICU	400	2012	AGRICULTURE	Warning: Estimated number of sections does not equal the actual number of sections.	
ALGEB1	400	2012	ALGEBRA 1	Warning: Estimated number of sections does not equal the actual number of sections.	
ALGEBR	400	2012	PRE-ALGEBRA	Warning: Estimated number of sections does not equal the actual number of sections.	
ART 1	400	2012	ART 1	Warning: Estimated number of sections does not equal the actual number of sections.	
ART 2	400	2012	ART 2	Warning: Estimated number of sections does not equal the actual number of sections. Warning: Prereq Num: 1 Prereq Opt: 1 - Course ART 1 not offered before this course.	
BEHPSY	400	2012	BEHAVIORAL PSYCHOLOGY	Warning: Estimated number of sections does not equal the actual number of sections.	
BIOLOG	400	2012	BIOLOGY	Warning: Estimated number of sections does not equal the actual number of sections.	
BPROG1	400	2012	BASIC PROGRAMMING 1	Error: The corequisite course of Section 01 has no sections offered during the same semester. Error: The corequisite course of Section 02 has no sections offered during the same semester.	
BPROG2	400	2012	BASIC PROGRAMMING 2	Error: Section 01 does not have any class meets. Error: The corequisite course of Section 01 has no sections offered during the same semester. Warning: No Control Sets Possible selected.	

Figure 17 – Course Validation Report

Step 8: Create Scheduling Teams

Creating Scheduling Teams is optional. To use Scheduling Teams, you assign a Scheduling Team Code to a student and to course sections. This code ensures that a student is enrolled into a section that corresponds to the student's team assignment. Scheduling Teams are typically used to schedule a group of students that should be in the same classes or have the same teacher or group of teachers. When an automatic scheduling process is run, the program attempts to schedule the student into a section that has the student's Scheduling Team Code.

Creating a Scheduling Team is a four-step process:

1. Add Scheduling Team Codes.
2. Update Course and Sections with Scheduling Team Assignments.
3. Assign Students to a Team.
4. Modify Individual Student Team Scheduling Assignments.

This section explains each of these steps.

NOTE	Team Scheduling must be enabled in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE) in Entity Year Options before fields and codes appear for students and course sections.
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Add Scheduling Team Codes

Create Scheduling Team Codes according to your Entity's needs. The codes are assigned both to students and sections. The codes are not specific to a Graduation Year or School Year.

To add Team Scheduling codes:

1. Go to WS\OF\FS\BC\PS\CO\ST.
2. Click Add.
3. In the Scheduling Team Code box, type an alphanumeric value.
4. In the Description box, type a description for the Scheduling Team Code.
5. Click Save.

Update Course and Sections with Scheduling Team Assignments

After you've created the Scheduling Team Codes, you must enter a Scheduling Team assignment on the sections that need them. Scheduling Teams ensure that the automated scheduling process schedules only certain students (those that share the section's Scheduling Team Code) into this section.

In addition, a Team Scheduling Priority must be added to the course when using Team Scheduling. This tells the system the importance of the course for the student when scheduling. The higher the priority, the more attempts the system will make to schedule students into the class.

See "Step 7: Maintain the Course Master" to learn how to update course and sections with scheduling team assignments

Assign Students to a Team

When all of the Scheduling Teams have been added, it is time to assign students to the teams. Scheduling Team assignments must be made for students each school year.

There are two methods to assign students to a Future Year Scheduling Team:

- Run the Mass Assign Student Scheduling Teams utility
- Assign Scheduling Teams by student

This section explains both of these methods.

NOTE	If team assignments existed in the current year, you can copy them from Current Year Scheduling to Future Year Scheduling (see "Run the Copy Student Scheduling Teams Utility" for more information about this utility).
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Run the Mass Assign Student Scheduling Teams Utility

The Mass Assign Student Scheduling Teams utility allows you to mass assign Student Scheduling Teams to a range of students. After you enter a value in the Total Number of Sections box, the program calculates the average number of students per Student Scheduling Team based on the total number of students selected through the parameters on the range screen. The utility also allows you to balance students on the Scheduling Teams by gender, race and/or Student Type.

To run the Mass Assign Student Scheduling Teams utility:

1. Go to WS\OF\FS\RP\PS\UT\ST.
2. Configure the Student Ranges screen and click Save.
3. If the ranges do not result in the selection of at least one student, a message states that you need to review the ranges. Click OK. However, if at least one student is selected, the student count appears in the Total number of students to be processed box.
4. Configure the Mass Assign Student Scheduling Teams screen. Refer to Table 11 for details about options on the screen. See “Controlling the Number of Students Assigned to Each Scheduling Team” after this procedure for a recommendation about Scheduling Teams.
5. Click Run.
6. A list of students to be processed appears. If a student in the list should not be processed, you can clear the check box to the left of the Entity column for that student’s name.
7. When all students who should be processed are selected, click Process. A message appears stating that by continuing, the Scheduling Teams will be assigned to the selected students based on the selected teams and team balancing information.
8. Click OK.

The report is available through the Print Queue and lists all students processed. The Scheduling Teams assigned to the student are listed on the report

Controlling the Number of Students Assigned to Each Scheduling Team

To evenly control the number of students assigned to each Scheduling Team, set the value in the Total number of sections box to equal the value in the Total Number of Students to be processed box. The Average number of students per section value will then equal 1.00. The system evenly distributes the number of students selected in the Student Ranges among the number of teams you select.

For example if you have 120 students and you select 4 teams, each team is assigned 30 students.

On the other hand, if you have 120 students and you want to spread them over four teams but you want two of the teams to contain twice as many students as the other two teams, you must enter a value of 6 into the Total number of sections box. This results in 20 students on two of the teams and 40 students on the other two teams.

The screen print below shows the Mass Assign Student Scheduling Teams utility screen.

Figure 18- Mass Assign Student Scheduling Teams screen

Option	Description
Total number of students to be processed	Total number of students that will be processed by the utility and available to be assigned to a Scheduling Team. This is based on the selections you made in the Student Ranges.
Total number of sections	The number of team sections desired. When a value is entered the system calculates and automatically populates Average number of students per section. Sections equate to the number of groups you want to divide the body of students into who are being assigned to Scheduling Teams. Once this value is determined the system will assign groups to Scheduling Teams. This could be a one-to-one ratio or there could be multiple groups in some Scheduling Teams. See “Controlling the Number of Students Assigned to Each Scheduling Team” for a recommendation about Scheduling Teams.

Average number of students per section	System calculation of the average number of students who will be assigned to each section based on values in Total number of students to be processed and Total number of sections. To change this value, you must change values in Total number of sections.
Scheduling Team	Allows the desired Scheduling Teams to be selected from all available Scheduling Team codes, for students to be mass added. After clicking OK, the number of students assigned to each Scheduling team is listed and can be changed if necessary.
Update	Allows the number of sections to be changed for a selected Scheduling Team.
Assign Scheduling Team By Requested Course(s) – Class Scheduling Teams	Assigns students into Scheduling Teams based on the requested course – class scheduling teams. Students that don't have a requested course with class scheduling teams will be assigned based on the selected teams and balance information.
Balancing Info	Allows Scheduling Team assignments to be balanced by Gender, Race and/or Student Type. If balancing by Student Type, make selections from available Student Types.
Student Type	This option is only available if Student Type is selected in Balancing Info. Allows Student Type selections to be made for balancing assignments.

Table 11 - Mass Assign NY Student Scheduling Teams options

Assign Scheduling Teams by Student

The Assign Scheduling Teams by Student utility allows you to assign students to a team on a student-by-student basis or modify existing individual team assignments for scheduling purposes. Use this option if you want to place students on a specific Scheduling Team rather than having the system randomly assign a student to a team, or if you need to modify the team a student was assigned to.

To assign Scheduling Teams by student:

1. Go to WS\OF\FS\RP\PS\UT\AS.
2. Click the plus sign next to the Scheduling Team code you want to assign or remove, or change the team that a student is assigned to.

To add a student to a team:

1. Click Add Student.
2. Select the box next to the Student Key for the student(s) you wish to add to the team. You can also clear the check box to remove students from the selected team.
3. Click Save.

To modify a student's team assignment:

1. Click Edit.
2. Click Scheduling Team and make the appropriate team selection.
3. Click Select.
4. Click Save.

To remove a student from the selected team:

1. Click Remove. A message asks whether you are sure you want to remove the student.
2. Click OK.

To view a roster of the students assigned to the team, click View All Students. From this screen you can also manage students assigned to the team. To change a student's team assignment, select a student, click Edit, and select a different team. You can also remove a student by clicking Remove.

Run the Copy Student Scheduling Teams Utility

The Copy Student Scheduling Teams Utility copies the student's current year Scheduling Team assignment to the student's next year Scheduling Team or vice versa.

To run the Team Scheduling Copy utility:

1. Go to WS\OF\FS\RP\PS\UT\CS.
2. Click Add.

3. To use the current year Scheduling Team assignment to populate the next year scheduling team value, click Copy CY Scheduling Team to NY Scheduling Team.
4. In the CY Scheduling Team Low and High boxes, enter the Scheduling Team codes you want to copy as the next year scheduling team assignments. If you are updating only one Scheduling Team, enter the same Scheduling Team code in both the Low and High boxes.
5. To delete the student's assigned current year Scheduling Team value, select the Clear Copied CY Scheduling Team from Students check box.
6. To overwrite any pre-existing next year Scheduling Team code assigned to a student, select the Overwrite Existing NY Scheduling Team on Students check box.
7. Click Save and Run.

The Copy Student Scheduling Team report appears showing you how many student-Entity records were updated. If student team assignments need to be changed, you can modify their assignments individually. To learn how to modify their assignments individually, see “Assign Scheduling Teams by Student” or “Modify Individual Student Team Scheduling Assignments.”

Modify Individual Student Team Scheduling Assignments

A Next Year Scheduling Team Code can be assigned or modified for a student on the Entity Info tab in Student Demographics. The NY Sched Team box appears if the Use Scheduling Teams check box is selected in Entity Year Setup (WS\OF\FS\PS\CF\SE\Entity Year Options).

NOTE	Make the student Scheduling Team additions or modifications in the NY Sched Team box and not the CY Sched Team box.
-------------	---

Produce a Scheduling Team Roster

The Scheduling Team Roster Report generates a list of students assigned to the Scheduling Teams you select on the report template. You can run this report after Scheduling Teams have been assigned to students to see which students are teamed together and to determine whether changes must be made. If individual team assignment modifications are needed, you must perform these changes before scheduling students into classes.

To produce a Scheduling Team Roster:

1. Go to WS\OF\FS\RP\RE\SR.
2. Click Add.
3. Configure the Scheduling Team Roster screen (Figure 19). See Table 12 below for details about options on this screen.
4. Click Save and Print.

The NY Team Scheduling Assignment Report appears. If totals (Totals Only or Both) were selected on the template, a separate page prints for each Scheduling Team listing the total number of students in the team. If details were selected (Details Only or Both), a separate page prints for each Scheduling Team listing the student names assigned to the team. If Both was selected, a separate page(s) print for details (for each team) before the totals page(s) prints.

The screenshot shows the 'Scheduling Team Roster' screen. The breadcrumb trail at the top is: Request Processing | Scheduling Reports | Scheduling Team Rosters | Scheduling Team Roster. On the right, there are buttons for 'Save', 'Save and Print', and 'Back'.

Template Settings

- * Template Description: [Text Field]
- ☐ Share this template with other users in entity 401
- ☐ Print Greenbar

School Year: 2011-12

Team Selection

Print Options

- ☐ Totals Only
- ☐ Details Only
- ☒ Both

Scheduling Teams

[Empty List Box] [Add] [Remove] [Remove All]

Ranges

Student Ranges

Low High

Grad Yr/Grade: 2012 12 2015 09

Homeroom: [Text Field] ZZZZZ

Name Key: [Text Field] ZZZZZZZZZZ

Advisor: [Text Field]

CY Status

- ☐ Active
- ☐ Inactive
- ☒ Both

NY Status

- ☐ Active
- ☐ Inactive
- ☒ Both

Special Ed

- ☐ Yes
- ☐ No
- ☒ Both

Other Options

- ☒ Select All Calendar(s) [Calendars]
- ☒ Select All School(s) [Schools]
- ☒ Select All Student Type(s) [Std Type]

Report Options

Detail Printing Options

Detail Options

- ☒ Student Name
- ☐ Ordering

☐ Print Student Name Key ☐ Print Student Homeroom

☐ Print Student Advisor ☐ Print Next Year Grad Year

☐ Print Student Next Year Status ☐ Print Student Type

☐ Print Student Gender ☐ Print Student Race

Print Order

Selected fields must be in desired print order.

Totals By: [Text Field] Student Type: [Text Field]

[Detail] [Ordering]

Asterisk (*) denotes a required field

Figure 19 – Scheduling Team Roster screen with Print Options of Both selected.

Area	Description of Area
Team Selection	This area of the screen determines how the data for the teams will appear on the report.
Options in this Area	Description of Options
Print Options	Specifies what information appears on the report. Selecting Totals Only provides a total count of students in each team. Selecting Details Only lists students in each team. Selecting Both lists students in each team as well as a total count of students in each team, each as a separate report.
Scheduling Teams	Options in this area determine which Scheduling Teams appear on the report.
Area	Description of Area
Ranges	Options in this area determine which students are included on the report.
Area	Description of Area
Report Options	Options in this area determine the information that prints on the reports.
Options in this Area	Description of Options
Student Name Ordering Print Student Name Key Print Student Homeroom Print Student Advisor Print NY Grad Year Print Student NY Status Print Student Type Print Student Gender Print Student Race	These options are only available if the Print Options of Details Only or Both are selected. You can organize the rosters using the Student Name option or use the Ordering option to order them by an alternate student demographic field. If Ordering is selected, additional options are available in the Print Order section of the screen in Detail Ordering. The remaining Detail Printing Options print more information for each student on the roster. The last three options (Student Type, Gender and Race) appear only if the Detail Option of Student Name is selected.
Totals By	Allows you to sort by gender, race and/or Student Type. This option is available only if the Print Options of Totals Only is selected.

Detail Ordering	Allows you to sort by Gender, Race and/or Student Type. This option is only available if the Detail Option of Ordering is selected.
Student Type	Allows you to sort the Student Types. If the sort selection in Totals By or Detail Ordering is by Student Type, this option is available.

Table 12 – Description of areas and options on the Scheduling Team Roster screen.

Step 9: Create Scheduling Categories

Creating Scheduling Categories is optional. Scheduling Categories allow students to be scheduled into specific sections of a course. If a student is assigned a Scheduling Category that matches the Scheduling Category assigned to a specific section of a course, the student can be scheduled into that section of a course. Students without a matching Scheduling Category cannot be scheduled into the section using an automated process.

Using Scheduling Categories allows for more flexibility than Scheduling Teams because courses, sections, and students can be assigned multiple Scheduling Categories. Scheduling Categories are maintained in Codes and can be assigned to a student on the Entity tab of Student Demographics or by using the Scheduling utility Mass Add/Delete Student Scheduling Categories.

Possible reasons for uses of Scheduling Categories include the following:

- Ensuring only females are scheduled into female sections of PE and only males are scheduled into male sections.
- Assigning students who carry laptops a category so they are scheduled into sections of courses that accommodate laptops.
- Assigning honors students a category so that they are scheduled into sections of courses that are honors classes.

Creating and assigning Scheduling Categories is a four-step process:

1. Add Scheduling Category Codes.
2. Update Course Sections with Scheduling Categories.
3. Mass Add and/or Delete Student Scheduling Categories.
4. Modify Individual Student Scheduling Categories.

This section explains each of these steps.

NOTE	Scheduling Categories must be enabled in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE) in Entity Year Options before fields and codes will appear for students and course sections.
-------------	--

Add Scheduling Category Codes

To use Scheduling Categories, you must create codes that will be assigned both to students and sections.

NOTE The Scheduling Category Code is restricted to one character. This is so that if a student is assigned multiple codes, they appear in the NY Categories box on the student's Entity Info tab in Student Demographics.

To add Scheduling Category Codes:

1. Go to WS\OF\FS\BC\PS\CO\SC.
2. Click Add.
3. In the Code box, type a one character alphanumeric value.
4. Type a description for the Scheduling Category Code in the Description box.
5. Continue adding Scheduling Category Codes as needed.
6. Click Save.

Update Course Sections with Scheduling Categories

Now that you've added Scheduling Category Codes, they must be assigned to course sections for automated processes to schedule students correctly. You can assign more than one Scheduling Category to a section. A student must be assigned to at least one of the matching Scheduling Category codes in order to be scheduled into a section that is assigned that same code.

To update Course Sections with Scheduling Categories:

1. Go to WS\OF\FS\BC\CM.
2. Locate a course. Click the plus sign next to the course code.
3. Click the plus sign next to Section Details.
4. Click Edit next to a section.
5. Click the Scheduling Category box.
6. Select a Scheduling Category for the section.
7. Click Save.
8. Click Save again.

Mass Add and/or Delete Student Scheduling Categories

The Mass Add/Delete Student Scheduling Categories utility efficiently assigns or deletes Scheduling Categories for selected students. You can assign Scheduling Category Codes to selected students using the utility or randomly assign one Scheduling Category Code to selected students. You can also use the utility to delete Scheduling Category Codes on selected students.

To mass-add or delete Student Scheduling Categories:

1. Go to WS\OF\FS\RP\PS\UT\SC.
2. Click Add.
3. Configure the Mass Add/Delete Student Scheduling Categories screen (Figure 20). See Table 13 for details about options on this screen.
4. Click Save and Process. A message states that the preview process is complete. If records are found to process, you are prompted to preview the data.
5. Click Preview Data to Process.
6. A list of students to be processed appears. Any NY Scheduling Categories assigned to the student are listed. To exclude a student from the process, select the student and click Remove From Update.
7. When the student records have been removed, click Back. This report cannot be viewed unless you select Preview Data to Process. The item in the Print Queue titled Mass Add/Delete Student Scheduling Categories – Preview does not contain any records. It only processed the Preview of the data— it did not process any students.
8. Click Run the Update. A message states that selecting OK will run the process and make the changes permanent, and that the update process runs through the print queue.
9. Click OK to continue.

The report is available through the Print Queue and lists all students processed. All Scheduling Categories assigned to the student (existing and new) are listed on the report.

... | Request Processing | Prod Setup | Utilities | Mass Add/Delete Student Scheduling Categories

Template Settings

* Template Description:

☐ Share this template with other users in entity 401

Utility Information

This process will mass add or delete student scheduling categories. If the "Add One Category Randomly" process type option is selected and the selected student already has an assigned scheduling category, it is possible that the random category selected for the student is the same category. If this is the case, that student will not be assigned another scheduling category.

Mass Add/Delete Student Scheduling Categories - Future Scheduling

Entity: **401** WSIPC High School

School Year: **2011-12**

Process By: ☒ Range ☐ Individual

Process Type

☒ Add All Scheduling Categories

☐ Add One Category Randomly

☐ Delete All Scheduling Categories

Sort By

☒ Alphakey

☐ Other ID

Scheduling Categories

Maximum selection is 10 Scheduling Categories.

Asterisk (*) denotes a required field

Figure 20 – Mass Add/Delete Student Scheduling Categories screen

Option	Description
Range or Individual	Determines which students are processed by the utility.
Process Type	Determines how the utility processes students. Add All Scheduling Categories assigns <i>all</i> selected Scheduling Categories to each student. Add One Category Randomly assigns <i>one</i> of the selected Scheduling Categories randomly to each student. Delete All Scheduling Categories removes <i>all</i> selected Scheduling Categories from each student. If the process type option of Add One Category Randomly is selected and the student already has an assigned scheduling category, the random category code selected for the student may be the same category. If this is the case, that student is not assigned the same scheduling category code twice.
Sort By	When the Process Type is Add One Category Randomly, this box is available. Select it to sort the students that will be processed either by Alpha Key or Other Id.
Scheduling Categories	All Scheduling Category Codes created for the Entity are available for selection by clicking Add. You must select at least one code and cannot select more than ten.

Table 13 – Mass Add/Delete Student Scheduling Categories screen options

Modify Individual Student Scheduling Categories

A Scheduling Category Code can be assigned or modified for an individual student on the Entity Info tab of Student Demographics (WS\ST\PR). The NY Categories box appears if the Use Scheduling Categories check box in Entity Year Setup (WS\OF\FS\PS\CF\SE\Entity Year Options) is selected.

CAUTION Be sure to make the student Scheduling Category additions or modifications in the NY Categories box and not the CY Categories box.
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PART TWO: MANAGING STUDENT REQUESTS

Part Two of this Guide shows you how to enter Course Requests for students. Entering requests requires the following processes:

- Create Availability Lists
- Enter Requests
- Use Reports to Analyze Student Requests

This section explains each of these processes.

Step 1: Create an Availability List

An Availability List contains courses generated from the Course Master, by grade level. Students use the list to designate their course requests. If Family/Student Access is used for request entry, the Availability List must still be generated so that the courses available for request are listed online. However, the paper copy does not have to be printed and distributed.

Once course requests have been made on the Availability List, requests are entered manually, or students/guardians can use them as a guide to enter requests directly into Family/Student Access.

Creating an Availability List is a three-step process:

1. Add A Course Wish Group
2. Create a Course Availability List
3. Print a Course Availability List

Each of these steps is explained below.

Add a Course Wish Group

Before you can create an Availability List, you must create a code that identifies a group of courses that will be generated into an Availability List. It is generally only necessary to create one Course Wish Group because an Availability List can be built by Grad Yr/Grade Level. Therefore, you don't need to create a Course Wish Group for each separate Grad Yr/Grade Level.

To add a Course Wish Group:

1. Go to WS\OF\FS\RP\PS\CO\CW.
2. Click Add.
3. Enter a Wish Group Id of up to three alpha-numeric characters.

4. Enter descriptions in the Short and Long Description boxes.
5. Select the Use This Course Availability List in Family/Student Access check box if the students or guardians will enter requests in Family Access.
6. Click Save.

Create a Course Availability List

This process creates a list of available courses for each Graduation Year using the ranges for the selected Course Wish Group. When a Course Availability List is created, certain information for all active courses in the Course Master is stored. This information includes the Grade Ranges of the course, whether the course is required or is an elective, the Course Type, Category and Schedule Type.

This information must be accurate in the Course Master before you generate the Course Availability List. If, for example, a Grade Range says the Course is offered to grades 09-12 but it really should be available only for 12th grade students, the course prints on the Course Availability List for grades 9-12 instead of only 12th grade students.

Course Availability Lists can be appended or re-created. If this is done, the additional information is also stored.

When you create a Course Availability List, a unique request number is assigned to each course. This number can help with the entry of student requests but is not required. If a Course Availability List is appended and new courses are added, the next available request number is assigned. When the Course Availability List is printed, the course appears in the proper position according to the sort selection not necessarily according to the request number assigned to the course. In addition, the request number assigned to the course displays.

When an *existing* Course Availability List is appended, the process validates courses on the current Course Availability List and updates any courses that have been inactivated or put in a Dropped status in the Course Master. These courses are flagged as 'Dropped – CWL' (where CWL = Course Wish List) if any of the following criteria is met (and has occurred *after* the list was first created):

- The Status of the course has changed to Inactive.
- The Schedule Type of the course has changed to Dropped.
- The Grade Ranges of the course have changed and are no longer available to the Grad Year of the selected Course Availability List.

NOTE	You can show a course on the Course Availability List as Dropped – CWL without changing the Schedule Type on the Course Master to Dropped Course and appending the Availability List. To do this, after creating the Course Availability List using the procedure below, edit the Course Wish Group (WS\OF\FS\RP\PS\CO\CW) and click the plus sign next to the Course Wish Group. Then click the plus sign next to the group of courses for the Grad Year and click the Drop hyperlink. You can now reprint the Course Availability List and “Dropped – CWL” will print next to the selected course(s) for the selected Grad Year(s).
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To create a Course Availability List:

1. Go to WS\OF\FS\RP\PS\UT\CA.
2. Verify that the correct School Year is selected. The next school year should default as the selected value.
3. Select a Course Wish Group in the Course Wish Group box.
4. In the Process Type area, select Create to create a new Course Availability List. Select Append to modify an existing list. Figure 21 and Figure 22 after this procedure provide examples of reports using each of these options.

WARNING	Never re-create an existing Course Availability List if the list is already in use. If the Course Availability List has been created, printed and distributed and requests will be entered based on the unique request number assigned to each course, select Append if changes are made to the list. A change includes a course being added, dropped or deleted in the Course Master.
----------------	--

5. Select the Grad Yr/Grade Low and High range for which the Course Availability List will be processed. A “snapshot” of the Course Master is taken of this range of data and a separate Availability List is created for each Grad Yr/Grade. When the list is printed, it can be printed with different data and sorted differently by Grad Yr/Grade.
6. In the Course Selection box select Electives and Required or Electives Only. This value is based on the selection made for each course in the Course Master in the Elective/Required box.

RECOMMENDATION

Make the “snapshot” selection Electives and Required courses, especially if the Grad Yr/Grade range includes several years. If Electives and Required courses is selected, later when the list is printed one Grad Yr/Grade you can chose to print only Electives for one Grad Yr/Grade while the remaining Grad Yr/Grade lists can include both Electives and Required courses. However, if the “snapshot” only includes Electives, those are the only courses that can be printed for all Grad Yr/Grade selections.

7. Make selections in the Course Types, Lunches and Study Halls boxes.
8. Determine whether to include courses marked as Normal Scheduled Types, Manually Scheduled Types and Special Education Types.
9. Click Sort and make selections. Course Key is selected by default and cannot be removed. Selections in this area determine the order the courses are displayed on the availability list.
10. Click Save.
11. Click Run.

The Course Availability List is created.

lcalp02.p 00-2 04.10.06.00.00	NY Sched HS 400 (Instructor) Create Course Availability List	11/12/10	Page:1 3:32 PM
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<u>Process Summary</u>			
School Year: 2012			
Course Wish Group: All			
Process Type: create			
<u>Grad Year</u>	<u>Number Processed</u>	<u>Number Created</u>	<u>Number Updated</u>
2012	61	61	0
2013	61	61	0
2014	60	60	0
2015	60	60	0
2016	1	1	0
2017	1	1	0
2018	1	1	0
2019	1	1	0
2020	1	1	0
2021	1	1	0
2022	1	1	0
2023	1	1	0
2024	1	1	0
***** End of report *****			

Figure 21 – Create Course Availability List output with a Process Type of Create.

lcalp02.p 00-2 04.10.06.00.00	NY Sched HS 400 (Instructor) Create Course Availability List	11/12/10	Page:1 3:36 PM
----------------------------------	---	----------	-------------------

Process Summary

School Year: 2012
Course Wish Group: All
Process Type: append

<u>Grad Year</u>	<u>Number Processed</u>	<u>Number Created</u>	<u>Number Updated</u>
2012	2	0	2
2013	2	0	2
2014	2	0	2
2015	2	0	2

***** End of report *****

Figure 22 - Create Course Availability List output with a Process Type of Append.

Print a Course Availability List

After you've created or appended a Course Availability List, it can be viewed or printed and distributed as needed for students in one graduation year or a range of graduation years. Typically, students use the lists to designate the courses they want to take in the upcoming year. Staff members then manually enter their course requests. Students and guardians can also use the list to prepare to enter course requests in Family/Student Access.

When printing a Course Availability List, there are three options for defining the output:

Print using Student Ranges. This option prints an availability list for a range of students that is customized for each student. The header of the list includes the student's name, address, phone number, grade level, date of birth, gender, homeroom, advisor, graduation year, calendar and school. It is easier to enter requests when you know the student's identity and other information.

Print using Student Selection. This option allows you to print an availability list for specific students. This is also a customized list for each student, including the same header information as when printed by student ranges. This option is helpful when a student's availability list is lost or unusable and another copy is needed.

Print using Template. This option prints an availability list with no header information. Students must write their name and other information onto their copy of the list. The template is helpful when you need a list for a specific graduation year and aren't ready to print them for specific students.

To print a Course Availability List:

1. Go to WS\OF\FS\RP\RE\PC.
2. Click Add.
3. Select a Course Availability List output type of Print using Student Ranges, Print using Student Selection or Print using Template. If Print using Student Ranges is selected, click Ranges and make the appropriate range selections.
4. Verify the School Year selected. This should default to the school year being scheduled.
5. Confirm the Control Sets values. If only courses with specific Control Set values should print on the Availability List, for example Semester 1 only, click Control Sets, make selections, and click Save.
6. Select the Grad Y/Grade Low and High range that the availability list should be printed for.

NOTE	You can print an Availability List for a span of Grad Years if the Availability List will contain the same kinds of information.
-------------	--

7. Click the arrow to the right of the Group to Print For box. This is the Course Wish Group you created previously. Only groups for which you have generated a Course Availability List appear for selection.
8. Click the Report Format arrow and select Entire List or Updates Only. If Updates Only is selected, only courses added since the list was appended are included on the list.
9. Click the Course Selection arrow and select Electives Only or Electives and Required.

NOTE	Both options are available when printing the list, even if you chose the Electives Only option when you created the Course Availability List. A list that was generated with Electives Only will not include Required courses when you print it even if you select Electives and Required as your Course Selection option. To include required courses, on the printed Availability List you must've selected the Elective and Required option when you initially generated the Course Availability List.
-------------	---

Example:

9th graders can select only Elective courses, but 10th-12th graders can select both Elective and Required courses. The list can be printed once for 9th graders with the Course Selection option of Electives only. The list for 9th graders only prints courses marked as Electives. The list can be printed again for 10th through 12th graders with the Course Selection option of Electives and Required selected. The list printed for 10th, 11th and 12th graders prints all courses – those marked as Elective and Required. This eliminates the need to create two separate availability lists. One list can be created and then printed with the needed options (differently for each graduation year

10. The Sort Sequence box shows the default sort of Course Key and other selected Sort options when the list was created.
11. Use the arrow for the Number of Signature Lines to select how many blank signature lines to print on the list, from 0 to 2. If 1 or 2 is selected, that number of lines prints at the bottom of each page of the list with the word "signature" underneath a blank line for someone to sign, such as a parent or guardian.
12. If you selected Signature Lines in step 11, enter descriptions that will appear before the blank line. If one Signature Line was selected in the previous step, enter a description in Line 1. If two Signature Lines were selected in the previous step, enter a description in Line 1 and Line 2, such as "Parent" or "Counselor."
13. Click Sort By. This option is not available if Print using Template is selected. Sort By selections determine the order in which the list prints for the selected student(s). Make selections and click Save.

NOTE	If a Sort By selection is not made, the lists print in alphabetical order by student last name and first name.
-------------	--

14. Click Save and Print.

The Course Availability List is generated through the Print Queue. The list includes the course request number assigned when the list was created. This information displays in the column titled NBR. In addition, the list displays the course's credit value, the course description, the Terms that the course is offered, and whether the course is a Required (R) or Elective (E).

Up to three columns of course records can display on one page of the Course Availability List. If more room is needed, additional pages are generated. If signature lines were selected, they appear at the bottom of each page of the list.

Figure 23 shows a Course Availability List printed for a range of students, including Elective and Required courses and two signature lines.

1sonyb12.p 20-2
04.10.12.00.00

COURSE SELECTION LIST OF AVAILABLE COURSES - 2012
SORT SEQUENCE: COURSE KEY

12/17/10

Page:1
12:10 PM

ANSELREB000 ANSEL, REBECCA
2003 STRANGE STREET
STEVENS POINT WI 54481
PHONE #

GRD: 12 HMRM : CAL: 400 CALENDAR
DOB: 09/02/1993 ADVISOR: H HOOT SCL: HIGH SCHOOL 400
GDR: FEMALE GRAD YR: 2012

NBR	KEY	CREDIT	COURSE	DESC	TM(S)	R	NBR	KEY	CREDIT	COURSE	DESC	TM(S)	R
1	ADVPHO	0.500	ADV. PHOTOGRAPH	S2	E		48	PHY101	0.500	PSYCHOLOGY 101	S2	E	
2	AGRICU	0.250	AGRICULTURE	T1	E		49	PHYSCI	1.000	PHYSICAL SCIENC	Y	R	
3	ALGEB1	1.000	ALGEBRA 1	Y	E		50	PHYSIC	1.000	PHYSICS	Y	E	
4	ALGEB2	1.000	ALGEBRA 2	Y	E		51	PSY102	0.500	PSYCH 102	S1	E	
5	ALGEBR	0.500	PRE-ALGEBRA	S1	E		52	RETSTU	0.500	RETAIL STUDIES	S1	E	
6	AMGOV	1.000	AMERICAN GOVERN	Y	R		53	SHAKES	0.500	SHAKESPEARE	S2	E	
7	AMHIST	1.000	AMERICAN HIST	Y	R		54	SHOP1	0.250	SHOP CLASS 101	T3	E	
8	AMLIT	0.250	AMER. LIT.	T1	E		55	SOCIAL	0.500	SOCIAL STUDIES	S2	E	
9	ART 1	0.250	ART 1	T4	E		56	SOCIPR	0.500	SOCIAL PROBLEMS	S1	E	
10	ART 2	0.250	ART 2	T1	E		57	STATIS	1.000	STATS AND TRIG	Y	E	
11	BEHPSY	0.500	BEHAVIORAL PSYC	S1	E		58	TECHED	0.250	TECH EDUCATION	T3	E	
12	BIOLOG	1.000	BIOLOGY	Y	R		59	USGOVT	0.500	U.S. GOVERNMENT	S1	E	
13	BPHOTO	0.250	B. PHOTOGRAPHY	T2	E		60	USHIS	1.000	U.S. HISTORY	Y	E	
14	BPROG1	0.250	BASIC PROG 1	T3	E		61	WELDG	1.000	WELDING	Y	E	
16	BUSLAW	0.250	BUSINESS LAW	T3	E		62	WGHTTR	0.500	WEIGHT TRAINING	S1	E	
17	CALC 1	1.000	CALCULUS 1	Y	E		63	WORHI	0.500	WORLD HISTORY	S2	E	
18	CALC 2	1.000	CALCULUS 2 AP	Y	E								
19	CHEMIS	0.500	CHEMISTRY	S2	E								
20	COLENG	1.000	COLLEGE ENGLISH	Y	E								
21	COMP	0.250	BEG COMPUTERS	T1	E								
22	COMPR1	0.250	COMPUTER PRO 1	T3	E								
23	COMPR2	0.250	COMPUTER PRO 2	T4	E								
24	CONSEC	0.250	CONSUMER ECON	T12	E								
25	DRED	0.250	DRIVERS EDUC	T4	E								
26	ECON	0.250	ECONOMICS	T2	E								
27	ENGL12	1.000	ENGLISH 12	Y	R								
28	FMATH	1.000	FRESH. MATH	Y	R								
29	FMCOL	0.250	FAMILY LIVING	T4	E								
30	FORLAN	1.000	FOREIGN LANG.	Y	E								
31	FPE	1.000	PHY ED 9	Y	R								
32	FSCIEN	1.000	FRESH. SCIENCE	Y	R								
33	GBIOLO	1.000	GEN. BIOLOGY	Y	E								
34	GEOGR	0.500	GEOGRAPHY	S1	E								
35	GEOPOL	1.000	GEO-POLITICS	Y	R								
36	GOVERN	0.250	GOVERNMENT	T12	E								
37	HLTH 1	0.500	HEALTH 1	S1	R								
38	HLTH 2	0.250	HEALTH 2	T1	E								
39	IPAIN	0.500	INTER PAINTING	S1	E								
40	IPROG	0.250	INTRO TO PROGR	T2	E								
41	JOURNA	0.250	JOURNALISM	T4	E								
42	KEYBRD	1.000	KEYBOARDING	Y	E								
43	MARKET	0.500	MARKETING	S2	E								
44	MUS450	1.000	JAZZ BAND	Y	E								
45	PE10	1.000	PHY ED 10	Y	E								
46	PE11	1.000	PHY ED 11	Y	E								
47	PFINAN	1.000	FINANCE	Y	E								
TOTAL COURSE REQUESTS: 62													

COUNSELOR : _____
signature

PARENT/GUARDIAN: _____
signature

Figure 23 – Course Availability List printed using Student Ranges.

Step 2: Enter Requests

The next step in managing student requests is entering requests for courses that students want to take in the school year being scheduled. You must enter requests for students before you can run the Auto Scheduler to produce student schedules.

When entering requests, you must know how many requests per student are allowed. To determine this, you need to know how many credits constitute a full schedule for the time period being scheduled (typically a full school year). If a full schedule is six credits, then *only* a maximum of six credits should be entered per student. If more requests are entered, for example to serve as alternate requests for courses the student might not get scheduled into, it will cause unreliable data. For example, it will appear that more seats are needed than actually are required, and course and student conflicts will be inflated.

Course requests that are specifically selected as alternates are entered into the system later and should not be entered at this time during the scheduling process. For information on entering alternate requests, see “Process Alternate Requests” later in this step.

Add Student Course Requests

There are several ways to enter requests:

- Enter Requests using Request Entry Screen
- Enter Requests By Student
- Use Mass Utility to Add, Change or Delete Requests
- Use Family Access to Generate Student Requests
- Assign a Recommendation to an Individual Student and as a Request
- Mass Request Recommended Courses

This section discusses each of these methods.

Enter Requests Using the Request Entry Screen

The Request Entry Screen is the most efficient way to manually enter requests. You can select students from a range or select a specific student. You can apply course filters to the available courses for the student to narrow the selection or find a specific course. The courses available for selection are all active courses in the Course Master even if the grade ranges of the course do not match that of the selected students.

When courses are requested, their credit value is added to the student’s Total Credits Requested value. This value should not exceed what is considered to be a full schedule (based on credits).

To enter requests using the Request Entry screen:

1. Go to SM\OF\FS\RP\ES.
2. Click the arrow to the right of the Student box to select the desired student. You can also click Student to search for a student using Student Filters and Individual Student Lookup. To modify the list of students available for selection using either method, click Ranges and specify a range of students and click Save.

NOTE	You can use the forward and back arrows to navigate to the previous or next student according to the ranges.
-------------	--

3. In the Course Filters area, use the Course Key, Short Description and Long Description, Required/Elective, Subject and Grade fields to narrow the list of courses in the Available Courses table at the bottom of the screen.

Course request selections for students are made from the Available Courses table and must appear in the table to be selected. Click Search to apply the Course Filters. Click Clear to set the Course Filters back to the default values.

4. Click Defaults next to the Available Courses table to set preference and alert options as desired.
5. Make appropriate selections and click Save.

Display Class Control Set Selection Screen on Add allows students to enroll in a subset of a course if the Entity allows it. For example, if a student is allowed to enroll in Semester 1 of a year-long course, this option allows this selection to be made.

Alert When Adding a Course the Student Has Already Passed causes a message to appear when a course is being requested for a student who passed the course with this same Curriculum Master course key in a previous school year.

6. In the Available Courses table, select a course and click Request. The course is added to the Requested Courses table.

NOTES	If the Course title is red, the course has already been requested. You cannot request a course for a student more than once. If you try to request a Course with red text, a message says it has already been requested. If a course is selected and the grade ranges specified do not match the student's grade level (based on the year being scheduled), a message describes the mismatch between the course and student's grade level. Click Request to add the course or click Cancel.
--------------	---

7. To remove a requested course, highlight the course in the Requested Courses table and click Delete.
8. To print a list of the student's requested courses, click Print Requests.
9. Repeat steps 2, 3 and 5 to enter requests for other students.
10. Click Back when request entry is complete.

Using the Request Quick Entry method on the Request Entry Screen

While in the Request Entry Screen, you can use the Request Quick Entry screen to expedite the entry of requests. Requests are entered by their Course Key. The courses available for selection are all active courses in the Course Master, even if the grade ranges of the course do not match that of the selected student.

To enter requests using Quick Entry:

1. Click Request Quick Entry.
2. Enter the Course Key of the request to be entered, or click Course Key to choose from a list of available courses.

CAUTION If the grade level of the student does not fall within the grade ranges of the selected course, a message does not appear advising of the mismatch. The course request is automatically added without advising that the grade level and grade ranges do not match.

3. Click Add Course.
4. To remove a requested course, highlight the course in the Requested Courses table and click Remove Item.
5. Click Save. The requests that you added appear in the Requested Courses table.
6. Click Back when request entry is complete.

Enter Requests By Student

When you enter requests By Student (WS\OF\FS\RP\RQ) there are two options:

- Add Requests with an Availability List
- Add Requests By Course

The two options are explained below.

NOTE	There is a third option called Request Quick Entry. This option works exactly like the Quick Entry option in Request Entry Screen (WS\OF\FS\RP\ES) except that in Request Entry By Student (WS\OF\FS\RP\RQ) Quick Entry is limited to just the selected student.
-------------	--

Add Requests with an Availability List

You can use this option to enter course requests for students when an Availability List was generated for student selection of requests. This method of request entry lets you quickly enter the student's requests from the generated list of available courses that matches the student's graduation year.

To add requests with an Availability List:

1. Go to WS\OF\FS\RP\RQ.
2. Select a student and click the plus sign to the left of the last name of the student.
3. Click the plus sign next to Course Requests to view the current course requests for the selected student. Requests can be edited (Variable Credits entered) or deleted from this screen. In addition, the Total Credits Requested and Total Credits Scheduled values appear for the selected student.

NOTE	When you enter student requests without an availability list, this is the only area where you can delete requests.
-------------	--

4. Click Add With Availability List to add and/or drop requests.

NOTE	If a Course Wish Group does not appear, a Course Availability List was not created. A Course Wish Group must be added and a Course Availability List created for that group before they will appear on this screen. If a message says a list does not exist for the selected student's graduation year, click OK. Since Availability Lists are generated for graduation years, a list must exist for the graduation year of the selected student before courses can be selected
-------------	---

5. Select the desired Course Wish Group and click the plus sign next to Entity for the desired group. If the list of courses does not appear, click the plus sign next to Course Availability List. The list shows courses that were selected when the Course Availability list was created and that match the student's graduation year.

NOTES	The courses are listed with their associated course request number (in the Nbr column) to help select the correct course per the selections made by the student on the Course Availability List that was distributed. Each course on the Course Availability List is a hyperlink you can click to view more information about the course. If there are more than 75 courses listed, the additional courses appear on another page. Click the next page number or click Next Page to see the next 75 courses.
--------------	---

- Click Add to select a course. After you click Add, the selection is now titled Drop. Once you've added a course as a request, you can delete it by clicking Drop.

NOTES	After a course is added as a request, the course request number and course code display in red and an asterisk (*) appears next to the course request number. This means the course has been requested for the student. As you select course requests for a student, the information at the top of the screen is updated. This includes the Total Credits for the student for the selected requests.
--------------	--

- When the desired requests have been added, click Finish.

The selected course requests display for the student in the Course Requests area. Click the plus sign next to Course Requests to expand this area if they do not appear.

Add Requests By Course

This option allows you to enter requests without creating an Availability List. The courses available for selection are all active courses in the Course Master, even if the grade ranges of the course do not match that of the selected student.

To Add Requests By Course:

- Go to WS\OF\FS\RP\RQ.
- Select a student and click the plus sign to the left of the student's last name.
- Click the plus sign next to Course Requests to view the current Course Requests for the student. Requests can be edited (Variable Credits entered) or deleted from this screen. In addition, the Total Credits Requested and Total Credits Scheduled values appear for the selected student.
- Click Add By Course to add and/or drop requests. A list of all active courses in the Course Master displays regardless of their Schedule Type (Normal, Manual, Special Education or Dropped Course).

5. If a course is selected and the grade ranges specified do not match the student's grade level (based on the year being scheduled), a message describes the mismatch between the course and student's grade level. Click Request to add the course or click Cancel.
6. When all requests have been added, click Finish.

Notice that as course requests are selected for a student, the information at the top of the screen is updated. This includes the total credits for the student for the selected requests.

The selected course requests display for the student in the Course Requests area. If they do not appear, click the plus sign next to Course Requests to expand this area. You can use this area to delete course requests if necessary.

NOTE	You cannot request a course for a student more than once. If you select a course and click Request for a course displayed in red text, a message states that it has already been requested.
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Use the Mass Utility to Add, Change or Delete Requests

Often, a large group of students share common requests (such as core classes), especially in elementary and middle schools and in schools using block scheduling. To reduce the time it takes to enter student requests, use this utility to assign groups of students the same request(s). Once added, only unusual situations or elective requests need to be entered. In addition, you can use the utility to change or delete requests for a course, or to mass delete all requests.

An option in the utility called Exclusion allows you to exclude students who have specific course requests from being included when the utility is run. In other words, all of the students within the entered ranges are assigned the selected Course/Section except students who have the course selected within the Exclusion option.

Example:

All 10th grade students are to be given a request for Biology except students with a request for AP Biology or Introduction to Biology. Both AP Biology and Introduction to Biology are selected as exclusions. The students in the basic and advanced courses are typically manually scheduled in those courses or requests for those classes were entered earlier and for specific students.

To use the Mass Utility to add, change or delete requests:

1. Go to WS\OF\FS\RP\PS\UT\MA.
2. Click Add.
3. Verify that the school year selected is correct. The default is the school year being scheduled.
4. Select Individual or Range. Make selections on the Individual or Range screen as needed.

5. Click Save.
6. If the Range option is selected, click Exclusions and select courses. Requests for students in the ranges will not be added, changed or deleted if the student already has a request for a course selected as an exclusion.
7. Click Save.
8. Select Add Course/Class in the Process Type area of the screen. Make Course and/or Class (section) selections and click Save.
9. Click Save and Run. The utility is processed through the Print Queue. When it's complete, a list of students appears. If the list of students is correct, click Process. If the list of students is not correct, click Back and refine the student selections (Individual or Range). A message asks if you want to continue.
10. Click OK.

NOTE	If no matching student records are found, a message says there are no records to show. Click OK.
-------------	--

The results are processed through the Print Queue. A report shows the students and the Course and/or Class that was processed. The total Exclusions value (if selected) is listed (the number of students for which a request was *not* added). The last page of the report shows the total number of students processed and the total number of Student Class Records that were updated.

Use Family Access to Generate Student Requests

Students and guardians can use the Course Request application in Family Access to view and update their Course Requests for a current or future term or school year. Typically, the application is used by a school in a lab environment, allowing groups of students to enter their Course Requests simultaneously. The application also allows entry of Alternate Requests.

Before Course Requests can be entered in Family Access, a Course Wish Group (WS\OF\FS\RP\PS\CO\CW) must be added with the option Use This Course Availability List in Family/Student Access selected.

For information about generating passwords and configuring Family Access for Course Request entry, refer to the *WSIPC Guide to Family and Student Access for Administrators*. For information about entering requests in Family Access, refer to the *WSIPC Guide to Family and Student Access for Students and Guardians*.

Assign a Recommendation to an Individual Student and as a Request

A teacher (through Educator Access Plus) or other user (through Web Access) can assign a recommendation for a student based upon the student's current courses (referred to as Previous Year Courses). That recommendation must then be approved (based on the district's business practice) and assigned to the student as a request for the next school year. This can be done one

recommendation at a time for a student, or many recommendations can be added as requests at once.

To assign a Recommendation by Individual Student:

1. Go to WS\OF\FS\SS\BS.
2. Click the plus sign next to the last name of the student who will be assigned a recommendation.
3. Click Add Course Recommendation.
4. In Previous Year Course, enter the course for which you are making a recommendation.
5. In the Recommended Course box, enter the course you are recommending for the student. If the browse list is empty, Recommendations have not been assigned to the Previous Year course you selected.
6. Click Save. As you pair Previous Year Course(s) and Recommended Course(s), the pairs appear in the Course Recommendations browse.
7. Repeat steps 3 through 6 for all recommendations you are assigning for the student.

To assign a Recommendation as a Request:

1. Go to WS\OF\FS\SS\BS.
2. Click the plus sign next to the desired student's Last Name.
3. Click the plus sign next to Course Recommendations. Any existing recommendations appear.

NOTE	For this option to appear, the Use Course Recommendations option must be enabled in Entity Year Options (WS\OF\FS\PS\CF\SE).
-------------	--

4. Do one of the following:
 - To create a single request, click Request for the desired Course Recommendation.
 - To create request for all recommendations for the selected student, click Request All Recommended Courses.
5. If there are other individual Course Recommendations that you would like to create a single request for, click Request.

Mass Request Recommended Courses

This process creates requests for all recommended courses for selected individual students or a range of students. Recommended courses marked as dropped are not requested.

To mass-request recommended courses:

1. Go to WS\OF\FS\RP\PS\UT\RR.
2. Verify the School Year selected.
3. Select a processing method in the Process By box. Select individual students or a range of students.
4. Click Save and Process. A processing message states that the preview process is complete. If records are found to process, you are prompted to preview the data.
5. Click Preview Data to Process. A list of students to be processed appears.
6. To exclude a student from the process, select the student and click Remove From Update. When finished removing student records, click Back.
7. Click Run the Update. A message states that selecting OK will run the process and make the changes permanent and that the update process runs through the print queue.
8. Click OK. A report of all students and the requests created for them is generated.

Process Alternate Requests

Just as requests can be entered for a student, you can also enter alternate requests. Alternate requests are entered specifically as alternates and do not count towards the credit count of regular requests. If the Auto Scheduler can't schedule a student into a requested course, the requests entered as alternates can be used to schedule the student into other courses.

Alternate requests can be entered as any of the following:

- Course alternates in the Course Master
- Individual student requests in Request Entry By Student
- Individual student requests in Family/Student Access. Refer to the *WSIPC Guide to Family and Student Access for Administrators* for information about configuration. See the *WSIPC Guide to Family and Student Access for Students and Guardians* for information about entering alternate course requests.

When the Schedule Alternate Requests process is run, there are three ways alternates can be processed: Course Paired, Student Paired or Unpaired. When Course Alternates are entered in the Course Master, they are called Course Paired alternates.

When a request is entered for a student, it can be “paired” (matched) with a regular request already entered for the student. This is called a Student Paired request. This tells the Schedule Alternate Requests process that if a request could not be scheduled, to instead schedule the specified alternate request in its place. This process requires the entry of all alternate requests that a student might want to take for *each* regular request that was entered for the student. For example, a student enters a request for Aerobics, and the student wants to take Weight Training if Aerobics can’t be scheduled. First, an Alternate Request must be entered for Weight Training. Then, the Alternate Request must be “paired” with Aerobics. Several alternate requests can be entered for each regular request. When the requests are “paired,” each alternate request must also be ordered according to the student’s preference.

An alternate request can also be entered for a student and not be paired with a specific request. This is called an Unpaired request. When the Schedule Alternate Requests process runs, it swaps elective courses for an alternate request, trying to get a conflict free schedule. There is an option in this process that does not allow scheduled courses to be changed in the student’s schedule. See Unpaired in Table 46 for more information.

RECOMMENDATION	Alternate requests can be entered for a student and not paired, which saves entry time. After the Auto Scheduler is run for regular requests, a student’s conflicts can be resolved one of two ways. First, the student’s alternate requests can be used as a reference for a counselor to resolve the student’s conflicts manually (without using the Schedule Alternate Requests process). Second, the alternate requests can be scheduled automatically by the system using the Schedule Alternate Requests process, selecting the Unpaired processing option.
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To add alternate requests:

1. Go to WS\OF\FS\RP\RQ.
2. Select a student and click the plus sign to the left of the last name of the student.
3. Click Add Alternate Request. A list of all active courses in the Course Master appears regardless of their Schedule Type (such as Normal, Manual, Special Education or Dropped Course).
4. Select the check box next to each course you want to enter as an alternate request for the student.

NOTE	If a course is selected for which the grade ranges specified do not match the student’s grade level (based on the year being scheduled), a message explains the mismatch between the course and student’s grade level. Click Add Alternate to add the alternate request or click Cancel. If a course has already been selected as a request for the selected student, a message states that the course can’t be added as an alternate request.
-------------	--

5. When the alternate requests have been added, click **Save**. The selected alternate requests display for the student in the **Unpaired Alternates** area. If they do not appear, click the plus sign next to **Unpaired Alternates** to expand this area.
6. If more than one alternate request has been added for a student, the alternate requests should be prioritized in the order they should be scheduled. Click the blue arrows to move an alternate request up or down in the order column.

NOTE	To remove an alternate request for the selected student, highlight the course and click Delete .
-------------	---

To pair alternate requests:

1. Go to WS\OF\FS\RP\RQ.
2. Select a student and click the plus sign to the left of the last name of the student.
3. Click **Pair Alternates**.
4. Highlight the course in the **Requested Courses** table that you want to pair with one or more alternate requests. These are the existing requests.
5. Highlight the course in the **Alternate Courses** table you want to pair with the selected request.

NOTE	If the alternate request you want does not appear, click Add Alt to add it. Select the course(s) and click Save . To remove an alternate request, highlight the course and click Delete .
-------------	--

6. Next to the **Requested Courses** and **Assigned Alternates** table, click **Add Pair**.
7. Repeat steps 5 and 6 for any additional alternate course requests you want to pair with the selected request.

NOTE	To remove pairs, click Delete Pair next to the Requested Courses and Assigned Alternates list.
-------------	---

8. Repeat steps 4 through 7 to pair alternate requests with a different request.
9. Once the alternate requests are paired with the desired requests, click **Finish**.
10. The pairs display for the student in the **Paired Alternates** area. If they do not appear, click the plus sign next to **Paired Alternates** to expand this area.

NOTE	To remove a pair click Delete next to it.
-------------	--

Step 3: Use Reports to Analyze Student Requests

The following reports focus on information about requests that have been entered for students. They help determine such things as which requests a student has made and what the student needs to take to meet the school's requirements. Each report is described below.

All reports listed are available at WS\OF\FS\RP\RE with the exception of the Non-Occurrence Report, which is available at WS\OF\FS\RE.

Student Request Report

The Student Request Report generates a list of students and their scheduled and requested courses. You can report on All Students, Only Students with Requests, Only Students without Requests or Only Students with Dropped Courses. You can also use the Credit Ranges on the report template to generate the report for students who have less than, more than or an exact number of credits.

Use this report to determine which students have too many requests or not enough requests to constitute a full schedule. Having the correct number of credit requests for every student helps you build a better Schedule Master.

Once you've determined which students have too many or too few requests, work with specific students to modify their requests. You can also use this report to print any Alternate Course Requests.

Run this report several times. Save a different template for each version of the report. At a minimum, run this report to identify the following students:

- *Students with no requests entered.* To find these students, select Only Students without Requests in the Report Option area.
- *Students with too many requests or with too few requests to constitute a full schedule.* To find these students, select Only Students with Requests in the Report Option area. In the Credit Ranges area, configure your screen to match Figure 24 where the value in the credits boxes (red box) is the same and equal to the number of credits that constitutes a full schedule.

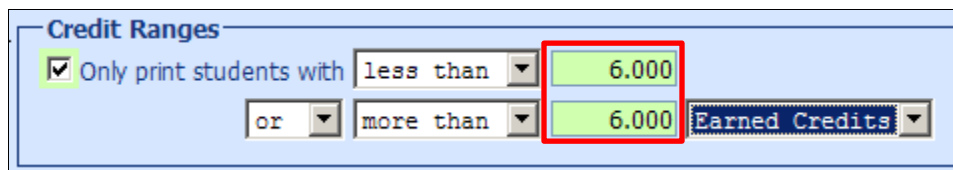


Figure 24 – Configuration for Credit Ranges area on Student Request Report screen

- *Students with requests for courses that have a Schedule Type equal to Dropped Course.* To find these students, select Only Students with Dropped Courses in the Report Option area.

Course Requests in Course Sequence Report

The Course Requests in Course Sequence Reports generates a list of students who are scheduled into, or who have a request for, the individual or range of courses you select on the report template. There is an option to print student names on the report template. If you do not choose this option, only the course totals by grade level and gender appear on the report. This report is not a section-by-section breakdown or a class list. Students on the report with an asterisk next to their names are scheduled into a section of the course.

Students with Specific Combination of Courses Report

The Student With Specific Combination of Courses Report generates a list of students who are scheduled into, or who have a request for, the courses you identify on the report template. Use this report to find students who are taking a specific combination of courses, or who aren't but should be (such as a Physics course and a Physics Lab course).

Non-Occurrence Report

The Non-Occurrence Report generates a list of students who have not taken, have failed, or have dropped a specific course or courses. The report checks for specific courses in a student's course history and in their current and future schedules.

Pre-Requisite Verification Report

The Prerequisite Verification Report generates a list of students who have requested courses, or are taking courses, for which there is a prerequisite. If a student requests a course (of any length) that has a prerequisite, the report verifies whether the student has taken the prerequisite course in the following areas: student's history from previous years, student's current year schedule, and student's requests for next year.

This report can be generated for only courses with prerequisites met, only courses with prerequisites not met, or both conditions. If prerequisites have been met, the report shows the prerequisite course's name and the year it was taken.

Student Alternate Request Report

The Student Alternate Request Report generates a list of students and their Alternate Requests. When used with the Free Period Report, this report helps place students into an Alternate Request Course for any period they have open.

Repeated Courses Report

The Repeated Courses Report generates a list of all students within the Student Ranges and Course Ranges on the report template who have taken the same course more than once during the selected school year. The report contains a summary of the students with repeated courses or, if you choose the Print Option of Detail, the report includes the course information. For this report to run effectively, the Curriculum Master must be properly implemented within the district and Entity. For information about Curriculum Master, see the *Curriculum Master Overview V4* document. Currently, this document is available only to Data Center Coordinators.

Four Report Options on the template specify which courses are included in the report generation. Each option is described in the table below.

Option	Description
Include Courses Repeatable For Credit	Includes courses that can be repeated for credit (for example, Band and Choir). The course must have the Repeatable For Credit check box selected in the Course Master area to qualify under this option.
Exclude 0.0 Credit Courses	Excludes courses from the Course Master with zero earned credit.
Print Only Repeats of Courses Currently Taken	Includes only courses the student is taking (or requesting) more than once.
Print Only when Student Credits Exceed Course Credits	Includes only courses where the student has earned (or will earn) more credits than the course is worth. This occurs when a student repeats a course and earns credit both times. Because the student earns credit both times, the student gets more credit for this course than it is actually worth (twice the amount). You must run a GPA Calculation before you select this option for this report.

Table 14 – Report options on the Repeated Course Report template

Registration Confirmation Report

The Registration Confirmation Report generates a list of unscheduled course requests and/or scheduled classes, including credit and fee information. This report can be used to verify student schedules.

Course Alternate Request Report

The Course Alternate Request Report lists the number of alternate requests per course. The number of alternate requests appears in the Requests column on the report. In addition, totals information shows how many alternate requests there are per Grade Level, detailed by female and male, and an overall total count appears as well. Also, for each course an Assigned count of all students currently scheduled into the course and an Available seat count for the course are provided.

PART THREE: BUILDING THE SCHEDULE MASTER

When you build a Schedule Master, you are constructing your Entity's Course Master. Using the student requests you've gathered and scheduling restrictions such as teacher and room availability, you add, edit and delete sections and meets to successfully schedule your students.

You can build a Schedule Master using three different methods:

- Interactive Scheduling Board
- Master Schedule Builder
- Advanced Master Schedule Builder

NOTE	The Advanced Master Schedule Builder (AMSB) builds the Schedule Master but is not discussed in this Guide because it is very complex and requires a significant amount of setup. To learn more about AMSB, refer to the AMSB training document. This document is currently available only to Data Center Coordinators.
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The Schedule Master is built on student requests. The goal is to design a Schedule Master that results in the fewest scheduling conflicts. Before you build the Schedule Master, ensure that each student has enough requests (credits) for a full schedule.

Building the Schedule Master requires eight steps. The first six steps help you prepare to Build the Schedule Master:

1. Calculate the number of sections needed.
2. Create sections.
3. Estimate the number of students in each section.
4. Prepare Meeting Patterns for placement in the Schedule Master.
5. Determine potential conflicts in the Schedule Master.
6. Learn to use the Interactive Scheduling Board and the Master Schedule Builder.

In the last two steps, you actually create the Schedule Master:

7. Schedule Single-Section Courses.
8. Schedule Multiple-Section Courses.

This section explains each of these steps.

Terms You Should Know

Before you perform the processes below, it will help if you know the following terms that classify courses based on how they are identified in the scheduling process.

Term	Definition
Singleton	Single-section course. A student has only one opportunity to be scheduled into a singleton. It is important that these courses are placed in the Schedule Master first. This minimizes conflicts between two singletons for which students have requests, and minimizes conflicts between two singletons and multiple-section courses later in the scheduling process.
Doubleton	Course with two sections. Because these courses are offered only twice, they are the second most difficult to schedule. For example, an Art course is offered twice a year and a PE course is offered five times a year. A student has five chances to be scheduled into PE and only two chances to be scheduled into Art. This makes placement of the Art course in the Schedule Master more important than the placement of the PE course.
Tripletion	Course with three sections.
Other courses	Courses with more than three sections are typically placed in the Schedule Master at the same time. When more than three sections of a course are available, it is not as difficult to find a section that fits the student's schedule.

Step 1: Calculate the Number of Sections Needed

You must calculate the number of sections needed for each course before you can use the Master Schedule Builder or Interactive Scheduling Board to create the Schedule Master.

CAUTION	The tools you'll use to build the Master Schedule use the Estimated Number of Sections value to calculate the Estimated Number of Conflicts. Therefore, regardless of the tool you use, you must complete "Step 1: Calculate the Number of Sections Needed."
----------------	--

Estimate the Number of Sections Needed

To estimate the number of sections you need, you run the Update Estimated Number of Sections utility. This utility determines the ideal number of sections for each course based on the number of requests for that course and updates the Estimated Number of Sections box on each course. This process must be run if you are using the Master Schedule Builder or the Interactive Scheduling Board.

To update the Estimated Number of Sections needed:

1. Go to WS\OF\FS\BC\PS\UT\UE.
2. Configure the Update Estimated Number of Sections screen (Figure 25). See Table 15 for details about options on this screen.
3. Click OK.

Figure 25 – Update Estimated Number of Sections screen

Option	Description
School Year	School year of the Course Master that the utility will run on. The next school year defaults as the selected value.
Course Key	Range of courses in the Course Master that the utility will process. Enter a range if you wish the utility to run on certain courses only. Leave the range open (blank to ZZZZZZZ) so the utility runs for all courses, including Inactive Courses.
Prompt Courses	Opens the Update Estimated Number of Sections Course Information screen where you validate and accept the calculated values of the utility. If you selected this option, see “Update the Estimated Number of Sections Course Information Screen” below this table for information on what to do.
Use Existing Average Section Size	Determines whether the Optimum Students and Maximum Students values for each existing section are used. If there are no sections for a course, the default values are used instead. If this option is not selected, the default values are those that appear in the Optimal Number of Students and Maximum Number of Students boxes.

Option	Description
Optimal Number of Students	Number of students that should optimally be scheduled into a section. This value is only used by the utility if a section of a course does not have a value entered in the Optimum Students box or if the Use Existing Average Section Size check box for the utility is not selected.
Maximum Number of Students	Maximum number of students that should be scheduled into a section. This value is only used by the utility if a section of a course does not have a value entered in the Maximum Students box or if the Use Existing Average Section Size check box for the utility is not selected.

Table 15 – Description of options on the Processing Options screen

Update Estimated Number of Sections Course Information Screen

If you selected the Prompt Courses check box when configuring the Update Estimated Number of Sections screen, the Update Estimated Number of Sections Course Information screen appears (Figure 26).

Update Estimated Number of Sections Course Information for 2011-12 - Skyward Default															Filter Options
Course Key	Course Description	Len	Sts	Subject	E/R	Type	Dept	Grades	Req	Max Stu	Opt Nbr Sec	Stu Per Sec	Min Nbr Sec	Stu Per Sec	Back
ACS200	11TH CULM PROJ	SM		GENERAL ELECTI	E	REGULAR	GENERAL	11-12	0	20	1	0.0	1	0.0	
ACS202	11TH CULMINATI	SM		GENERAL ELECTI	E	REGULAR	GENERAL	11-12	2	29	1	2.0	1	2.0	
ACS220	12TH CULM PROJ	SM		GENERAL ELECTI	E	REGULAR	GENERAL	12-12	2	20	1	2.0	1	2.0	
ACT100	ACCOUNTING	SM		OCCUPATIONAL I	E	VOCATIONAL	VOCATIONAL	10-12	34	58	2	17.0	2	17.0	
ACT102	ACCOUNTING	SM		OCCUPATIONAL I	E	VOCATIONAL	VOCATIONAL	10-12	34	61	2	17.0	2	17.0	

Figure 26 – Update Estimated Number of Sections Course Information screen

For the Estimated Number of Section value in the Course Master to be updated to agree with the Optimum Number of Sections value on the Update Estimated Number of Sections Course Information screen, the Optimum Number of Sections value must be changed or reviewed.

Changing the Calculation

If you do not agree with the calculation, change the value and click Back.

Reviewing the Calculation

Even if you're not changing the Optimum Number of Sections calculation, you must confirm that you have reviewed it.

To review the calculation:

1. Place your cursor in the Optimum Number of Sections box for a course.
2. Click Tab on your keyboard to move to the same box for the next course.

Once the Optimum Number of Sections field for a course has been tabbed through, it is considered reviewed. Fields that have been updated or reviewed turn green.

3. Click Back.

CAUTION	A message states how many courses you have successfully updated. Any remaining courses are not updated. If you re-run the utility any previous updates you made to Estimated Sections do not appear. Instead the calculated value appears. The only values that will be updated are values that you update.
----------------	---

Understanding Section Calculations

Understanding how the system determines the number of sections needed based on requests may be valuable. Using the values in Figure 25, the following example demonstrates how the Optimum Number of Sections, Minimum Number of Sections and Students Per Section values are calculated:

- To calculate the value in the Optimum Number of Sections box (which could be called the “Realistic Estimated # of Sections”), two separate calculations are used (an *Optimal* Number of Sections calculation and a Minimum Number of Sections calculation) and then averaged. The Optimal Number of Sections is an internal calculation. This value is not displayed. The Minimum Number of Students value is displayed if you selected the Prompt Courses option when running the utility.
 - The first calculation, Optimal # of Sections, is found by dividing the number of Requests for the Course (335) by the Optimal Number of Students per Section (24). This equals 13.9 sections.

NOTE	The Optimal Number of Students per Section is calculated by averaging the Optimum Students values for all sections of the course.
-------------	---

- The second calculation, Minimum Number of Sections, is found by dividing the number of Requests for the Course (335) by the Maximum Number of Students per Section (30). This equals 11.1, which means a minimum of 12 sections are needed to accommodate all requests. This value is displayed as the Minimum Number of Sections if you select the Prompt Per Course check box when you run the utility.

NOTE	The Maximum Number of Students per Section is calculated by averaging the Maximum Students values for all sections of the course.
-------------	---

The figures from the two calculations above are added and divided by two to find an average ($13.9 + 11.1 = 25 / 2 = 12.5$ sections). The resulting number (12.5 sections) is rounded to 13 sections and is the Optimum # of Sections value for the course. This value is displayed as the Optimum Number of Sections if you select the Prompt Per Course check box when you run the utility.

- The Students Per Section value (for the Optimum Number of Sections value) is found by dividing the number of Requests for the course (335) by the Optimum Number of Sections value (13). This equals 25.8 students per section.

- The Students Per Section value (for the Minimum Number of Sections value) is found by dividing the number of Requests for the course (335) by the Minimum Number of Sections value (12). This equals 27.9 students per section.

Compare the Estimated Number of Sections and Actual Number of Sections Values

Before you use the Master Schedule Builder or the Interactive Scheduling Board, you must verify that the value in the Estimated Number of Sections box and in the Actual Number of Sections box are the same for each course.

To verify this, use the Course/Class Count Report. This report is typically used in Current Year Scheduling to justify additional teacher FTE in an Entity. In Future Year Scheduling, it is used to compare the Estimated Number of Sections and Actual Number of section values for each course. Therefore, it is only necessary to select specific options when running the report. You can use this report to determine where you need to add or inactivate sections.

NOTE

The value in the Estimated Number of Sections box in the Course record is based on the Optimum Number of Sections value, which is automatically calculated. You can manually overwrite this with a different value when you run the Update Number of Sections utility.

The Actual Number of Sections box in the Course record cannot be edited. It shows the number of active sections. You can change this value only by adding additional active sections to the course or by inactivating or deleting sections.

To compare the Estimated Number of Section and Actual Number of Section values:

1. Go to WS\OF\FS\BC\RE\CC.
2. Configure the Add Course/Class Count Report screen (Figure 27). See Table 16 for details about options on this screen.
3. Click Save and Print.

4. Use the report output and other restrictions (such as staffing restrictions that prevent you from offering a certain number of sections) to determine how many sections the school will offer for each course.

The Estimated Number of Sections value is represented in the EST SEC report column.

The Actual Number of Sections value from the course does not appear on the report. Instead, you must count the number of sections for the course to obtain this value. Therefore, select Active in the Course Status and Class Status boxes.

5. Use the decisions you've made based on the report output to update the Estimated Number of Sections box in the Course Master and the Actual Number of Sections as appropriate in the Course Master until both are the same.

The following tips will help you as you update the Course Master.

- If you decide that the value in the Actual Number of Sections box is the number of sections that will be offered, you only need to manually change the value in the Estimated Number of Sections box to match the existing value in the Actual Number of Sections box.
- If you decide that the calculated value in the Estimated Number of Sections box is the number of sections that will be offered, add or delete/inactive sections of the Course to match the value in the Estimated Number of Sections box. See "Step 2: Create Sections" to learn how to auto-generate sections that need to be added.
- If you decide on a value other than the ones in either the Estimated Number of Sections box or Actual Number of Sections box, change the value in the Estimated Number of Sections box and add and/or inactivate/delete sections in the Course. See "Step 2: Create Sections" to learn how to auto-generate sections that need to be added.

Figure 27 – Course/Class Count Report screen

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Option	Description
Include Partial Grade Overlappings	Determines the courses included on the report based on Grade Level values on the course. If this check box is not selected and you run the report for a shorter range of Grade Levels that are in the Course Master, courses outside this Grade Level range are not included. For example, if you define a range of 09-09, courses that have a Grade Level of 09-12 are not included on the report.
Sort	Specifies whether the report is sorted by department, subject or teacher.
Report Options	Determines the data included in the report. The report is being used to compare Estimated and Actual Number of Section values for the next school. Therefore, select the Print Section Counts and Include Requests in Course Counts options.
Student Status	Determines which students are selected when calculating the Totals counts (Total, Female and Male), based on their Next Year Status. The Number of Requests total is based on all requests, whether the student's Next Year Status is Active or Inactive.
Course Status	Determines which courses are included on the report based on the status of the course. Select Active.
Class Status	Determines which courses are included on the report based on the status of the section (active or inactive). Select Active.
Totals Groups	Creates reporting groups by race, special education and/or economic status (economic status is determined by Lunch Codes).

Table 16 – Description of options on the Course/Class Count Report screen

Interpreting the results of the Course/Class Count Report

While this report can serve many purposes, you are using it to ensure that the Estimated Number of Sections and Actual Number of Sections values are equal for each course. Because the report contains many pieces of data, refer to Figure 28 and Table 17 to see the pieces of information that will help you decide to either add more sections for a course or change the value in the Estimated Number of Sections box.

lsonyr01.p 33-2				WSIPC High School					
04.10.12.00.00				Course/Class Count Report					
COURSE	DESCRIPTION	LGTH	EST SEC	NBR AVL	NBR REQ	----TOTALS----			
						TOT	FEM	MAL	
AMT120	9TH MATH	SM	1	20	0	0	0	0	
01	Ryan H. Smithscr			S1	01	0	0	0	
AMT122	9TH MATH	SM	1	20	0	0	0	0	
01	Ryan H. Smithscr			S2	01	0	0	0	
AMT220	10TH MATH	SM	1	49	10	9	3	6	
01	Ryan H. Smithscr			S1	02	1	0	1	
S1				S1		0	0	0	
AMT222	10TH MATH	SM	1	20	10	9	3	6	
01	Ryan H. Smithscr			S2	02	0	0	0	
AMT320	11TH MATH	SM	1	40	7	7	5	2	
01	Ryan H. Smithscr			S1	05	0	0	0	
02	Ryan H. Smithscr			S1	03	0	0	0	
AMT322	11TH MATH	SM	1	29	7	7	5	2	
01	Ryan H. Smithscr			S2	05	0	0	0	
AMT420	12TH MATH	SM	1	20	8	8	3	5	
01	Ryan H. Smithscr			S1	04	0	0	0	
AMT422	12TH MATH	SM	1	20	8	8	3	5	
01	Ryan H. Smithscr			S2	04	0	0	0	

D

E

F

G

H

I

Figure 28 – Course/Class Count Report sample used to determine the value for Estimated Number of Sections per Course and the number of actual sections that exist per course.

Letter	Description
A	A blank value in this field means that a teacher isn't assigned to the meeting pattern.
B	Estimated Number of Sections. The value in the column represents the value for the course from the Course Master. The Est Sec value for AMT320 is 1.
C	The number of lines per course represents the number of sections that exist for the course. Select only active sections when running the report so the number of sections that print equals the number in the Actual Number of Sections box on the course record. There are two actual sections for AMT320.
D	Total number of scheduled and unscheduled requests. There are 10 requests for AMT220.

Letter	Description
E	Total number of unscheduled requests when the total is on the same line as a course. There are nine unscheduled requests for AMT220.
F	Total number of scheduled requests when the total is on the same line as a section. There is 1 scheduled request for AMT220, Section 01.
G	A difference between the value in the NBR REQ column (box D - 10 in this example) and the total of the values in the TOT column for the course and sections (boxes E and F - nine in this example) indicates that there are requests for the course from students who have a NY Status of Inactive.
H	Maximum Seats Available value on the course.
I	Display Period from the Meet Pattern. In the example above, the Display Period is 04. There is no column label for this information.

Table 17 – Descriptions of the identifiers in Figure 28

Step 2: Create Sections

If you determine that additional sections for courses are needed, you can automatically generate them by running the Auto-Generate Section and Class Meets utility.

To determine whether sections are needed, the Auto-Generate Section and Class Meets utility does one of the following based on your parameter selections:

- Uses the value in Estimated Number of Sections
- Divides the number of Current Requests by the optimum number of students per section

When you run this utility, Section Default values on the course are used to create sections. To minimize the number of updates you'll have to make on section information, make sure the Section Defaults on courses are complete.

NOTE	This utility does not delete any extra sections and Meeting Patterns. Unneeded sections must be deleted or inactivated manually.
-------------	--

To create sections:

1. Go to WS\OF\FS\BC\PS\UT\AG.
2. Configure the Auto Generate Section and Class Meet Records screen (Figure 29). See Table 18 below for details about options on this screen.
3. Click Run.

A report is generated that shows the number of section records created and the number of class meet records created.

Auto Generate Section and Class Meet Records		Run
This utility will create missing Class Section and/or Class Meet records.		Back
The program determines if classes are needed by using the Estimated Number of Sections or by dividing the number of requests by the optimum number of students per section. If the program determines that new sections are required, section values will default to the values entered in the "Class Defaults" from the Course Maintenance screen. To reduce the amount of changes necessary after running this utility, make sure that as much detailed Class and Class Meet default information as possible has been filled in. Note: No records will be deleted by this utility. Any extra records will need to be deleted manually.		
Courses Ranges		
Entity:	401 WSIPC High School	
School Year:	2011-12	
Control Sets	S1 - S2 - YR	
Course Key:		to: ZZZZZZZZ
Utility Options		
☒ Create Class Sections		
☐ Calculate 'Estimated Number of Sections'		
☐ Create Class Meeting Patterns		

Figure 29 – Auto-Generate Sections and Class Meets screen

Option	Description
Course Key	Specifies the range of courses the utility includes in the process.
Create Class Sections	Specifies whether sections can be created by the utility.
Calculate “Estimated Number of Sections”	Uses the Estimated Number of Sections value to determine whether sections are created. If this check box is not selected, the utility uses current requests and optimum number of students per section to determine whether sections are created.
Create Class Meeting Patterns	Specifies whether meets will be created for any existing sections that lack them and for any new sections created by the utility.

Table 18 – Description of options on the Auto-Generate Section and Class Meets utility screen

Step 3: Estimate the Number of Students in Each Section

Before creating the Schedule Master, the system must know how many students would be scheduled into each section based on student requests. The system can calculate this if you run the Update Estimated Class Counts by Grade utility. The information is viewable in the Interactive Master Builder and Interactive Scheduling Board.

The estimate assumes a perfect scheduling run, which means all students would get into every one of their requested courses. The estimate is calculated by taking the number of requests for a course and separating the students into all available sections, leveling by gender, grade level, and by how full the section might be.

Example:

A two-section course with equal class maximums is requested by 20 juniors and 30 seniors. This process estimates that a total of 25 students, $\frac{1}{2}$ of the juniors (10) and $\frac{1}{2}$ of the seniors (15), will be scheduled into each section.

This process only needs to be re-run if course requests or sections are added or removed since the last time it was run.

To estimate the number of students in each section:

1. Go to WS\OF\FS\BM\PS\UT\CB.
2. Verify the School Year. It defaults to the next school year.
3. Click Run. A message states that the utility has finished.
4. Click OK.

Step 4: Prepare Meeting Patterns for Placement in the Schedule Master

You may need to delete or reset some data in meeting pattern records before they can be placed in the Schedule Master. This is called *initializing*. Meeting patterns clone over with data from the current school year's Course Master. Initialize them if you use the Master Schedule Builder or Interactive Scheduling Board to create the Schedule Master. If you don't initialize them, the system can't suggest the best possible placement for each course.

Data in the meeting pattern that can be initialized includes the following:

- Scheduling Period
- Lunch Code
- Teacher
- Building/Room Number

You can select one or more options for initializing. If an option is selected, the following initialized values are used:

- Scheduling Period = 0
- Lunch Code = None
- Teacher = None
- Building = Choice (as defined in the Section default, as defined in the Entity Year default, or None)
- Room = None

Initializing the Scheduling Period to 0 (zero) allows the Master Schedule Builder / Scheduling Board logic to suggest the best period in which to place a course. The Display Periods and Attendance Periods on the Meeting Pattern are not initialized with a zero period. Instead, the current value (the period the course is being offered in the current year) is maintained until a period assignment is made through one of Master Schedule Builder processes (Non-Interactive, Interactive or Advanced) or through the Interactive Scheduling Board process. The data in the Meeting Pattern is initialized using the Initialize Class Meet Details utility.

This is a very important step in the scheduling process—especially initializing the Scheduling Period so that the system can suggest the best placement in the master schedule for each section. Because each master schedule is constructed from student requests, if you don’t allow the system to determine the best placement of courses based on those requests the likelihood of conflicts is higher.

CAUTION Before running this utility, save a copy of the Course Master using the Create a Schedule Master Save Point utility (WS\OF\FS\BC\PS\UT\SP). This allows you to use the Restore Schedule Master to Previous Save Point utility (WS\OF\FS\BC\PS\UT\PS) to restore the Course Master to its original state.

For classes that *must* be offered a specific period, you must enter data manually after the Scheduling Period has been initialized to zero. These are often referred to by scheduling personnel as “must have” courses. Make these manual updates in the Course Master after running the Initialize Class Meet Details utility. The more periods you assign manually, the more potential conflicts will have.

To prepare Meeting Patterns for placement in the Master Schedule:

1. Go to WS\OF\FS\BM\PS\UT\IC.
2. Configure the Initialize Class Meet Details screen (Figure 30). See Table 16 below for details about options on the screen.
3. Click Run.
4. When the utility is done, a message states that the utility has finished processing. Click OK.

To update a meeting pattern with a “must have” period:

1. Go to WS\OF\FS\SM.
2. Find a course and section that must be offered a specific period.
3. Click the plus sign next to the Course Code for that section.
4. Click the plus sign next to Meet Details.
5. Click Edit for the Meet Pattern for which the period needs to be entered.
6. Enter data in the Display Period, Scheduling Period and Attendance Period boxes.

Repeat this procedure for all course sections with Meeting Patterns that must be offered during a specific period.

Initialize Class Meet Details

This process will initialize the Class-Meet record details, depending on the selected options. The initial values are as follows:

Scheduling Period = 0
Lunch Code = None
Teacher = None
Building = Section default, Entity Year default, or None
Room = None

Entity: 401 WSIPC High School

School Year: 2011-12

Courses and Class Ranges

Course Key: to: ZZZZZZZ

☐ Process Study Hall, Lunch, and Transfer Classes

☐ Only Initialize Classes Built by the Master Builder

Terms To Process: All=All Year Schedule Terms=01-02

Available Options

☒ Initialize Scheduling Period

☐ Initialize Lunch Code

☐ Initialize Teacher

☐ Initialize Building/Room Number

Run

Back

Figure 30 – Initialize Class Meet Details screen

Option	Description
School Year	School Year of the Course Master that the utility includes in the process.
Course Key	Range of courses the utility includes in the process.
Process Study Hall, Lunch and Transfer Classes	Determines whether courses in the Course Master that are identified with a Category of Study Hall, Lunch or Transfer, are processed by the utility.

Option	Description
Only Initialize Classes Built by the Master Builder	Determines whether courses that have been placed through the Master Schedule Builder or Interactive Scheduling Board are processed by the utility. This is used after the Master Schedule Builder or Interactive Scheduling Board suggested periods for some classes. It deletes the suggested periods so you can start over without resetting any periods you set up manually.
Terms To Process	Determines which courses are included on the report by the terms the courses are offered. Typically, this selection is All=All Year.
Initialize Scheduling Period	Changes the existing Scheduling Period to 00 on the Meeting Pattern. This tells the system that the Meeting Pattern has not been placed in the Master Schedule and needs to be placed. The Scheduling and Display Period values are not set to 00. Instead, they are left at last year's values.
Initialize Lunch Code	Changes the Lunch Code box to None on the Meeting Pattern.
Initialize Teacher	Changes the Teacher box to None on the Meeting Pattern.
Initialize Building/Room Number	Changes the Building box to the section default (if one exists), Entity Year default (if one exists) or None, and changes the Room Number box on the Meeting Pattern to None.

Table 19 – Description of options on the Initialize Class Meet Details screen

Step 5: Determine Potential Conflicts in the Schedule Master

Before the Schedule Master can be created, the system must know what conflicts would exist if sections were placed in the same Period of the Schedule Master. The Conflict Matrix is the primary tool used to find these possible conflicts. This utility looks at each combination of two courses and the number of students who have requested both courses.

Example:

The following students have requested AP Calculus and Chemistry:

AP Calculus

Susan Anderson *
Joseph Axelron
Mary Ballman
John Dodson *
Shannon Hall *

Chemistry

Robert Aders
Susan Anderson *
Richard Azinger
John Dodson *
Shannon Hall *

The three students with asterisks (*) after their names have requested both courses. On a conflict matrix, AP Calculus and Chemistry have a “cross-reference” conflict of 3. This means that if each of these courses has only one section *and* these sections are assigned to the same period, three conflicts will occur. If more sections are available for each course, the likelihood of true conflicts decreases.

There are two types of conflicts: *actual conflicts* and *estimated conflicts*. Actual conflicts occur if students request two courses with one section each, offered the same period. Estimated conflicts occur if there are additional sections of each course and the system estimates the conflicts.

When suggesting periods for classes, the Master Schedule Builder and the Interactive Scheduling Board use the information that is generated by the Conflict Matrix. This is why you must run this utility.

The Conflict Matrix utility creates a data file containing information about the cross-reference conflict (that is, for each pair of courses in the course file it looks at how many students have requested both courses). While you can view the Conflict Matrix, there is typically no reason to do so. You can view the details of the conflicts (student names) between courses within the Interactive Master Schedule Builder and Interactive Scheduling Board. You can also view and print the details of the Conflict Matrix (WS\OF\FS\BM\RE\PC).

NOTE	Re-run the Conflict Matrix after adding or removing a Section/Meeting Pattern in the Course Master or if you make changes to student requests. If this option is not re-run after changes are made, the Master Schedule Builder and Interactive Scheduling Board will use inaccurate information.
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To determine potential conflicts in the Schedule Master:

1. Go to WS\OF\FS\BM\PS\UT\CC.
2. Verify that the correct School Year is selected. It defaults to the next school year.
3. Click Run.

Step 6: Learn to Use the Interactive Scheduling Board and the Master Schedule Builder

To create the Schedule Master, you decide which period of the day a course will be offered, who will teach the course, and possibly in what room or building it will be offered. The goal is to design a Schedule Master that creates the fewest number of scheduling conflicts.

Two methods for creating the Schedule Master are discussed in this Guide:

- Interactive Scheduling Board
- Master Schedule Builder (Interactive and Automated modes)

This section explains both of these methods.

NOTE	The Advanced Master Schedule Builder (AMSB) can also be used to build the Schedule Master but is not discussed in this Guide because this process requires significant setup and understanding. To learn more about this process, refer to the AMSB training document. This document is currently available only to Data Center Coordinators.
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Scheduling Using the Interactive Scheduling Board

If you've scheduled by hand before, you've probably created a master schedule by placing a large grid on the wall or floor containing all courses and periods. The Interactive Scheduling Board is an electronic version of this labor-intensive manual method that lets you analyze courses and move "chips" with your mouse. Information about conflicts, teacher and room status and student counts are readily available. Each "chip" on the scheduling board represents a unique Meeting Pattern in the Course Master.

The Interactive Scheduling Board uses the same analysis techniques and offers the same information as the Master Schedule Builder, but it allows you to view the entire Schedule Master at a glance rather than one section at a time.

This section of the Guide shows you how to use the Interactive Scheduling Board. It is divided into two sub-sections:

- Configuring the Ranges screen
- Customizing the Interactive Scheduling Board

Configuring the Ranges Screen

The Ranges screen determines which courses are available for placement on the Scheduling Board. This screen must be configured the first time you use the Interactive Scheduling Board. You can save your Ranges screen parameters so that you don't have to configure them each time you access the board.

To configure the Ranges screen:

1. Go to WS\OF\FS\BM\SB.
2. Configure the Ranges screen (Figure 31). See Table 20 for a description of options on this screen.
3. Click OK.

After you click OK, the Interactive Scheduling Board screen appears and you can begin creating the Schedule Master. To learn how, see “Using the Scheduling Board to place Sections.”

Interactive Scheduling Board Screen Options:
☒ Use Paging when Displaying Scheduling Board Items

OK
 Reset
 Back

Class Range and Selection Options:

Low	High
* Course Key/Section:	ZZZZZZ ZZZ
* Grad Yr/Grade: 2012 12	2024 K2
* Subject:	ZZZ
* Type:	ZZZ
* Department:	ZZZ
* Estimated # of Sections: 0	999

☒ Include All Scheduling Teams

Course Status:
☒ Active
☐ Inactive
☐ Both

Elective/Required:
☐ Elective
☐ Required
☒ Both

Scheduling Type:
☒ Include All Scheduling Types
☒ Normal
☒ Manually Scheduled
☒ Special Education
☒ Dropped Course

Class Status:
☒ Active
☐ Inactive
☐ Both

Staff Range and Selection Options:

Low	High
* Name Key:	ZZZZZZZZZZ

☒ Include Staff Not Flagged as Teachers
☒ Show Staff Unavailability

Asterisk (*) denotes a required field

Figure 31 – Ranges screen

Option	Description
Use Paging when Displaying Scheduling Board Items	Determines whether all sections will display on one page so that the page can load faster. This check box cannot be cleared when using Internet Explorer. To clear this check box, you must use another browser such as Firefox.
Course Key/Section	Selects the specific course codes and sections that will be available on the Interactive Scheduling Board.
Grad Yr/Grade	Specifies the courses and sections available for display or selection based on the Grade Ranges value on the course in the Course Master.
Subject	Specifies the courses and sections for display or selection based on the Subject value on the course in the Course Master.
Type	Specifies the courses and sections available based on the Type (such as Regular, Skill Center, Vocational) value on the course in the Course Master.
Department	Specifies the courses and sections available for display or selection based on the Department value on the course in the Course Master.
Estimated # of Sections	Specifies the courses and sections available for display or selection based on the Estimated Nbr of Sections value on the course in the Course Master.
Include All Scheduling Teams/Teams	Selects course sections available for display or selection based on the Scheduling Team assigned on the section in the Course Master. When Include All Scheduling Teams is selected, all sections of the course are selected even if a Scheduling Team is not assigned. When Include All Scheduling Teams is not selected and the Teams box is clicked, only those sections with a matching Team Scheduling assignment appear.
Course Status	Specifies the courses available for display or selection based on the Course Status value on the course in the Course Master.
Elective/Required	Specifies the courses and sections available for display or selection based on the Elective/Required value on the course in the Course Master.

Option	Description
Scheduling Type	Specifies the courses and sections available for display or selection based on the Scheduling Type value on the course in the Course Master.
Class Status	Specifies the sections available for display or selection based on the Class Status value on the section in the Course Master.
Name Key	Selects the specific staff that will be available for display or selection on the Interactive Scheduling Board to assign to a chip (Meeting Pattern).
Include Staff Not Flagged as Teachers	Determines whether staff will be displayed if they are not flagged as a teacher on their staff record. If you haven't assigned staff to the meeting patterns, consider selecting this option so that chips are displayed on the scheduling board.
Show Staff Unavailability	Determines whether a chip is displayed on the board in one or more periods of the day for a staff based on the Do Not Schedule Time Entry box on the staff record. See "Part One, Step 4: Create do Not Schedule Time Entry Record(s)" for more information about the Do Not Schedule Time Entry option.

Table 20 – Description of options on the Interactive Scheduling Board Range screen

Customizing the Interactive Scheduling Board

The Scheduling Board contains the following options that allow you to customize how the board looks and the how the data appears:

- Toolbar options
- Navigation options
- Staff Unavailability Chip options
- Period Headings options

With these options, you can customize the color of the chips and determine what the color represents, sort data by courses, teachers or rooms, and display windows of information that help you make decisions.

This section explains each of these options.

Toolbar Options

The toolbar at the top of the Scheduling Board has five menus that allow you to change the appearance of the screen and analyze and schedule sections:



Figure 32 – Interactive Scheduling Board Toolbar menu

Each menu on the toolbar is discussed below.

Options Menu

The first Toolbar menu is Options (Figure 33). The options in this menu allow you to customize chip colors, go back to the Ranges screen and change the values you set initially, and save customized parameters. Table 21 describes each option in the Options menu.

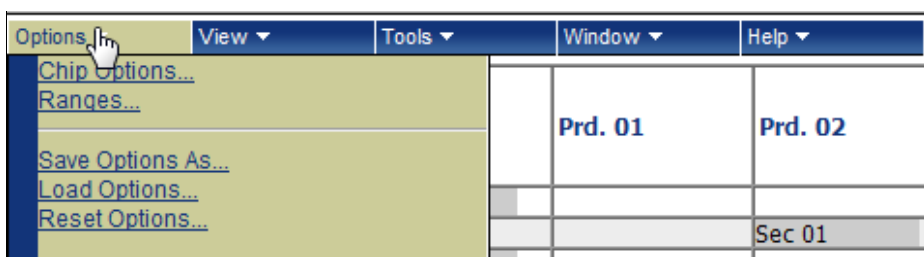


Figure 33 - Options menu

Option	Description
Chip Options	Defines the color of the chips, either by the courses Estimated Section value (estimated number of sections), Control Set length (Semester 1, Semester 2, Year, etc.), or the Scheduling Team assigned to a section. You can also define the color of Staff Unavailability chips. See “Part One, Step 4: Create Do Not Schedule Time Entry Records” for more information.
Ranges	Displays the Ranges screen that you see upon first entering the Scheduling Board. See Table 20 for more information.
Save Options As	Allows you to save selections on the Ranges screen for use when entering the Scheduling Board in the future. You are asked to create a name for the ranges. One set of ranges is marked as the default parameters, which will load when you open the Scheduling Board. You can load different saved ranges using Load Options. After saving a set of ranges, a new item appears in the Options toolbar called Save Options to [name of saved ranges]. This allows you to quickly save any changes to your ranges.

Option	Description
Load Options	Allows you to select a set of saved ranges other than the default set of saved ranges, to load to the Scheduling Board and work with. This could be helpful to load colors for different purposes (one set of colors for Control Sets and another set for Estimated Number of Sections), but both are based on the same chip placement.
Reset Options	Resets all screen options to the default values.

Table 21 – Interactive Scheduling Board Toolbar Options

Figure 34 shows what the Interactive Scheduling Board can look like when the chips are customized to specific colors. In this example, the chip colors are based on Control Sets, where Yellow = Semester 1 and Green = Semester 2.

Options ▾				View ▾				Tools ▾				Window ▾				Help ▾																											
Sort		Top		Refresh						Sort		Top		Refresh																													
First	Prev	Next	Last	Prd. 00				Prd. 01				Prd. 02				Prd. 03				Prd. 04				Prd. 05				Prd. 06				First	Prev	Next	Last	Prd. 07							
Search:																																Search:											
ACS200				Sec 01												Sec 01																ACS200											
ACS202																																ACS202											
ACS220				Sec 01																												ACS220											
ACT100				Sec 11				*				Sec 12																				ACT100											
ACT102				Sec 01								Sec 02																				ACT102											
ADM200				Sec 06				*																								ADM200											
ADM202				Sec 06				*																								ADM202											
AEN100				Sec S1				*																								AEN100											
AEN102				Sec S1				*																								AEN102											
AEN200				Sec S1				*																								AEN200											
AEN202																								Sec 01								AEN202											
AEN300																												Sec 01								AEN300							
AEN302				Sec 01																												AEN302											
AEN400				Sec 01																												AEN400											
AEN402				Sec 01																												AEN402											
AFA100				Sec 01																												AFA100											
AFA202				Sec 01																												AFA202											
AFA400				Sec 01																												AFA400											
AFA402				Sec 01																												AFA402											
AID100				Sec S1																												AID100											
AIL100				Sec 03				*																								AIL100											
AIL102				Sec 03				*																								AIL102											
AMT120				Sec 01																												AMT120											
AMT122				Sec 01																												AMT122											
AMT220				Sec S1												Sec 01																AMT220											
AMT222																												Sec 01								AMT222							
AMT320				Sec 01								Sec 02																				AMT320											
AMT322				Sec 01																												AMT322											
Sort		Top		Refresh		Prd. 00				Prd. 01				Prd. 02				Prd. 03				Prd. 04				Prd. 05				Prd. 06				Sort		Top		Refresh		Prd. 07			
First	Prev	Next	Last																													First	Prev	Next	Last								
Search:																																				Search:							

Figure 34 – Interactive Scheduling Board with specific colors identified in Chip Options

View Menu

The options in the View menu (Figure 35) allow you to customize how the data on the Scheduling Board is displayed. You determine whether the data is displayed by courses, by teachers, or by rooms. In addition, you can determine whether that data (by courses, by teachers, or by rooms) is displayed by year, semester or term. Table 22 describes each option in the View menu.

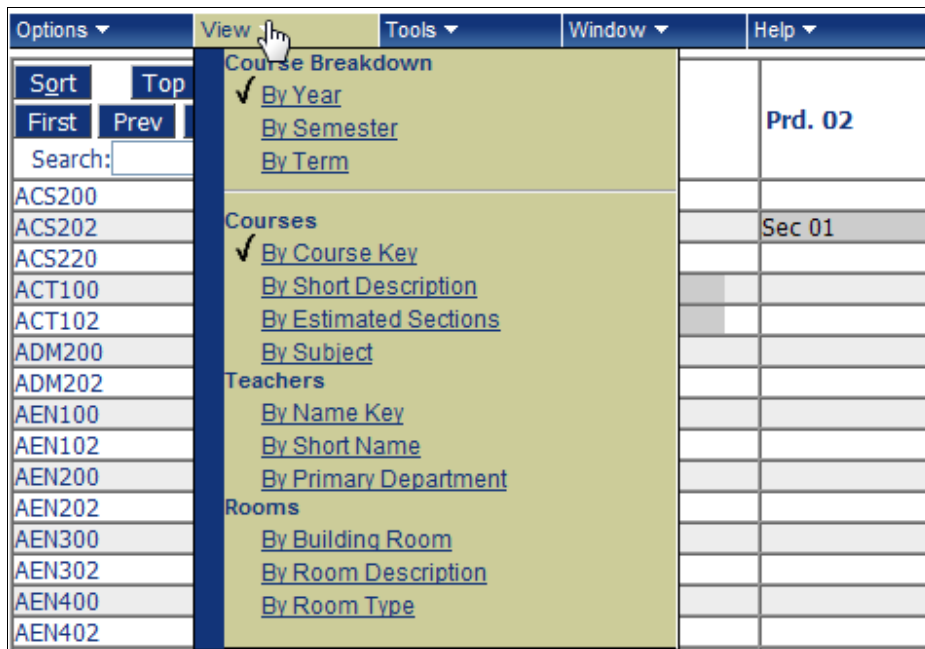


Figure 35 – View menu

Option	Description
[Course/Teacher/Room] Breakdown	The wording of this option depends on the selection made in the lower portion of the menu. For example, if a Teacher selection has been made, the option reads as Teacher Breakdown. The options By Year, By Semester, and By Term determine how many rows of data are available for the Teacher/Course/Room. For example: if the view is By Teacher and a teacher has courses assigned Period 01 in both Semester 01 and Semester 02, the By Semester view would show only Semester 01 classes in the Semester 01 row of the teacher's name and only Semester 02 classes in the Semester 02 row.
Courses	Displays courses vertically in the left-hand column. Chips can be moved (within the course's row only) to the desired period.
Teachers	Displays teachers vertically in the left-hand column. Chips can be moved to the desired teacher and period, but will not appear on the board unless they are currently assigned to a teacher. For information about this, see Placing Sections using the Interactive Scheduling Board. If By Primary Departments is selected, Primary Departments must be assigned to a staff for this option to display appropriately. See "Part One, Step 4: Add Department to Staff Record." If the Scheduling Configuration Option (WS\OF\FS\PS\CF\SC) Assign Default Building/Room from Teacher's Staff Entity Record has been enabled, when chips are moved from one teacher to another on the board, you are prompted to assign the teacher's building and room defaults to the meeting pattern for the chip. For this functionality to work, building and room defaults must be assigned in Staff Profile (WS\SF\SF\Entity).
Rooms	Displays rooms vertically in the left-hand column. Chips can be moved to a room and period but do not appear on the board unless they are assigned to a period and/or room. For information about this, see Placing Sections using the Interactive Scheduling Board.

Table 22 – Description of options on the View menu

Figure 36 is an example of what the Interactive Scheduling Board can look like when the View is customized By Semester. The difference between this view and that in Figure 34 (customized By Year) is that Yellow chips (Semester 1) and Green chips (Semester 2) are on different rows for each course. There is one row per Semester, so there are two rows per course because this Entity has two Semesters defined in their Scheduling setup. To see how the chips are now divided per Semester, look at course ACT100 in Figure 36 below. The sections for Semester 1 (Yellow chips) appear on a separate row than the sections for Semester 2 (Green chips).

Options ▾				View ▾		Tools ▾		Window ▾		Help ▾	
Sort		Top		Refresh							
First	Prev	Next	Last								
Search:				Prd. 00	Prd. 01	Prd. 02	Prd. 03	Prd. 04	Prd. 05	Prd. 06	Prd. 07
ACS200 (Semester 1)										ACS200 (Semester 1)	
ACS200 (Semester 2)				Sec 01						ACS200 (Semester 2)	
ACS202 (Semester 1)										ACS202 (Semester 1)	
ACS202 (Semester 2)						Sec 01				ACS202 (Semester 2)	
ACS220 (Semester 1)				Sec 01						ACS220 (Semester 1)	
ACS220 (Semester 2)										ACS220 (Semester 2)	
ACT100 (Semester 1)				Sec 09	*					ACT100 (Semester 1)	
ACT100 (Semester 2)										ACT100 (Semester 2)	
ACT102 (Semester 1)										ACT102 (Semester 1)	
ACT102 (Semester 2)				Sec 01	*					ACT102 (Semester 2)	
ADM200 (Semester 1)				Sec 03	*					ADM200 (Semester 1)	
ADM200 (Semester 2)										ADM200 (Semester 2)	
ADM202 (Semester 1)										ADM202 (Semester 1)	
ADM202 (Semester 2)				Sec 05	*					ADM202 (Semester 2)	
AEN100 (Semester 1)				Sec 01	*					AEN100 (Semester 1)	
AEN100 (Semester 2)										AEN100 (Semester 2)	
AEN102 (Semester 1)										AEN102 (Semester 1)	
AEN102 (Semester 2)				Sec 01	*					AEN102 (Semester 2)	
AEN200 (Semester 1)				Sec 02	*					AEN200 (Semester 1)	
AEN200 (Semester 2)										AEN200 (Semester 2)	
AEN202 (Semester 1)										AEN202 (Semester 1)	
AEN202 (Semester 2)								Sec 01		AEN202 (Semester 2)	
AEN300 (Semester 1)										AEN300 (Semester 1)	
AEN300 (Semester 2)									Sec 01	AEN300 (Semester 2)	
AEN302 (Semester 1)										AEN302 (Semester 1)	
AEN302 (Semester 2)				Sec 01						AEN302 (Semester 2)	
AEN400 (Semester 1)				Sec 01						AEN400 (Semester 1)	
AEN400 (Semester 2)										AEN400 (Semester 2)	
Sort		Top		Refresh							
First	Prev	Next	Last								
Search:				Prd. 00	Prd. 01	Prd. 02	Prd. 03	Prd. 04	Prd. 05	Prd. 06	Prd. 07
ACS200 (Semester 1)										ACS200 (Semester 1)	
ACS200 (Semester 2)				Sec 01						ACS200 (Semester 2)	
ACS202 (Semester 1)										ACS202 (Semester 1)	
ACS202 (Semester 2)						Sec 01				ACS202 (Semester 2)	
ACS220 (Semester 1)				Sec 01						ACS220 (Semester 1)	
ACS220 (Semester 2)										ACS220 (Semester 2)	
ACT100 (Semester 1)				Sec 09	*					ACT100 (Semester 1)	
ACT100 (Semester 2)										ACT100 (Semester 2)	
ACT102 (Semester 1)										ACT102 (Semester 1)	
ACT102 (Semester 2)				Sec 01	*					ACT102 (Semester 2)	
ADM200 (Semester 1)				Sec 03	*					ADM200 (Semester 1)	
ADM200 (Semester 2)										ADM200 (Semester 2)	
ADM202 (Semester 1)										ADM202 (Semester 1)	
ADM202 (Semester 2)				Sec 05	*					ADM202 (Semester 2)	
AEN100 (Semester 1)				Sec 01	*					AEN100 (Semester 1)	
AEN100 (Semester 2)										AEN100 (Semester 2)	
AEN102 (Semester 1)										AEN102 (Semester 1)	
AEN102 (Semester 2)				Sec 01	*					AEN102 (Semester 2)	
AEN200 (Semester 1)				Sec 02	*					AEN200 (Semester 1)	
AEN200 (Semester 2)										AEN200 (Semester 2)	
AEN202 (Semester 1)										AEN202 (Semester 1)	
AEN202 (Semester 2)								Sec 01		AEN202 (Semester 2)	
AEN300 (Semester 1)										AEN300 (Semester 1)	
AEN300 (Semester 2)									Sec 01	AEN300 (Semester 2)	
AEN302 (Semester 1)										AEN302 (Semester 1)	
AEN302 (Semester 2)				Sec 01						AEN302 (Semester 2)	
AEN400 (Semester 1)				Sec 01						AEN400 (Semester 1)	
AEN400 (Semester 2)										AEN400 (Semester 2)	
Sort		Top		Refresh							
First	Prev	Next	Last								
Search:				Prd. 00	Prd. 01	Prd. 02	Prd. 03	Prd. 04	Prd. 05	Prd. 06	Prd. 07
ACS200 (Semester 1)										ACS200 (Semester 1)	
ACS200 (Semester 2)				Sec 01						ACS200 (Semester 2)	
ACS202 (Semester 1)										ACS202 (Semester 1)	
ACS202 (Semester 2)						Sec 01				ACS202 (Semester 2)	
ACS220 (Semester 1)				Sec 01						ACS220 (Semester 1)	
ACS220 (Semester 2)										ACS220 (Semester 2)	
ACT100 (Semester 1)				Sec 09	*					ACT100 (Semester 1)	
ACT100 (Semester 2)										ACT100 (Semester 2)	
ACT102 (Semester 1)										ACT102 (Semester 1)	
ACT102 (Semester 2)				Sec 01	*					ACT102 (Semester 2)	
ADM200 (Semester 1)				Sec 03	*					ADM200 (Semester 1)	
ADM200 (Semester 2)										ADM200 (Semester 2)	
ADM202 (Semester 1)										ADM202 (Semester 1)	
ADM202 (Semester 2)				Sec 05	*					ADM202 (Semester 2)	
AEN100 (Semester 1)				Sec 01	*					AEN100 (Semester 1)	
AEN100 (Semester 2)										AEN100 (Semester 2)	
AEN102 (Semester 1)										AEN102 (Semester 1)	
AEN102 (Semester 2)				Sec 01	*					AEN102 (Semester 2)	
AEN200 (Semester 1)				Sec 02	*					AEN200 (Semester 1)	
AEN200 (Semester 2)										AEN200 (Semester 2)	
AEN202 (Semester 1)										AEN202 (Semester 1)	
AEN202 (Semester 2)								Sec 01		AEN202 (Semester 2)	
AEN300 (Semester 1)										AEN300 (Semester 1)	
AEN300 (Semester 2)									Sec 01	AEN300 (Semester 2)	
AEN302 (Semester 1)										AEN302 (Semester 1)	
AEN302 (Semester 2)				Sec 01						AEN302 (Semester 2)	
AEN400 (Semester 1)				Sec 01						AEN400 (Semester 1)	
AEN400 (Semester 2)										AEN400 (Semester 2)	

Figure 36 - Interactive Scheduling Board with the View set to By Semester

When the Scheduling Board is customized to view By Primary Department (Figure 37), you can view the teachers who have been assigned to the same Primary Department grouped together. In Figure 37, the first three teachers listed have been assigned to the same Primary Department (ENG).

Options ▾	View ▾	Tools ▾	Window ▾	Help ▾																	
Sort	Top	Refresh																			
First	Prev	Next	Last							Prd. 00	Prd. 01	Prd. 02	Prd. 03	Prd. 04	Prd. 05	Prd. 06	Sort	Top	Refresh		
Search:																Search:					
ENG - AGenovesi																ENG - AGenovesi					
ENG - APicketscr																ENG - APicketscr					
ENG - BBrickells																ENG - BBrickells					
- Abdulascr																- Abdulascr					
- AWieslerscr																- AWieslerscr					
- BDompescr																- BDompescr					
- BGerlandsc																- BGerlandsc					
- BHavenhill																- BHavenhill					
- AManternmac																- AManternmac					
- AMccclnesc																- AMccclnesc					
- AMenonscr																- AMenonscr					
- BPignatell																- BPignatell					
- BSchnarrsc																- BSchnarrsc					
- BSteinkamp																- BSteinkamp					
- Candelscr																- Candelscr					
- CBoninescr																- CBoninescr					
- CDockhamsc																- CDockhamsc					
- CDonnelson																- CDonnelson					
- CFveashsc																- CFveashsc					
- CGauldensc																- CGauldensc					
- Okupkascr																- Okupkascr					
- CPillettes																- CPillettes					
- CSobolewsk																- CSobolewsk					
- CStenstrom																- CStenstrom					
- CTrabuccos																- CTrabuccos					
- DCulloscr																- DCulloscr					
- DDrorowscr																- DDrorowscr					
- DFlatness																- DFlatness					
Sort	Top	Refresh																			
First	Prev	Next	Last							Prd. 00	Prd. 01	Prd. 02	Prd. 03	Prd. 04	Prd. 05	Prd. 06	Sort	Top	Refresh		
Search:																Search:					
AEN300																					
SST800																					
SST800																					

Figure 37 – Interactive Scheduling Board with the View set to By Primary Department

Tools Menu

The next Toolbar menu is Tools (Figure 38). The options in this menu allow you to view the Conflict Matrix and export the data in the Scheduling Board to Excel. Table 23 describes options in the Tools menu.

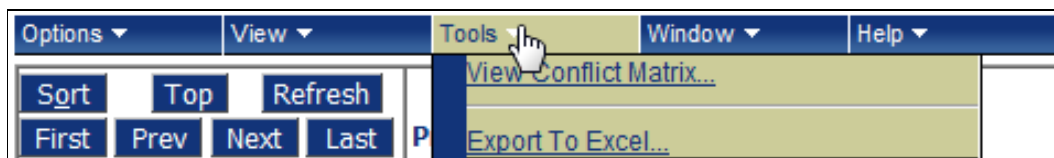


Figure 38 – Tools menu

Options	Description
View Conflict Matrix	Displays the Conflict Matrix you generated in “Step 5: Determine Potential Conflicts in the Schedule Master.”
Export to Excel	Allows you to export specific fields and periods in the Scheduling Board to an Excel document. This can be done for specific terms, semesters or the entire year. You can determine whether only the first chip in each cell is printed or whether all chips in the cell are printed.

Table 23 – Description of options on the Tools menu

Figure 39 and Figure 40 show the options available to export data from the Scheduling Board to Excel. Once you have made the selections on these screens, you can export the results to Excel. Figure 41 shows an example of data from the Scheduling Board exported to Excel based on the previous selections.

A screenshot of the 'Scheduling Board Export Maintenance' screen. It features a 'Fields to Print' section with a list of fields: '1. Course Key/Section', '2. Course Description', '3. Teacher(short)', '4. Period - Building - Room', '5. Terms - Days', and '6. Total Section Enrollment'. Each field has a checkbox and a 'Print Label' button. To the right, there are settings for 'Start Period' (01), 'Stop Period' (06), 'Print For' (Entire Year), 'Teacher Display' (As on Scheduling Board), 'Print' (All Classes in Cell), and a checkbox for 'Show Period Times in Heading'. At the bottom right, there are 'Export' and 'Back' buttons.

Figure 39 – Export to Excel screen selections

Sort Order		
Sort Fields		
Move	Field	Select
	Course Key/Section	☒
	Course Description	☒
	Teacher(short)	☒
	Period - Building - Room	☒
	Terms - Days	☒
	Total Section Enrollment	☒
	Teacher(full)	☐
	Class Period Times	☐

OK

Back

Unselect All

Figure 40 – Export to Excel Fields to Print option

	A	B	C	D	E	F	G
1		Period 01	Period 02	Period 03	Period 04	Period 05	Period 06
2	ENG - AGenovesis						
3	ENG - APicketscr						
4	ENG - BBrickells - Abdullascr			Do Not Sched. Term: 01 - 01 Days: MTWRF ----- Do Not Sched. Term: 02 - 02 Days: MTWRF ----- SST800/02 AMERICAN GOVT Abdullascr 03 - 401 - 01 - 01 - MTWRF 0			
5							
6	- AWieslersc						
7	- BDompescr						
8	- BGerlandsc						
9	- BHavenhill						
10	- AManternac						
11	- AMcclinesc						
12	- AMenonscr						
13	- BPignatell - BSchnarrsc						AEN300/01 11TH ENGLISH BSchnarrsc 06 - 401 - EXTE 01 - 01 - TWRF 0
14							
15	- BSteinkamp - CAndelscr				SST800/04 AMERICAN GOVT CAndelscr 04 - - 01 - 01 - MTWRF 0		
16							

Figure 41 – Scheduling Board data exported to Excel based on options selected in Figure 39 and Figure 40.

Windows Menu

The next Toolbar menu is Windows (Figure 42). The options in this menu allow you to customize the Scheduling Board with multiple windows to help you place course sections and make decisions about their placement in the Schedule Master. Table 24 describes options on the Windows menu.

Multiple windows can be viewed simultaneously on the scheduling board to view information on a course. Typically, this requires that you increase the resolution of your monitor.

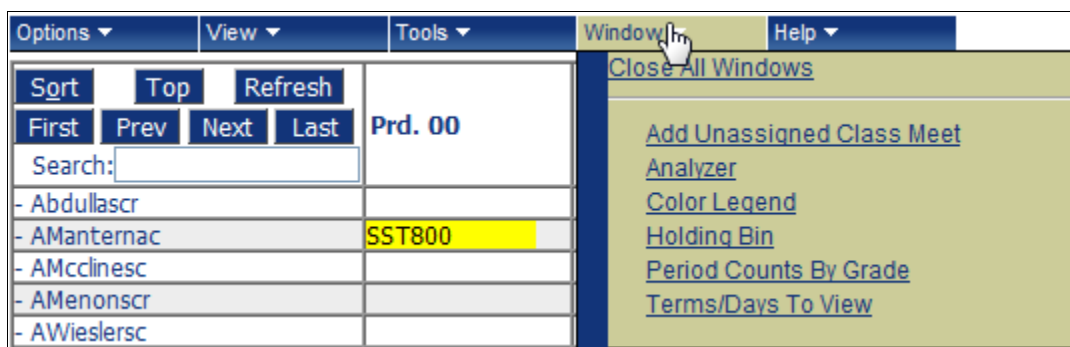


Figure 42 – Windows menu

Option	Description
Close all Windows	Closes all active windows. This does not close the scheduling board itself—it returns you to a view where only the scheduling board is open.
Add Unassigned Class Meet	For more information on this option, see “Placing Sections using the Interactive Scheduling Board.”
Analyzer	For more information on this option, see “Placing Sections using the Interactive Scheduling Board.”
Color Legend	Opens a window to display the chip color settings selected in the Chip Options screen (Figure 43).
Holding Bin	For more information on this option, see “Placing Sections using the Interactive Scheduling Board.”
Period Counts by Grade	Displays the estimated number of students that will be scheduled by period (Figure 44). Totals are provided by gender and total students, by grad year/grade for each period. The totals are calculated by running the Update Estimated Class Counts Grade utility. Refresh can be selected after a chip is moved to a different period to see the effect on the counts.
Terms/Days to View	Opens a window that controls the terms and weekdays of chips that are displayed (Figure 45). This allows easy viewing of Day 1 vs. Day 2 (or M-W-F vs. T-R) and Semester 1 vs. Semester 2. The calculations in the Period Counts By Grade window reflect the view that you select (for example, if you select Semester 1 in the Term/Days to View, then only Semester 1 counts are included in Period Counts by Grade calculations).

Table 24 - Options on the Windows menu

Control Sets

Length	Term	Description
SM	S1	Semester 1
SM	S2	Semester 2
YR	YR	YEAR

Staff Unavailability: -N/AV-

Figure 43 – Color Legend Window showing the colors selected (in this example the view is by Control Set)

mode = Period

Estimated Counts By Grade						Refresh	Back
Period ▲	Grad Year	Grade	Females	Males	Total Students		
01	2012	12	4	4	8		
01	2013	11	0	0	0		
01	2014	10	48	52	100		
01	2015	09	32	30	62		
01 [TOTAL]	9999	All	84	86	170		
02	2012	12	1	1	2		
02	2013	11	1	1	2		
02	2014	10	12	13	25		
02	2015	09	32	30	62		
02 [TOTAL]	9999	All	46	45	91		

33 records displayed

*** Note: These Totals reflect values Calculated by Running the Scheduling Board 'Update Estimated Counts' Utility.**

Figure 44 – Period Counts By Grade window

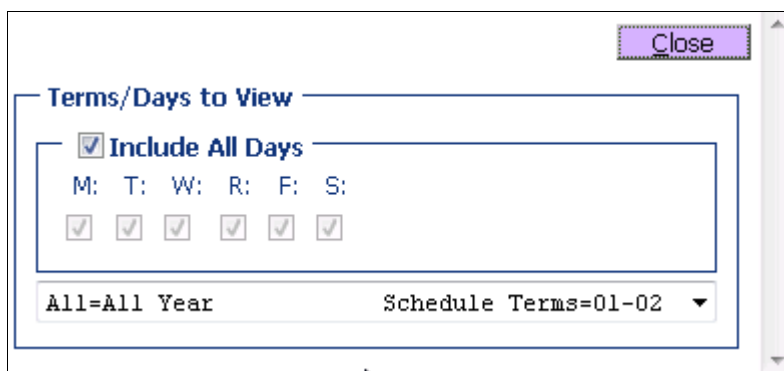


Figure 45 – Terms/Days to View Window

Help Menu

The next Toolbar menu is Help (Figure 46). The option in this menu allows you to quickly access SkyDoc help about the Interactive Scheduling Board.



Figure 46 – Help menu

Navigation Options

The Navigation options (Figure 47) help you navigate within the current page and to other pages (if there are multiple pages) of the Scheduling Board. If you pause your mouse pointer over each navigation option, a short description of the option appears. Table 25 describes the Navigation options.



Figure 47 – Interactive Scheduling Board Navigation options

Option	Description
Sort	Edits the sort order of the first column of data (by Course, by Teacher, or by Room). Use the move icon to change the order of the records in the column. Use the Reset button to set the data back to the original order.
Top	Scrolls back to the top of the screen. This may need to be done if the scroll bar on the right side of the screen was used to move the screen.
Refresh	Re-synchronizes the screen with the data from the database.
First	Moves to the first page of data.
Prev	Moves to a previous page of data from the one you're viewing.

Option	Description
Next	Moves to the next page of data from the one you're viewing.
Last	Moves to the last page of data.
Search	Finds a specific course, teacher or room according to how you're viewing the Interactive Scheduling Board.

Table 25 – Description of Interactive Scheduling Board Navigation options

Staff Unavailability Chip Options

Some teachers should not be scheduled into certain periods of the day. The Staff Unavailability option allows you to block a staff member from being scheduled into certain periods. When this feature is used, a Staff Unavailability chip is placed in the unavailable periods based on the Do Not Schedule Time Entry records created in Staff maintenance. To assign a color to these chips for easy recognition on the Scheduling Board, click the Options menu on the toolbar and select Chip Options. Staff Unavailability chips appear only when the first column of data is being viewed by teacher.

See “Part One, Step 4: Create Do Not Schedule Time Entry Record(s)” for more information.

NOTE	Staff Unavailability chips cannot be moved using the drag-and-drop technique like other chips. To move these chips, go to Staff maintenance and change the Do Not Schedule Time Entry record.
-------------	---

Option	Description
Move to Top	If there are multiple class chips in a cell, an asterisk (*) appears on the right edge of the chip. To view other chips in the cell, right-click on a chip to select this option. Select Move to Top to display other sections. The option allows you to choose which section to display as the top chip.
Tool Tip	If you pause your mouse over a Staff Unavailability chip on the board a tool tip appears. The information in the tool tip includes the staff name, the terms and days the staff member is not available and any other chips that are in the cell (chips that are under the Staff Unavailability chip).

Table 26 – Description of Interactive Scheduling Board Staff Unavailability Chip options

When the Scheduling Board is customized to view By Teacher, as seen below in Figure 48, you can see any Staff Unavailability chips. In this example, you can see a red Staff Unavailability chip in Period 03.

Options View Tools Window Help

Sort Top Refresh

First Prev Next Last	Prd. 00	Prd. 01	Prd. 02	Prd. 03	Prd. 04	Prd. 05	Prd. 06
Search:							
- Abdullascr				Do Not Sched. *			
- AManternac							
- AMcclinesc							
- AMenonscr							

Staff Unavailability "chip."

Period Headings

A minimum of seven periods (plus period 00) appear across the top of the Scheduling Board regardless of your Entity's configuration. You cannot schedule courses into periods that have not been configured for next year scheduling.

See Figure 49 below for an example of the period headings and the “wrapping” of the columns that can occur across the screen when all of the periods do not fit on the screen.

SortTopRefresh				Prd. 00	Prd. 01	Prd. 02	Prd. 03	Prd. 04	Prd. 05	Prd. 06	SortTopRefresh				Prd. 07
FirstPrevNextLast											FirstPrevNextLast				
Search:											Search:				

Figure 49 – Period Headings: Period 00 – Period 07

There is one option in the Periods Heading columns called View Period Counts By Grade. To access this option, right-click with your mouse in any Period Heading column. This shows the same window that would appear if you were to select Window from the top toolbar and select Period Counts By Grade. See “Period Counts By Grade” for more information about this option.

How to Place Sections Using the Interactive Scheduling Board

Now that you've learned how to select courses to work with on the Scheduling Board, this section describes the options that allow you to place the course sections into a specific period of the Schedule Master.

When the Scheduling Board first appears, it looks similar to the image in Figure 50. It has not been customized with specific colors and no sort method is defined. Customization is discussed in the section “Customizing the Interactive Scheduling Board.”

Drag and Drop Chips

You move sections around on the board by dragging and dropping chips. To drag and drop a chip, use your mouse to click and hold on a chip to drag and drop it into another cell.

When viewing data on the board by Course, this assigns the period. When viewing data on the board by teacher, this assigns the period and teacher. When viewing data on the board by room, this assigns the period and room. When moving a chip to another cell, data is updated and saved on the Meeting Pattern immediately.

Move Class to Top

If there is more than one class chip in a cell, an asterisk (*) appears on the right edge of the chip. To view other chips (sections) in the cell, right click on a chip and select Move Class to Top. The option allows you to choose which section to display as the top chip.

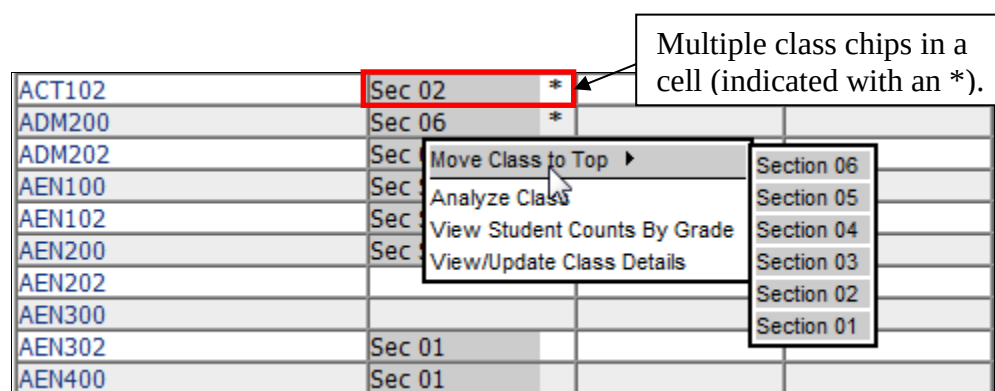


Figure 51 – Right-click on a chip with an asterisk to the right of the chip and move your mouse over the option Move Class to Top.

Tool Tip

If you pause your mouse pointer over a chip on the board, a pop-up box, or tool tip, appears. The information in this tool tip includes the course short description, course code, section number, teacher, period, building and room, terms, days the class meets, and any other chips that are in the cell (chips that are under the top chip).

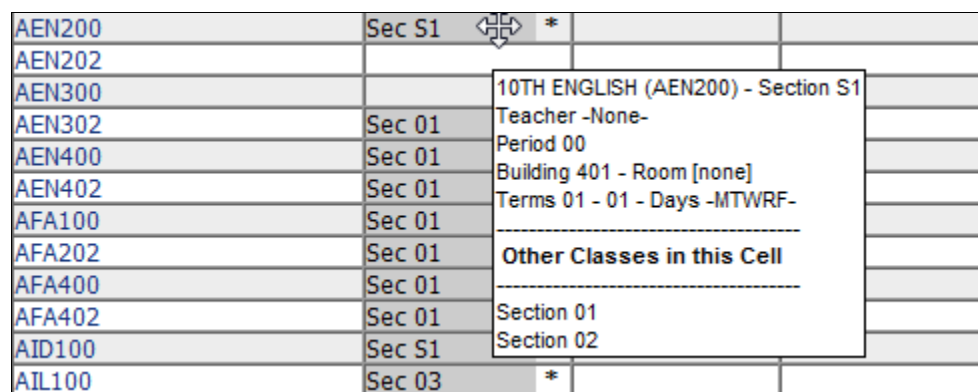


Figure 52 – A pop-up display appears when you pause your mouse pointer over a chip on the board.

Analyzer

In the toolbar at the top of the Scheduling Board, select the Window menu and then select the Analyzer option. This displays the same window that would appear if you were to right-click on a cell and select Analyze for a section.

The information in the analysis window includes actual and estimated conflicts, estimated students, and teacher and room status/conflicts. It also suggests a Control Set, Period, Staff and Room from available values. That combination of values and five other suggested combinations are listed and ranked by the fewest conflicts (Figure 53).

If there are student, staff and/or room conflicts, buttons (Conflict, Staff and/or Room) are highlighted . You can select these buttons to see the conflicts specific to the selected combination of values suggested by the system. If you click Conflict, there are three options you can use to determine how the common requests are displayed:

- Only Display Common Requests with Conflicts displays a list of classes that have been placed in the same period as the selected class (based on the selected class's available period value on the analysis screen) and the students that have requested the conflicting classes.
- Display All Classes that Overlap displays a list of all classes that have been placed in the same period as the selected class (based on the selected class's available period value on the analysis screen), regardless of whether there are common requests. The list shows classes only, not the students requesting the classes.
- Display All Common Requests displays a list of classes that the students who requested the selected class have also requested, regardless of whether the class is in the same period.

If you click Move, the chip is moved to the suggested period (the period currently selected in the Periods column). This automatically updates the Meeting Pattern.

Scheduling Board Analysis Screen

Class Meet Information

Class: ACT100/01 ACCOUNTING Dsp Period: 01 Dsp Terms: 01 - 01 Dsp Days Meet: MTWRF
Teacher: <None> Building/Room: 401-227 Schd Period: 01 Schd Terms: 01 - 01 Schd Days Meet: MTWRF

Class Analysis Options

☐ Control Sets (Terms) ☐ Day Meets ☒ Periods ☐ Staff Members ☐ Room Numbers ☐ Buildings

Class Meet Available Values

Control Set (Days)	Periods	Staff (Priority)	Rooms (Priority)
S1 (<None>)	00	<None> (0)	<None> (0)
S1 (MTWRF)	01		401 - 227 (1)
	02		
	03		
	04		

Rank: 1 Actual Conflicts: 0
Estimated Conflicts: 0 Estimated Students: 0

Suggested Values - 6 Possible Combinations

Rank	Cntrl Set/ Days	Prd	Act Conf	Est Conf	Est Stu	Staff	Building/ Room
1	S1 - MTWRF	01	0	0	0	<None>	401 - 227
2	S1 - MTWRF	06	0	0	7	<None>	401 - 227
3	S1 - MTWRF	05	0	1	27	<None>	401 - 227
4	S1 - MTWRF	03	0	2	30	<None>	401 - 227
4	S1 - MTWRF	04	0	2	30	<None>	401 - 227

6 records displayed

Figure 53 – The Scheduling Board Analysis window. In this example, you see information for ACT100 because the chip has been analyzed by right-clicking and selecting Analyze Class.

Analyze Class

Right-click on a chip to select this option. This opens the analysis window. This displays the same window that would appear if you were to select the Window menu on the toolbar at the top of the Scheduling Board and select Analyzer. See “Analyzer” for more information on this option.

View Student Counts by Grade

Right-click on a chip to select this option. The option displays the estimated student count for the class, by gender and total students and by grad year/grade (Figure 54). The totals on this screen reflect totals calculated by running the Update Estimated Class Counts Grade utility.

... | Build Master Schedule | 2011-12 Interactive Scheduling Board | Add Unassigned Meets   

mode = Student

Course/Class Information

Class: ACT100/12 ACCOUNTING

Terms: S1 (01 - 01)
Grades: 10 - 12
Requests: 335

Min. Students: 1
Opt. Students: 29
Max. Students: 29

Back

Estimated Counts By Grade



Grad Year ▲	Grade	Females	Males	Total Students
2012	12	1	1	2
2013	11	0	0	0
2014	10	12	12	24
9999	All	13	13	26

4 records displayed

*** Note: These Totals reflect values Calculated by Running the Scheduling Board 'Update Estimated Counts' Utility.**

Figure 54 – Window that appears when you right click on a chip and select View Student Counts By Grade.

View/Update Class Details

Right-click on a chip to select this option. When you select this option, the Edit Class Meet screen appears (Figure 55). This option allows most meeting patterns' values to be updated. If meeting pattern information is changed, re-analyze the chip/section to verify its correct period placement.

... | Future Scheduling | Build Master Schedule | 2011-12 Interactive Scheduling Board | Edit Class Meet

Course

Entity: 401 WSIPC High School

Class: ACT100/01 ACCOUNTING

Control Set: S1 - Semester 1 Class Status: Active

Start and Stop Terms

* Display Term Start: 01 * Stop: 01 * Scheduling Term Start: 01 * Stop: 01

Meet Pattern

* Display Period: 01 Display: M T W R F S

* Scheduling Period: 01 Scheduling: M T W R F S

* Attendance Period: 01 Attendance: M T W R F S

Lunch Code

☒ None ☐ Group A ☐ Group B ☐ Group C ☐ Group D ☐ Group E ☐ Group F

Building: 401 Building (401)

Room: 227 227

Type: Computer Lab

Teacher:

Teacher Type ?

☐ Primary ☐ Alternate

Figure 55 – The Edit Class Meet screen appears when you right-click on a chip and select View/Update Class Details.

Add Unassigned Class Meet

This option is only available if the View is by Teachers or Rooms. In the toolbar at the top of the Scheduling Board, select the Window menu and then select Add Unassigned Class Meet.

The Add Unassigned Class Meet option opens a window from which you can create a chip for meeting patterns that do not have a teacher, when viewing by teacher, or those chips that do not have a building and room assigned, when viewing by room. When the chip is created, it is placed in the Holding Bin. See “Holding Bin” for more information on this feature.

Classes with Unassigned Teachers							Select
Class ^	Description	Length	Grades	Credits	Req/Elec	Status	Back
+	ACS200/01	11TH CULM PROJ	SM (02-02)	11 - 12	0.500	Elective	Active
+	ACS202/01	11TH CULUMINATI	SM (02-02)	11 - 12	0.000	Elective	Active
+	ACS220/01	12TH CULM PROJ	SM (01-01)	12 - 12	0.500	Elective	Active
+	ACT100/01	ACCOUNTING	SM (01-01)	10 - 12	0.500	Elective	Active
+	ACT100/02	ACCOUNTING	SM (01-01)	10 - 12	0.500	Elective	Active
+	ACT100/03	ACCOUNTING	SM (01-01)	10 - 12	0.500	Elective	Active
+	ACT100/04	ACCOUNTING	SM (01-01)	10 - 12	0.500	Elective	Active
+	ACT100/05	ACCOUNTING	SM (01-01)	10 - 12	0.500	Elective	Active
+	ACT100/06	ACCOUNTING	SM (01-01)	10 - 12	0.500	Elective	Active

ALL 0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Class:

863 records displayed

Figure 56 – Window that appears when you select the Window menu from the toolbar at the top of the Scheduling Board and then select the Add Unassigned Class Meet option.

Holding Bin

This option is only available when the view on the board is by teachers or rooms. In the toolbar at the top of the Scheduling Board, select the Window menu and then select the Holding Bin option.

The reason the Holding Bin is only available when the view is by teachers or rooms is that in these views, if there are chips with no teacher or room assigned and the chip needs to be temporarily unscheduled (placed in Period 00), there is no cell to place the chip in. In this situation, the chip can be placed in the Holding Bin.

Drag and drop a chip into the Holding Bin to temporarily unschedule the chip. This removes the teacher when you are viewing the Scheduling Board in by teacher mode and removes the room when viewing the Scheduling Board in by room mode.

If you click Empty, this removes the chip from the screen. The Meeting Pattern still exists and the chip is still available in the Course view or can be added back to the board in the Teacher and Room view using the option Add Unassigned Class Meet. See “Add Unassigned Class Meet” for more information the .Add Unassigned Class Meet option.

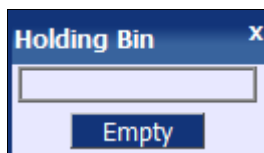


Figure 57 – Window that appears when you select the Window menu from the toolbar at the top of the Scheduling Board and then select Holding Bin.

Scheduling Using the Master Schedule Builder

The Master Schedule Builder is used to build the Schedule Master. It uses student requests, teacher availability and room usage to determine where each course should be placed to minimize the amount of student conflicts created during the scheduling process. Because it helps you determine course placement in the Schedule Master, it makes manual schedule building unnecessary. Like the Interactive Scheduling Board, information about conflicts, teacher and room status and student counts are readily available. The Master Schedule Builder uses the same analysis techniques and provides the same information that the Interactive Scheduling Board does.

The Master Schedule Builder can be processed using two modes: Interactive and Automated. Table 27 describes each mode.

Mode	Description
Automated	Assigns periods automatically based on student, teacher and room conflicts. No processing is done by the user. Because most users want more control over the building of the Schedule Master than this feature offers, most schools do not use the Automated option.
Interactive	Allows you to select the course and section to process. The system suggests a period based on student, teacher and room conflict, but you can select a different period than suggested. For this reason, this is the recommended option and is the option explained in this Guide.

Table 27 - Master Schedule Builder modes

This section of the Guide shows you how to use the Interactive Master Schedule Builder. The section is divided into two sub-sections:

- Configuring the Ranges Screen
- Using the Master Schedule Builder to place Sections

Configuring the Ranges Screen

This section explains how to configure the Master Schedule Builder Ranges screen, not how to create the Master Schedule using the Master Schedule Builder. The Ranges screen determines which courses are available in the Master Schedule Builder. The section that follows later discusses step-by-step procedures for creating the Master Schedule using the Master Schedule Builder.

To configure the Ranges Screen:

1. Go to WS\OF\FS\BM\MS\IB.
2. Configure the Ranges screen (Figure 58). See Table 28 for a description of options on this screen.
3. Click OK.

After you click OK, the Master Schedule Builder screen appears and you can begin creating the Schedule Master. To learn how, see “Placing Sections Using the Master Builder” in the next section.

This Process will Assist in the Building of the Master Schedule; including the Assignment of Control Sets, Days, Periods, Teachers and Rooms.

Interactive Master Schedule Builder Options

Course and Class Ranges

School Year: 2011-12

Terms: Entire Year Terms: 01 - 02

Control Sets S1 - S2 - YR

Low **High**

Course Key: ZZZZZZZZZ

Grad Yr/Grade: 2012 12 2015 09

Actual Number Of Sections: 0 999

Manual Course Rank: 0 999

☒ Include Required Courses

☒ Include Elective Courses

☐ Include Courses Without Student Requests

☐ Include Classes Previously Scheduled

Display Period: 01 to: 06

Interactive Value Assignment Options

☐ Suggest Control Sets (Terms) ☐ Suggest Day Meets

☒ Suggest Periods ☐ Suggest Staff Members

☐ Suggest Room Numbers

Available Buildings

Select	Building
☐	401 - Building (401)

1 records displayed

☐ Automatically Advance to the Next Class after Scheduling

☐ Automatically Analyze the Next Class

Master Builder Suggestion Rules - Point Breakdown: [Options](#)

OK

Save

Load

Reset

Close

Figure 58 – Default selections on the Interactive Master Schedule Builder Ranges Screen

Option	Description
School Year	School year for future scheduling.
Terms	Defaults to the terms selected when the school year for future scheduling was selected.
Control Sets	Defines the Control Sets that will be available when selecting courses in the Master Schedule Builder.
Course Key	Restricts the courses to be processed by Course Key. Typically this is left at the default settings. However, to process all of one type of course where the course keys are within a range of course key, restrict this range. Example: All of your art course keys begin with the letters 'AR'. To process only art courses you could restrict the range to AR through ARZZZZZ.

Option	Description
Grad Yr/Grade	Any course that includes the Grade Level in this range will be available for processing. The Grade Level value is located in the Course Master. <i>Example:</i> A high school wants to schedule senior-level courses in the Schedule Master first to give seniors the best opportunity to have all of their courses requests scheduled. Therefore, the Grad Yr/Grade boxes are set as 12 through 12. All courses available to seniors are available for placement in the Schedule Master.
Actual Number Of Sections	Specifies the courses and sections that will be processed based on the value in the Actual Nbr of Sections box of the course in the Course Master.
Manual Course Rank	Determines the courses processed by their Course Rank value. When the Advanced Master Schedule Builder (AMSB) is used, the Course Rank value on each course can be changed from the default value of 999. If you are not using the AMSB, the Course Rank value cannot be changed. Therefore, leave the values set at the default settings so that all courses are processed by the Schedule Master Builder.
Include Required Courses	Specifies whether courses with a value equal to Required in the Elective/Required field in the Course Master will be processed.
Include Elective Courses	Specifies whether courses with a value equal to Elective in the Elective/Required field in the Course Master will be processed.
Include Courses Without Student Requests	Specifies whether courses with no requests will be processed.
Include Classes Previously Scheduled	Determines whether sections (classes) previously placed in the Schedule Master in a specific period will be available to be processed. This field is commonly used after courses are placed in the Schedule Master. It can be used to help resolve conflicts through course adjustments. Due to these changes, a new period may be suggested. You may also want to see if a particular section would now fit better with a different teacher, room, or term assignment.
Display Period	Restricts previously scheduled classes by its Display Period value. This option is only available if the option Include Classes Previously Scheduled is selected.

Option	Description
Suggest Control Sets (Terms)	Used in conjunction with the Advanced Master Schedule Builder.
Suggest Day Meets	Used in conjunction with the Advanced Master Schedule Builder.
Suggest Periods	Selected by default.
Suggest Staff Members	Used in conjunction with the Advanced Master Schedule Builder.
Suggest Room Numbers	Used in conjunction with the Advanced Master Schedule Builder.
Available Buildings	Used in conjunction with the Advanced Master Schedule Builder.
Automatically Advance to the Next Class after Scheduling	After scheduling the section you are currently processing, the next section is automatically selected and the suggested period displays. This eliminates the need to click Select to process the next section and it increases the efficiency of the Master Builder.
Automatically Analyze the next Class	After scheduling the section you are currently processing, the next section is automatically analyzed and information regarding conflicts and suggested combinations (periods, teachers and buildings/rooms) is available. This eliminates the need to click Analyze to analyze the next section and it increases the efficiency of the Master Builder. This option is only available if the option Automatically Advance to the Next Class after Scheduling is selected.
Master Builder Suggestion Rules – Point Breakdown: Options	The Master Builder uses rules to suggest placement for sections based on the Point Values set on this screen. The higher the Suggested Rank Value point value, the more that rule influences the placement of a section. Each rule can be given a weight, or level of importance—the higher the point value, the higher the level of importance. All of the rules are assigned an initial default value. You can modify these defaults to influence the “scheduling formula” to more closely match the requirements of your Entity. Initially, you may want to run the utility with the default values. If you want specific logic information on any of the values, place your cursor in the box and double-click.

Table 28 – Description of options on the Interactive Master Schedule Ranges screen

Placing Sections Using the Master Schedule Builder

Now you know how to select the desired courses to work with in the Master Builder. This section describes the options that allow you to place the course sections into a specific period of the Schedule Master.

To place sections using the Master Schedule Builder:

1. Select the first class you want to place in the Master Schedule by either accepting the class the system selected, clicking the **Class** hyperlink, or using Express Entry Lookup (EEL) to select the next class you want to place in the Schedule Master.
2. Click **Analyze**. You will only have to do this for the first class unless you did not select **Automatically Analyze the next Class** on the **Ranges** screen.
3. Determine the **Control Set (Days)** and **Period** the section should be scheduled in. See Table 29 below for a description of options on this screen that help you make that determination.
4. Click **Schedule** to accept the suggested values (**Control Set**, **Period**, **Staff**, **Building/Room**) or select other values and click **Schedule**. See Table 29 for a more detailed description of these options.
5. Select the next class you want to place in the Schedule Master if you did not select the option **Automatically Advance to the Next Class after Scheduling** on the **Ranges** screen.

If you want to select a class other than the next class that is selected automatically, click **Cancel Schedule** and click the **Class** hyperlink or use the EEL to select the next class you want to place in the Schedule Master.

6. Repeat steps 2-5 until you have placed all desired classes in the Schedule Master.
7. Click **Close**.

Interactive Master Schedule Builder

Class Information

* Class: ACT100/02 ACCOUNTING

Previous Next Edit Course Edit Section

Course Rank: 999
Estimated Section(s): 12
Actual Section(s): 12
Request(s): 335

Class Meets

Dsp Period	Dsp Terms	Display Days Meet	Teacher	Building/Room	Sch Period	Sch Terms	Scheduling Days Meet
06	01 - 01	MTWRF	None	401-227	00	01 - 01	MTWRF

Analyze

Class Meet Available Values

Control Set (Days)	Periods	Staff (Priority)	Rooms (Priority)
S1 (<None>)	00	<None> (0)	<None> (0)
S1 (MTWRF)	01		401 - 227 (1)
	02		
	03		
	04		

Rank: 1 Actual Conflicts: 0
Estimated Conflicts: 0 Estimated Students: 0

Schedule Conflict Staff Room Cancel Schedule

Suggested Values - 6 Possible Combinations

Rank	Cntrl Set/ Days	Prd	Act Conf	Est Conf	Est Stu	Staff	Building/Room
1	S1 - MTWRF	02	0	0	0	<None>	401 - 227
2	S1 - MTWRF	06	0	0	7	<None>	401 - 227
3	S1 - MTWRF	05	0	1	27	<None>	401 - 227
4	S1 - MTWRF	03	0	2	30	<None>	401 - 227
4	S1 - MTWRF	04	0	2	30	<None>	401 - 227

6 records displayed

Figure 59 – Interactive Master Schedule Builder screen where Analyze for the first section has been selected.

Area	Description
Class Information	This area of the screen displays information about the course and is the area used to select a course for placement in the Schedule Master. There are also areas on the screen that provide opportunity for editing the course and section information.
Options In This Area	Description of Option
Class	Allows selection of the section to be placed in the Schedule Master, using the hyperlink or Express Entry Lookup (EEL).
Previous / Next	Moves to the previous or next course or section according to the values specified on the ranges screen.
Edit Course	Shortcut to the Course Master to allow you to edit values on the selected course.
Edit Section	Shortcut to the Course Master to allow you to edit values on the selected section.
Class Meets	Display of the Meeting Pattern information for the selected section.

Analyze	Provides information regarding the selected section. The information analyzed includes actual and estimated conflicts, estimated students, teacher and room status/conflicts. It will also suggest a Control Set, Period Staff and Room from available values. That combination of values and five other suggested combinations are listed and ranked by the fewest conflicts. If there are student, staff or room conflicts, buttons are highlighted (Conflict, Staff and/or Room). You can use these buttons to view the conflicts specific to the selected combination of values suggested by the system.
Course Rank	Used in conjunction with the Advanced Master Schedule Builder. The default value of all courses is 999 when the Advanced Master Schedule Builder is not used.
Estimated Section(s)	The Estimated Nbr of Sections value of the course from the Course Master.
Actual Section(s)	The Actual Nbr of Sections value of the course from the Course Master.
Request(s)	The Current Requests value of the course from the Course Master.
Area	Description
Class Meet Available Values	Once a course and section are selected for processing, information about the Meeting Pattern appears, as well as options that can be used to schedule and/or adjust the information.
Options In This Area	Description of Option
Control Sets (Day)	Identifies the length of a course (year, semester, term) and the terms and days (MTWRF or day rotation) the class would meet. You can choose another control set other than the suggested control set by clicking on a different selection. The suggested Control Set is highlighted.
Periods	All available periods the class can be scheduled into. The suggested Period is highlighted. To choose another period, click a different selection. If you select a period in which a different section of the same course is already offered, a warning appears. That period also displays in red in the Suggest Values table to the right.

Staff (Priority)	Staff assigned to the class. The suggested staff is highlighted. You can choose another staff by clicking a different selection. Typically only <None> is listed as teachers are usually assigned as part of building the Schedule Master. Following the staff name is the priority assigned to the staff. This functionality is used with the Advanced Master Schedule Builder.
Rooms (Priority)	Rooms assigned to the class. The suggested room is highlighted. You can choose another room by clicking on a different selection. Following the room assignment is the priority assigned to the room. This functionality is used with the Advanced Master Schedule Builder.
Suggested Values Combinations	Combinations of the possible values in the Control Set, Periods, Staff and Rooms columns, ranked by the system. The suggested combination (Rank 1) is highlighted.
Rank	Value calculated by the system based on Actual Conflicts and Estimated Conflicts based on Control Set, Period, Staff and Room availability.
Actual Conflicts	Value that indicates conflicts have occurred only between courses that are both singletons (single-section courses). If a period shows a number for Actual Conflicts, the section being scheduled is guaranteed to have that number of student conflicts if it is scheduled into that period. <i>Example:</i> Band is a year-long singleton course that has been scheduled into period 1. Ten students request Band and Photography, a semester-long singleton course. If Photography is scheduled into period 1, these students have a guaranteed conflict in their schedule: they cannot take Band and Photography in period 1.
Estimated Conflicts	Indicates conflicts have occurred between multiple-section courses and between singleton and multiple-section courses. The calculation occurs by dividing the number of conflicts between courses and the total number of estimated sections for two courses. A factor is then applied to come up with an estimated number of possible conflicts if this section of the course were assigned to the selected period.
Estimated Students	Estimated number of students that will be scheduled into the period based on the current Course Master, assuming every student will be scheduled into every requested course.

Conflict	Course and student conflict information pertaining to the selected period. You can view common requests with conflicts, all classes that overlap, or all common requests.
Staff	Course and class conflict information pertaining to the selected staff.
Room	Course and class conflict information pertaining to the selected room/building.
Schedule	Schedules the course section into the period currently selected in the Periods column in the Class Meet Available Values area.
Cancel Schedule	Allows you to avoid having to place the section—this is the only way to access the Class Information portion of the screen to select another section to schedule or to select the Close button.

Table 29 – Description of options on the Interactive Master Schedule Builder screen

Scheduling Using both Methods Interchangeably

The Interactive Scheduling Board and Master Schedule Builder methods can be used interchangeably to build a Schedule Master. For example, you may want to schedule your single-section courses with the Scheduling Board and then use the Interactive Master Builder to schedule multiple-section courses. This approach shows the single-section courses in a visual layout so you can conceptualize their placement in the overall schedule. This can help because you may not be able to visualize multiple-section courses in the Scheduling Board.

The method or combinations of methods used to create the Schedule Master is up to you. The above example is just one way that the methods can be used interchangeably. Because each method updates the meeting pattern information as soon as you move chips or schedule a class, you can change methods of scheduling classes based upon your preferred method. Which method you choose may be determined by classes you need to schedule.

Step 7: Schedule Sections into the Schedule Master

Now that you know how to use the Interactive Scheduling Board and the Master Schedule Builder to place sections in the Schedule Master, it is time to place sections of the courses.

Single-section courses are placed in the Schedule Master first because if they are placed correctly, this creates a Schedule Master with the fewest number of conflicts. When a set of students have requests for two single-section courses and those courses are placed in the Schedule Master in the same period, conflicts are guaranteed. You want to avoid this, so first place those course sections in different periods and avoid conflicts.

After you place single-section courses in the Schedule Master and have confirmed that their placement (with adjustment if necessary) causes few or no scheduling conflicts, it is time to place multiple-section courses.

You can choose from among the following methods:

- Place doubletons only (two-section courses), then place tripletons (three-section courses) and then place all remaining multiple-section courses. Courses with more than three sections can typically be placed in the Schedule Master at the same time (when more than three sections of a course are available, it is not as difficult to find a section that fits into the student's schedule).
- Place doubletons only and then place all remaining multiple-section courses.
- Place all remaining multiple-section courses after placing single-section courses.

Regardless of how you choose to place courses, the processes you use are the same. You simply repeat the same steps if you choose to separate the scheduling of doubletons and tripletons.

NOTE	It is important to initialize the Scheduling Period to period 0 (zero) so that the system can recommend the best placement for each course. For more information on this procedure, see “Step 4: Prepare Meeting Patterns for Placement in the Schedule Master.” If this initialization is not done, courses other than singletons will exist in the Schedule Master, increasing the likelihood of conflicts as you place your singleton courses.
-------------	---

Place Single-Section Courses in the Schedule Master

You can either use the Interactive Scheduling Board, the Master Schedule Builder or a combination of both methods to place single-section courses. You use the Actual Conflicts information in the Schedule Master building tools to build the best Schedule Master with the fewest Actual Conflicts.

In order to schedule your single-section courses into the Schedule Master you use the Range parameters to identify those courses that are singletons. One difference between the two methods is the range value for selecting single-section courses. In the Interactive Schedule Builder, the

value used is Estimated Number of Sections. In the Master Schedule Builder, the value used is Actual Number of Sections.

To place single-section courses in the Schedule Master:

1. Go to WS/OF/FS/SB (Interactive Scheduling Board) or WS/OF/FS/MS/IB (Master Schedule Builder).
2. Enter a value of “1” in the Estimated # of Sections, Low and High boxes if you’re using the Interactive Scheduling Board, or in the Actual Number Of Sections Low and High boxes if you’re using the Master Schedule Builder.
3. Configure the remaining options on the Ranges screen. For information about other options, see “Configure Using the Ranges Screen” in the section “Scheduling Using the Interactive Scheduling Board” or see “Configure Using the Ranges Screen” in the section “Scheduling Using the Master Schedule Builder.”
4. Click OK.
5. Place all single-section classes in the Master Schedule. For information about this process, see “Placing Sections Using the Interactive Scheduling Board” in the section “Scheduling Using the Interactive Scheduling Board” or see “Placing Sections Using the Master Schedule Builder” in the section “Scheduling Using the Master Schedule Builder.”

NOTE	Ensure that as you place sections in the Master Schedule, you populate missing data in the Meeting Pattern as needed. For example, when you initialized the meeting pattern, if you set the Scheduling Period to zero and the Teacher to None, when you place Sections into a specific period in the Master Schedule you may still need to assign a Teacher to the Meeting Pattern. To avoid the possibility of further conflicts, do this as you place the sections.
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Place Multiple-Section Courses in the Schedule Master

You can either use the Interactive Scheduling Board, the Master Schedule Builder or a combination of both methods to place multiple-section courses. You use the Actual Conflicts and Estimated Conflicts information in the Schedule Master building tools to build the best Schedule Master with the fewest Actual Conflicts.

One difference between the two methods is the range value for selecting multiple-section courses. In the Interactive Schedule Builder, the value used is Estimated Number of Sections. In the Master Schedule Builder, the value used is Actual Number of Sections.

To place multiple-section courses in the Schedule Master:

1. Go to WS/OF/FS/BM/SB (Interactive Scheduling Board) or WS/OF/FS/BS/MS/IB (Master Schedule Builder).
2. Enter a value that is equal to the number of sections you want to place in both the Low and High boxes for the Estimated # of Sections option if you're using the Interactive Scheduling Board, or for the Actual Number Of Sections option if you're using the Master Schedule Builder. For example, if you want to place doubletons only, use a value of 2 to 2. If you want to place doubletons and tripletons, use a value of 2 to 3. If you want to place all multiple-section courses, use a value of 2 to 999.
3. Configure the remaining options on the Ranges screen. For information about other options, see "Configure Using the Ranges Screen" in the section "Scheduling Using the Interactive Scheduling Board" or see "Configure Using the Ranges Screen" in the section "Scheduling Using the Master Schedule Builder."
4. Click OK.
5. Place all selected sections in the Master Schedule. For information about this process, see "Placing Sections Using the Interactive Scheduling Board" in the section "Scheduling Using the Interactive Scheduling Board" or see "Placing Sections Using the Master Schedule Builder" in the section "Scheduling Using the Master Schedule Builder."
6. If not all multiple-section courses are placed in the schedule, repeat steps 2-5 until all sections of all courses are placed in the Master Schedule.

NOTE	Ensure that as you place sections in the Master Schedule you populate missing data in the Meeting Pattern as needed. For example, when you initialized the Meeting Pattern, if you set the Scheduling Period to zero and the Teacher to None, when you place Sections into a specific period in the Master Schedule you may still need to assign a Teacher to the Meeting Pattern. To avoid the possibility of further conflicts, do this as you place the sections.
-------------	--

Run the Auto Scheduler in Imperative or Pseudo Mode

If you've just finished placing all the single-section courses in the Schedule Master, it is time to run the Auto Scheduler in the Imperative Mode. Imperative Mode allows you to see if any conflicts are being caused between single-section courses without actually scheduling students into sections. This process allows you to minimize conflicts between single-sections courses and the periods they are placed in before scheduling any multiple-section courses.

For an Imperative Scheduling Run, it is most important to determine where student and course conflicts have occurred and whether, with course adjustments, they can be avoided. The goal in scheduling single-section courses first is to create the fewest scheduling conflicts.

If you have already placed all the single-section courses in the Schedule Master and have just finished placing all of the multiple-section courses, it is now time for you to run the Auto Scheduler in the Pseudo Mode. Pseudo Mode simulates an actual scheduling run but does not lock students into course sections. This process will normally be run several times. Reports are available so that changes can be made to the Course Master to resolve conflicts before students are actually placed into the Schedule Master.

RECOMMENDATION	Before running the Auto Scheduler, consider locking the Auto Scheduler to prevent anyone from using it while you are working. See “Step 5: Verify Scheduling Configuration, Choose Scheduling Lock Options” for more information about using lock options.
-----------------------	--

To run the Auto Scheduler in Imperative or Pseudo Mode:

1. Go to WS\OF\FS\SS\AS\GS.
2. Do one of the following:
 - If you have just placed your single-section courses, select the Imperative Conflict Run as the Scheduling Run To Perform. This is a simulated run for single-section courses only and will not schedule students into the section.
 - If you have already placed your single-section courses and have just placed your multi-section courses, select the Pseudo Scheduling to Simulate Process as the Scheduling Run To Perform. This is a simulated run and will not schedule students into the course sections.
3. Configure the remainder of the Generate Student Schedules Maintenance screen (Figure 60). See Table 30 for details about options on this screen.
4. Click Save and Run.

A message appears stating that the scheduling run has finished. A report that shows each Grade Level that was processed, the number of students, the conflicts, percent of conflicts, imbalances (if selected on the maintenance screen) and the imbalances percent (if applicable) appears. This data can also be viewed in the Scheduling Run Analysis (WS\OF\FS\SS\AS\RA\Totals) area. For more information about viewing the Schedule Run Analysis data, see “View Schedule Run Details and Reports.”

... | Student Schedule Generation | Auto Scheduler | Generate Student Schedules | Generate Student Schedules Maintenance

This Process will Allow the Mass Scheduling of Students into their Requested Courses based on the Ranges Entered by the User.

Template Settings

* Template Description:

☐ Share this template with other users in entity 401

Schedule Generation Options

Year To Generate Schedules For: 2011-12 Terms: Entire Year Terms: 01 - 02

Student Ranges

	Start	End
* Grad Yr/Grade:	2012 12	2015 09
	Low	High
* Student Type:		ZZZ
* NY Sched Team:		ZZZ

Scheduling Run To Perform

☐ Actual Scheduling Run * Number of Runs: 1 ?
☐ Imperative Conflict Run
☐ Pseudo Scheduling to Simulate Process

Scheduling Options

☐ Close Sections When Filled
☐ Build Free Period Matrix
 * Semester Imbalance Max: 10 ?

☐ Balance By Student Attributes

Select	Order	Field
☐	0	Gender
☐	0	Race
☐	0	Special Education

3 records displayed

Creation Options

☐ Create Student Conflict Detail
☐ Include Imbalances As Conflicts

Asterisk (*) denotes a required field

Figure 60 – Generate Student Schedules Maintenance screen

Option	Description
Grad Yr/Grade	Ranges of students to be scheduled by Graduation Year/Grade Level. In the Imperative Conflict Run, actual schedules are not created. The Start range is the Grad Yr/Grade level that you want scheduled <i>first</i> and the End range is the grade level that you want scheduled <i>last</i>. Typically, the hardest Graduation Year/Grade Level to schedule is scheduled first.
Student Type	Ranges of students to be scheduled by Student Type, if desired.
NY Sched Team	Ranges of students to be scheduled by Next Year Scheduling Team code.
Close Sections When Filled	Determines whether sections of a course are closed when they are full. The auto-scheduler stops scheduling students into a section once the maximum number of student's value for that section is reached. When processing an Imperative or Pseudo scheduling run, you may want to leave this option unchecked to see how many students could have been scheduled into a particular course section if class maximums were not an issue.

Option	Description
Build Free Period Matrix	Creates the Free Period Matrix report that shows how many students are free each period of the day. The information from this matrix is not useful when running an Imperative scheduling run because a full schedule is not being generated for a student.
Semester Imbalance Max	Maximum number of free periods per week that may differ between semesters before a semester imbalance occurs. If a semester imbalance occurs, the scheduling program tries to re-schedule the student to remove the imbalance. For example, assume the Semester Maximum Imbalance is set to 10 (the default). If a student has 2 free periods (that meet 5 days a week) one semester and the student has no free periods the second semester, the student will be fine (2 free periods x 5 days a week = 10 free periods the 1st semester). However, if the Semester Maximum Imbalance was set to 9, the student would then be imbalanced since the student has more than a 9 free period difference between semesters. The information from this matrix is not useful when running an Imperative scheduling run because a full schedule is not being generated for a student.
Create Student Conflict Detail	Creates the Student Conflict Detail report that tells you which students have a course conflict. Recommendation: Always select this option so that schedule generation reports are available.
Include Imbalances As Conflicts	If the Create Student Conflict Detail option is selected, this option is available. It includes any imbalances as a conflict on the Student Conflict Detail report. The information from this matrix is not useful for an Imperative scheduling run because a full schedule is not being generated for a student.
Balance By Student Attributes	The system automatically balances section sizes. This option forces the system to try and balance section size by Gender, Race or Special Education based on the attribute(s) chosen.

Table 30 – Description of options on the Auto Scheduler Generate Student Schedules Maintenance screen

View Schedule Run Details and Reports

Each time a scheduling run is generated, details and reports based on the outcome of the scheduling run are generated. These details and reports allow you to find out which students and courses have conflicts. These reports are helpful for both an Imperative and a Pseudo scheduling run. However, the way you use the information is different depending on whether you're placing single-section or multi-section courses.

The following reports are available from a schedule generation run:

- Student Conflict Detail Report
- Course Conflict Report
- Conflict Totals Report

For more information on running and interpreting these reports, refer to “Run and Interpret the results of the Student Conflict Detail Report,” “Run and Interpret the results of the Course Conflict Report,” or “Run and Interpret the results of the Conflict Totals Report” later in this section.

In addition to these reports, the following general details about a scheduling run are available :

- Details on the options selected when the scheduling run was generated
- Totals information that was displayed in report format after the scheduling run was generated.
- A Free Period Matrix (if the option was selected when the run was generated).

To view these general scheduling run details:

1. Go to WS\OF\FS\SS\AS\RA.
2. Click the plus sign next to the Run Type that you generated. If you are reviewing the details for an Imperative run, select an Imperative Run Type. If you are reviewing a Pseudo run, select a Pseudo Run Type.
3. Click the plus sign next to Run Details. The details of the scheduling run appear, which include the selections made when generating the scheduling run.

NOTE	There is one exception in this display, Highest Period. This was not a selection made when generating the scheduling run. Instead, it shows the highest period number that the system finds in the classes that were scheduled by that scheduling run. If the Highest Period value is 6, that means the system scheduled students into 1st through 6th periods. If you had a 6 period school and a scheduling run indicates a Highest Period of 4, it means students were not scheduled into 5th and 6th periods. You need to adjust the master schedule for those two periods.
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4. Links for each of the three available scheduling reports display if applicable options were selected when generating the scheduling run. Click Student Conflict Detail Report, Course Conflict Report or Conflict Totals Report to view a report.

NOTE	The Student Detail Report link will not appear if Create Student Conflict Detail was not selected when you generated the scheduling run.
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5. Click the plus sign next to Totals. The data that appears is the same data that was available in report format to view after the scheduling run was generated. It is also the same data that is available when the Conflict Totals Report is generated and the Detail Sequence option Totals Only is selected. For further information on the information available in this report, see “Run and Interpret the results of the Conflict Totals Report” later in this section. The Conflict Totals Report does not provide data that is helpful when analyzing an Imperative Scheduling Run.
6. Click the plus sign next to Free Period Matrix. If the message “The Free Period Matrix was not built during this Scheduling Run” appears instead of the matrix, the Build Free Period Matrix option was not selected when the scheduling run was generated. It is also the same data this is available when the Conflict Totals Report is generated and the Detail Sequence option Free Periods By Grade Only or Free Periods By Grade & Totals is selected. For further information on the information available in this report, see “Run and Interpret the results of the Conflict Totals Report” later in this section.

Figure 61 shows the Student Scheduling Run Analysis with all of the options expanded. The Run Details provide information about the options you selected when generating the Imperative Run, and the hyperlinks provide access to the Student Conflict Detail Report and Course Conflict Report.

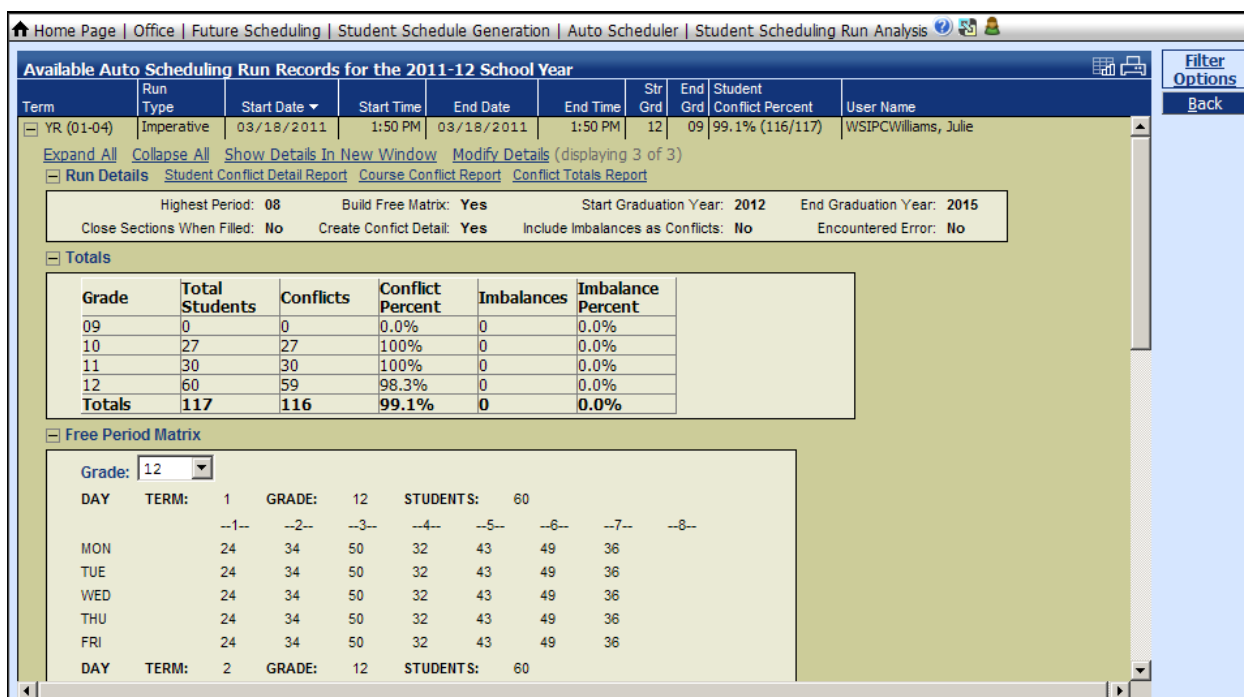


Figure 61 - Student Scheduling Run Analysis screen for Imperative Scheduling Run with all options expanded.

Run and Interpret the results of the Student Conflict Detail Report

This report lists each student who has a scheduling conflict. It offers information explaining why a student was or was not scheduled. This information is in the form of codes to designate each course's status. The codes are described in Table 31, Table 32 and Table 33.

To run the Student Conflict Detail Report:

1. Go to WS\OF\FS\SS\AS\RA.
2. If you are analyzing an Imperative scheduling run, click the plus sign next to the Imperative Run Type that you generated. If you are analyzing a Pseudo scheduling run, click the plus sign next to the Pseudo Run Type that you generated.
3. Click the plus sign next to Run Details.
4. Click the Student Conflict Detail Report link.

NOTE	The Student Conflict Detail Report link does not appear if Create Student Conflict Detail was not selected when you generated the scheduling run.
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5. Select a Student Key range.
6. Select a Grad Yr/Grade range.
7. Select a Report Format.
8. Select Printer Orientation of Portrait or Landscape. Details below the option state how many periods will print across the page based on the Report Format and Printer Orientation selected.
9. Select any of the following remaining options:

Print One Conflict per Page inserts a page break between students.

Double-Space the Report inserts a carriage return between courses.

Sort Course by Subject lists courses for a student by subject.

Print Conflicts and Imbalances lists any imbalances if the option Include Imbalances As Conflicts was selected when the scheduling run was generated.

Print Supplemental Auto Scheduling Arbitrary Scheduling Techniques lists supplemental codes (P, p, O, o, Q and q) to detail how the student was scheduled into a course. If this option is not selected, the technique will be printed as A (Arbitrary).

10. Click Run. The report appears. Refer to Table 31 and Table 32 for information about the detail provided on the report and how to interpret the results.

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NY Sched HS 400 (Instructor)

03/22/11

Page:7

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IMPERATIVE SCHEDULING CONFLICT REPORT FROM 03/18/2011

10:42 AM

Column T

Column F

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Figure 62 – Student Conflict Report based on the Imperative Scheduling Run with the Section/Terms Days Report Format selected.

To interpret the results of the Student Conflict Detail Report:

1. Locate Column T (refer to Figure 62). The codes that display in Column T specify how the course was scheduled. Refer to Table 31 for the specific values that appear in this column.
2. Locate Column F (refer to Figure 62). The codes that display in Column F denote special scheduling types for the course. Refer to Table 32 for the specific values that appear in this column
3. Locate any Conflict Codes (refer to Figure 62). Conflict codes print for any course which the system is not able to schedule. Courses with no conflicts have the days of the week or day rotation numbers that the class is scheduled for beneath the period assigned column. Refer to Table 33 for the specific values that appear in this column.

NOTE	The Imperative scheduling run and the Pseudo scheduling run do not schedule students. When the report descriptions below contain the word “scheduled” for either mode, this means “if” scheduled because these two modes do not schedule students.
-------------	--

Symbol in Column T	Description
(*)	Course could not be scheduled. If other possible sections are shown, those sections conflict with other scheduled sections. If other possible sections are not shown, this course could not be scheduled for any reason other than a conflict with another assigned course. Other codes will be printed for that information.
M	Course was manually placed into the student’s schedule by the user. The course was not scheduled by the system.
I	Course was scheduled as an imperative because it is a single-section course or a derived singleton.
i	Course was scheduled as an imperative after another course was arbitrarily scheduled, forcing this course to have only one possible section.
A, O, P, Q, o, p, q	The scheduling program made an arbitrary decision in its attempt to build a schedule. It first attempts to balance the number of students between sections at the point the student is being scheduled.

Table 31 – Descriptions of the codes used in Column T of the Student Detail Report

Symbol in Column F	Description
M	Course has a Schedule Type of Manually Scheduled.
D	Course has a Schedule Type of Dropped Course.
G	Course is part of a Lock Group. While a course may appear to be able to be scheduled, if other courses in the Lock group cannot be scheduled into a different term, the course is “conflicted out.” You may then look into the other courses in the Lock Group to determine how they were scheduled or why they had conflicts.

Table 32 – Descriptions of the codes used in Column F in the Student Detail Report

Conflict Codes	Description
-----	Another period for which the course has a section offered. These dashes print for all of the courses, whether they have conflicts or not. If the section does not meet every day, dashes display only for days the course meets and there will be spaces for the days the course does not meet.
+++++	Student has been blocked from being scheduled into a section for a variety of reasons, including section filled, prerequisite, corequisite or group block. A single letter appears to the left of the Course Length value to indicate the specific reason the student has been blocked.
f	Section is full. If the day pattern also prints, the student is scheduled into the section. If plus symbols appear (+), the student did not get scheduled into the section because it was full.
c	Course has a corequisite. If a student is blocked (+) from being scheduled, it is because its corequisite could not be scheduled.
p	The student has a prerequisite course request for this course. If a student is blocked (+) from being scheduled for this course request, it is because the prerequisite course request could not be scheduled.
b	Course has both a corequisite and a prerequisite course request.
g	Course is part of a Lock Group that should be scheduled in opposite terms.

Table 33 – Descriptions of the Conflict Codes used in the Student Conflict Detail Report

When evaluating this report for conflicts, review student schedules on the report for conflicts. For an Imperative scheduling run, look for conflicts with other single-section courses. For a Pseudo scheduling run, look for conflicts in any course for individual students.

Look for Conflict Codes in Column T of the report and then determine the specific reason (based on the Conflict Codes) a student did not get scheduled into that course. Find trends between specific courses where conflicts are common. You'll use this information later to determine whether you may modify the placement of the section in the Schedule Master. In a Pseudo scheduling run you may possibly create additional sections of a multi-section course.

NOTE	Multiple-section courses that reside in Period 0 (zero) are seen by the system as conflicts because they are unscheduled requests, but for an Imperative run this is not a true conflict. These requests are listed for a student with an * (asterisk) in Column T of the report, indicating the course could not be scheduled.
-------------	---

Run and Interpret the Results of the Course Conflict Report

This report summarizes the information about how students were scheduled into sections of courses (or would have been scheduled into sections of courses for the scheduling run). It offers totals based on each course and section (if desired) and indicates for each course how many students requested the course, how many would receive the course and how many students would not receive the course due to schedule conflicts. It can be used in conjunction with the Student conflict Detail Report to decide whether periods of a section need to be modified or if sections need to be added or dropped.

To run the Course Conflict Report:

1. Go to WS\OF\FS\SS\AS\RA.
2. If you are analyzing an Imperative scheduling run, click the plus sign next to the Imperative Run Type that you generated. If you are analyzing a Pseudo scheduling run, click the plus sign next to the Pseudo Run Type that you generated.
3. Click the plus sign next to Run Details.
4. Click the Course Conflict Report link.
5. Select the Detail Sequence of Course Only or Course & Class.

NOTE	Selecting Course Only will display information regarding the Course. This information includes the total number of requests, how many students would be scheduled and the number of conflicts that would have occurred (students are not actually scheduled since this is an Imperative Scheduling Run). Selecting Course & Class displays additional information regarding the section (in the case of the Imperative Scheduling Run this will be only one section). The information includes Meeting Pattern detail and Optimum, Maximum and Assigned seat counts.
-------------	--

6. If you want courses that are still placed in period zero included on the report, select the Print Courses/Classes Scheduled Period Zero check box. Typically for an Imperative scheduling you would not select this option because you wouldn't want to include all of the non-placed, multi-section courses.
7. Click Run.

Figure 63 shows a Course Conflict Report with Course & Class Detail Sequence option selected for an Imperative Scheduling Run. Notice that some of the single-section courses listed have a conflict (CONF) count greater than zero. Investigate the student conflicts for these courses to determine whether the course should be moved to another period.

lsonyr03.p 16-2				NY Sched HS 400 (Instructor)								03/22/11				Page:1							
04.10.12.00.00				Imperative Course Conflict Run (Course & Class) Report From 03/18/2011																1:02 PM			
COURSE		DESCRIPTION			SCD			TOT		COR			CONFLICT'S OPEN PERIODS										
SEC	TEACHER	TRM	PD	DAYS	OPT	MAX	ASG	TYP	REQ	SCD	CONF	LGT	--1-	--2-	--3-	--4-	--5-	--6-	--7-	--8-			
ADVPHO	ADV. PHOTOGRA							N	19	19	0	SM											
01	JTHOMPSON	S2	03	MTWRF	15	20	19						OPTIMUM EXCEEDED										
AEROB	AEROBICS							N	11	11	0	SM											
01	<None>	S2	05	MTWRF	25	30	11																
ALGEB2	ALGEBRA 2							N	11	8	3	YR											
01	MS GOMPER	YR	02	MTWRF	25	30	8																
ALGEBR	PRE-ALGEBRA							N	12	10	2	SM											
01	MS GOMPER	S1	07	MTWRF	15	20	10																
ART 2	ART 2							N	37	17	20	TM											
01	MR WHITE	T1	01	MTWRF	25	30	17																
BEHPSY	BEHAVIORAL PS							N	15	10	5	SM											
01	H HOOT	S1	01	MTWRF	15	20	10																
BIOLOG	BIOLOGY							N	11	11	0	YR											
01	L LAWRENCE	YR	02	MTWRF	15	20	11																
CALC 2	CALCULUS 2 AP							N	11	11	0	YR											
01	R JAMES	YR	07	MTWRF	25	30	11																

Figure 63 – A Course Conflict Report with Course & Class Detail Sequence option selected for an Imperative Scheduling Run.

lsonyr03.p 16-2				NY Sched HS 400 (Instructor)										03/22/11				Page:1					
04.10.12.00.00				Pseudo Course Conflict Run (Course & Class) Report From 03/22/2011																		3:10 PM	
COURSE		DESCRIPTION			SCD			TOT		COR			CONFLICT'S OPEN PERIODS										
SEC	TEACHER	TRM	PD	DAYS	OPT	MAX	ASG	TYP	REQ	SCD	CONF	LGT	--1-	--2-	--3-	--4-	--5-	--6-	--7-				
ADVPHO	ADV. PHOTOGRA							N	19	13	6	SM	2	2		1	4		2				
01	JTHOMPSON	S2	03	MTWRF	15	20	13																
AEROB	AEROBICS							N	11	11	0	SM											
01	<None>	S2	05	MTWRF	25	30	11																
AGRICU	AGRICULTURE							N	23	14	9	TM	2	2	1	4	4		1				
01	MR WHITE	T1	01	MTWRF	15	20	7																
02	JTHOMPSON	T1	01	MTWRF	15	20	7																
ALGEB1	ALGEBRA 1							N	16	12	4	YR		1									
01	MS GOMPER	YR	03	MTWRF	20	25	6																
02	<None>	YR	03	MTWRF	20	22	6																
ALGEB2	ALGEBRA 2							N	11	7	4	YR							1				
01	MS GOMPER	YR	02	MTWRF	25	30	3																
02	<None>	YR	06	MTWRF	20	22	4																
ALGEBR	PRE-ALGEBRA							N	12	9	3	SM	2		1	2	1		1				
01	MS GOMPER	S1	07	MTWRF	15	20	6																
03	<None>	S1	05	MTWRF	20	22	3																

Figure 64 – Course Conflict Report with Course & Class Detail Sequence option selected for a Pseudo Scheduling Run.

To interpret the results of the Course Conflict Report:

1. Locate the upper row of column headings on the Course Conflict Report that you generated. The column descriptions in Table 34 below describe the course information and help you interpret the results of the report.
2. Locate the lower row of column headings on the Course Conflict Report that you generated (if you selected the Detail Sequence of Course & Class). The column descriptions in Table 35 below describe the section information for each course and help you interpret the results of the report.

NOTE	The Imperative scheduling run and the Pseudo scheduling run do not schedule students. When the report descriptions below contain the word “scheduled” for either mode, this means “if” scheduled because these two modes do not schedule students.
-------------	--

Course Column Headings	Description
COURSE	The course key of the course from the Course Master.
DESCRIPTION	Short Description of the course from the Course Master.
SCD TYP	Schedule Type attached to the course. Schedule Types include N (normal), M (manually scheduled), S (special education) and D (dropped course).
TOT REQ	The total number of requests for the course. This count is the total from all grade levels, even if the schedule generation was run for only one or a few Grad Years or Grade Levels.
SCD	Total number of students who could be scheduled during the schedule generation run. This count includes only students with the Grad Years or Grade Levels selected during the schedule generation run. During imperative scheduling runs, this number represents the number of students who would be assigned if an actual schedule run was processed.
CONF	Total number of students who could not be scheduled during the schedule generation run. The count includes students within the Grad Years or Grade Levels selected during the schedule generation run.
COR LGT	Course Length of the course from the Course Master.
CONFLICTS OPEN PERIODS	Columns identify, by period, the number of students who would have been able to take the course had it been offered in a different period (the period under which the value is displayed). This information can help you decide which period might be the best for assigning a section. In the case of Semester length courses, the count includes students who are free that period for either semester. In the case of Semester length courses, the count includes students who are free that period for either semester.

Table 34 – Course column headings for the Course Conflict Report

Section Column Headings	Description
SEC	Course section number.
TEACHER	Teacher assigned to the section.
TRM	Term in which the section is going to be taught.
PD	Period in which the section is going to be taught.
DAYS	Days of the week in which the section is going to be taught.
OPT	Optimum number of students to be assigned to the section.
MAX	Maximum number of students to be assigned to the section.
ASG	Number of students assigned to the section during schedule generation. During Imperative Scheduling Runs, this number represents the number of students who would be assigned if an actual schedule run was processed.
OPTIMUM EXCEEDED	This message prints for the section when the optimum number of students for the section is exceeded. Students are still scheduled even if the optimum is exceeded.
MAXIMUM EXCEEDED	This message prints for the section when the maximum number of students for the section is exceeded. If the option Close Sections when Filled is set to No, this message is informational and students are scheduled into the section. If the option Close sections when Filled is set to Yes, the student will not be scheduled into the section since there are no longer seats available in that section.

Table 35 – Section column headings for the Course Conflict Report

For an Imperative scheduling run, use this report to determine which single-section courses have conflicts. When placing single-section courses, your goal is to have as few conflicts with other single-section courses as possible. When you review the report, look at the CONF (conflict) column for courses with conflict totals greater than zero. Use this report in conjunction with the Student Conflict Detail Report to determine which students are in conflict. You must determine whether one or more courses need to be moved to another period of the day to eliminate some or all of the conflicts. In addition, review the report looking for OPTIMUM EXCEEDED or MAXIMUM EXCEEDED messages to determine whether additional sections of these single-section courses need to be offered.

For a Pseudo scheduling run use this report to see how sections are balanced by reviewing the ASG (assigned) values for each section of a course. In addition, use this report to see how many students could not be assigned to a section by comparing the SCD (scheduled) and CONF (conflict) values for each course. Use this report in conjunction with the Student Conflict Detail Report to determine which students are in conflict.

You can determine what alternative periods a section can be placed in by looking at the CONFLICTS OPEN PERIOD details. You will need to determine whether one or more courses need to be moved to another period of the day to eliminate some or all of the conflicts. In addition, review the report looking for OPTIMUM EXCEEDED or MAXIMUM EXCEEDED messages to determine whether additional sections of these courses need to be offered.

Run and Interpret the results of the Conflict Totals Report

This report prints summary information regarding the schedule generation run. The report shows you how many students were scheduled into each period, the total percent of conflicts based on grade level and the total number of students scheduled per period based on grade level.

For an Imperative scheduling run, this report does not provide data that is helpful when analyzing an Imperative Scheduling Run. It is likely that every student will have at least one conflict and that the Conflict Percent values will be close to 100% for each grade level. This occurs because each request a student has for a multiple-section course that has not been placed in the Master Schedule still counts as an unscheduled course, and therefore also counts as a conflict. Students may not have conflicts if their schedule has been manually built or if their schedule consists entirely of single-section requests that do not conflict with one another.

For a Pseudo scheduling run you should run and interpret the results of the Conflict Totals Report.

To run the Conflict Totals Report:

1. Go to WS\OF\FS\SS\AS\RA.
2. Click the plus sign next to the Pseudo Run Type that you generated.
3. Click the plus sign next to Run Details.
4. Click the Conflict Totals Report link.
5. Select the Detail Sequence of Free Periods By Grade & Totals, Totals Only or Free Periods By Grade Only.
6. Click Run.

Figure 65 shows a Conflict Totals Report with Detail Sequence of Free Periods By Grade & Totals selected. In this example, the Free Periods By Grade portion of the report is shown, for

Grade 12 only, for Term 1 only. Each additional Term is represented in the reported, followed by each other Grade Level/Term.

lsonyr02.p 04-2		NY Sched HS 400 (Instructor)					03/22/11		Page:1
04.10.12.01.00		Auto Scheduling Run - Free Periods By Grade & Totals Report From 03/22/2011							3:58 PM
DAY	TERM: 1	GRADE: 12			STUDENTS: 60				
		--1--	--2--	--3--	--4--	--5--	--6--	--7--	
MON		19	15	21	14	43	2	32	
TUE		19	15	21	14	43	2	32	
WED		19	15	21	14	43	2	32	
THU		19	15	21	14	43	2	32	
FRI		19	15	21	14	43	2	32	

Figure 65 – Conflict Totals Report with Detail Sequence of Free Periods By Grade & Totals selected.

Figure 66 shows a Conflict Totals Report with Detail Sequence of Free Periods By Grade & Totals selected with totals shown. In this example, the Totals portion of the report is shown, which is at the end of the report.

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NY Sched HS 400 (Instructor)

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04.10.12.01.00

Auto Scheduling Run - Free Periods By Grade & Totals Report From 03/22/2011

3:58 PM

AUTO SCHEDULING RUN TOTALS BY GRADE

GRADE	STUDENTS	CONFLICT	PERCENT	IMBALANCE	PERCENT
09	0	0	11.1%	0	88.9%
10	27	3	11.1%	24	88.9%
11	30	28	93.3%	2	6.7%
12	60	49	81.7%	3	5.0%
Total	117	80	68.4%	29	24.8%

***** End of report *****

Figure 66 - Conflict Totals Report with Detail Sequence of Free Periods By Grade & Totals selected with totals shown.

The following information will help you interpret the Conflict Totals Report.

- The information in this report provides you with an impression concerning the general success of the scheduling run.
- The Free Periods by Grade Detail Sequence option shows in a matrix by period, day of the week and term, the number of students who were not scheduled or would not be scheduled, for each period, in the period column listed. This gives you an idea of periods into which sections may need to be added. A matrix is available for each grade level that was processed during the schedule generation.
- The Totals Detail Sequence option shows each Grade Level that was processed, the number of students, the conflicts, percent of conflicts, imbalances (if selected when generating the scheduling run) and the imbalances percent (if applicable).
- The higher the percent of conflicts, the more work you must do to the Schedule Master. In some cases, a conflict rate of 10% is acceptable, and might be excellent. In others, a 5% conflict rate may be the goal. For example, if the percent of conflicts is 15% but the Course Conflict Report shows most courses have one or two conflicts, there is not much left to be done to the Course Master. You must resolve the conflicts individually.

Make Adjustments to the Schedule Master

After you've run, interpreted and reviewed schedule generation reports, use the information you have gathered to modify the Schedule Master. If an Imperative scheduling run was performed, modify single-section courses only. If a Pseudo scheduling run was performed, modify multiple-section courses only. Do NOT make adjustments to previously placed single-section courses.

While reviewing the reports, note courses with conflicts. If the number of students with conflicts is low, a change to the period for either course may not be possible or may not need to be made. However, if many students are unable to be scheduled into one course or the other, modify the meet to find a better placement for the course. However, changing the period assignment may resolve some conflicts but could possibly create others.

If students have conflicts due to special scheduling situations like Lock Groups, Prerequisites or Corequisite, look closely at the periods the courses are offered. If students cannot get course A's prerequisite because it is blocked out by another course request, they will not be able to get Course A either. In this case, change or add a section for the prerequisite or change the period of the course that it is conflicting with. When setting up corequisite, ensure that meeting patterns are created to allow for the corequisite requirements that have been created. For example, if corequisites must be taken in opposite semesters, be sure to create sections and meeting patterns that address these requirements.

To make adjustments to the Schedule Master:

1. Do one of the following:
 - Repeat the section “Place Single-Section Courses in the Course Master” for single-section courses that were causing conflicts. Be sure to view all single-section courses when making changes to any courses. To view previously scheduled courses, select Include Classes Previously Scheduled on the Ranges screen if you are using the Master Schedule Builder.
 - Repeat the section “Place Multiple-Section Courses in the Course Master” for multiple-section courses that you are attempting to move in the Schedule Master. Be sure to view all courses when making changes to any courses. To view previously scheduled courses select Include Classes Previously Scheduled on the Ranges screen if you are using the Master Schedule Builder.
2. Repeat the section “Run the Auto Scheduler in Imperative or Pseudo Mode.”
3. Repeat the section “View Schedule Run Details and Reports.”

Perform this process until few or no conflicts remain between single-section courses. Then continue to “Step 8: Schedule Multiple-Section Courses.”

PART FOUR: SCHEDULING STUDENTS

You have now generated schedules that simulate a scheduling run without actually creating student schedules and have had the opportunity to resolve conflicts in the Course Master before creating student schedules. It is now time to create student schedules and resolve any remaining conflicts manually.

Step 1: Manually Place Students in Sections

Before you actually process student requests and create student schedules, consider whether any students must be placed into certain sections of courses before being scheduled automatically. This might include Special Education courses because courses designated as Special Education are not scheduled by the Auto Scheduler. It might also include sections that students must be scheduled into because of specific placement reasons (for example, it may be important to place a student with a specific teacher).

Make these manual placements before running the Auto Scheduler or allowing guardians/students to perform Online Arena Scheduling.

Use the Scheduling By Student process to manually place students in to sections.

Step 2: Schedule Student Requests

There are two methods that can be used to create student schedules:

- Run the Auto Scheduler in Actual Mode
- Perform Online Arena Scheduling

This section discusses both of these methods.

Run the Auto Scheduler in Actual Mode

This process duplicates the Pseudo Scheduling Run with the exception that all student schedules are created as actual schedule records for sections of the requested courses. Once this has been done, the student schedule is as complete as the system can make it. Conflicts may still have occurred and there may be free periods in a student's schedule, but from this point on, modify a student's schedule rather than making changes to the Master Schedule.

You can run the Actual Scheduling Run option more than once, in effect layering several scheduling runs and locking previous scheduling runs into place. Typically this is done for a different grade level each time, but can also be done by making different courses available for each subsequent run of the Auto Scheduler. For example, you can set the Schedule Type on some courses in the Course Master to a value other than Normal so that the Auto Scheduler excludes those courses when the scheduler is processed. After you run the Auto Scheduler, you set the Schedule Type values on the course back to Normal and change the other course's Schedule Type to a value other than Normal so that they are excluded by the Auto Scheduler during the next scheduling run. Then you re-run the Auto Scheduler.

It is recommended, but not required, that the Actual Scheduling Run be completed before processing Student Year End processing. When Year End is processed, the next school year becomes the current school year and Future Scheduling tools are no longer available to create schedules for the year you were working with unless the scheduling tools are enabled for the current school year. Do this with caution because you are working with current year schedules when enabling this functionality.

See the appendix for the logic that the Auto Scheduler uses to determine the order in which students are processed, the logic used to process the courses for each student, and how co-requisites, scheduling teams and scheduling categories are processed. Some frequently asked questions about the logic are also included in the appendix.

If alternate requests have been entered for students, they can also be scheduled for students. However, they must be scheduled separately from regular requests. See “Step 3: Schedule Student Alternate Requests” in this section for more information.

BEST PRACTICE	Before running the Auto Scheduler, lock the Auto Scheduler to prevent anyone from using the scheduler while you generate schedules. See “Step 5: Verify Scheduling Configuration, Choose Scheduling Lock Options” for more information about locking the Auto Scheduler.
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To run the Auto Scheduler in Actual Mode:

1. Go to WS\OF\FS\SS\AS\GS.
2. In the Scheduling Run To Perform box, select Actual Scheduling Run.
3. Configure the rest of the Generate Student Schedules Maintenance screen (Figure 67). See Table 36 for details about options on this screen.
4. Click Save and Run.

A message appears stating that the Actual run has finished processing. A report is available to view showing each Grade Level that was processed, the number of students, the conflicts, percent of conflicts, imbalances (if selected on the maintenance screen) and the imbalances percent (if applicable). This same data is available in Scheduling Run Analysis (WS\OF\FS\SS\AS\RA\Totals) and is discussed in further detail in “View Schedule Run Reports and Details.”

NOTE	To use the scheduling tools in the Future Scheduling module for the future school year, a scheduling run must be run in the Actual mode prior to the Student Records Year End process. If this is not done, the scheduling tools will still be available, but will need to be enabled for the current school year to complete the process of generating student schedules. See Appendix D for more information regarding this process.
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... | Student Schedule Generation | Auto Scheduler | Generate Student Schedules | Generate Student Schedules Maintenance

This Process will Allow the Mass Scheduling of Students into their Requested Courses based on the Ranges Entered by the User.

Template Settings

* Template Description:

☐ Share this template with other users in entity 401

Schedule Generation Options

Year To Generate Schedules For: 2011-12 Terms: Entire Year Terms: 01 - 02

Student Ranges

* Grad Yr/Grade: Start 2012 12 End 2015 09

* Student Type: Low High

* NY Sched Team: Low High

Scheduling Run To Perform

☒ Actual Scheduling Run * Number of Runs: 1 ?

☐ Imperative Conflict Run

☐ Pseudo Scheduling to Simulate Process

Scheduling Options

☐ Close Sections When Filled

☐ Build Free Period Matrix

* Semester Imbalance Max: 10 ?

Creation Options

☐ Create Student Conflict Detail

☐ Include Imbalances As Conflicts

Balance By Student Attributes

Student Attributes

Select	Order	Field
☐	0	Gender
☐	0	Race
☐	0	Special Education

3 records displayed

Asterisk (*) denotes a required field

Save Save and Run Back

Figure 67 – Generate Student Schedules Maintenance screen. In this example, the Actual Scheduling Run mode is selected.

Option	Description
Grad Yr/Grade	Ranges of students to be scheduled by Graduation Year/Grade Level. The Start range is the Grad Yr/Grade level that you want scheduled <i>first</i> and the End range is the grade level that you want scheduled <i>last</i> . Typically, the hardest Graduation Year/Grade Level to schedule is scheduled first.
Student Type	Ranges of students to be scheduled by Student Type, if desired.
NY Sched Team	Ranges of students to be schedule by Next Year Scheduling Team code.
Close Sections When Filled	Determines whether sections of a course will be closed when they are full. The auto-scheduler stops scheduling students into a section once the maximum number of student's value for that section is reached.
Build Free Period Matrix	Creates the Free Period Matrix report that shows how many students are free each period of the day.
Semester Imbalance	Maximum number of free periods per week that may differ between

Option	Description
Max	semesters before a semester imbalance occurs. If a semester imbalance occurs, the scheduling program tries to re-schedule the student to remove the imbalance.
Create Student Conflict Detail	Creates the Student Conflict Detail report that tells you which students have a course conflict. Always select this option so that schedule generation reports are available.
Include Imbalances As Conflicts	If the Create Student Conflict Detail option is selected, this option is available. It includes any imbalances as a conflict on the Student Conflict Detail report.
Number of Runs	An Actual Scheduling Run can be processed up to five times in one run, through a cycling of scheduling and unscheduling. The scheduling portion of the cycle is equal to the Number of Runs. For example, if the Number of Runs is set to 3, the Auto Scheduler will schedule, unschedule, schedule, unscheduled and schedule. All classes are unscheduled except for those the student was manually scheduled into. This option allows the Auto Scheduler to try scheduling different course combinations and minimize the number of course conflicts. Note: It is not recommended to set the number of runs greater than one if you are layering the scheduling runs. This is because the point of the multiple scheduling runs was to lock previous runs and if you process later scheduling runs and allow the scheduler to schedule and unscheduled classes (because you select more than one Number of Runs), the system will potentially unscheduled classes that were scheduled in previous scheduling runs.
Balance By Student Attributes	The system will automatically balance section sizes. This option will force the system to try and balance section size by Gender, Race or Special Education based on the attribute(s) chosen.

Table 36 – Description of options on the Auto Scheduler Generate Student Schedules Maintenance screen

Perform Online Arena Scheduling

This process uses Family Access for Online Arena Scheduling, which creates student schedules. A guardian or student selects the student's courses, working out conflicts as they create the schedule. When a class is added to a student's schedule using this method, it occurs instantly and the seat is removed from the class count immediately.

The district controls access to Online Arena Scheduling. Guardians and students can create schedules during a specified date and time. This access is assigned by grade level. In addition, a counselor or advisor can review schedules. Further changes can be controlled by locking, approving or re-opening the schedule. The guardian, student and staff use Message Center to communicate. For example, the can ask questions about changes that should be made to the schedule.

Before using Online Arena Scheduling, you must configure it in Web Access and Family Access. This Guide covers the configuration in Web Access. For Family Access configuration instructions and to learn about the processes a guardian and student must follow in Family Access to add classes to a students' schedule, see the *WSIPC Guide to Family and Student Access for Administrators* and the *WSIPC Guide to Family and Student Access for Students and Guardians*.

The appendix contains a troubleshooting section to help staff members responsible for managing the online arena scheduling process.

Considerations for Deploying Online Arena Scheduling

Before deploying Online Arena Scheduling, answer the following questions:

- What process will you use to deploy Family Access, and how will the product be maintained? For example, how will support be provided to guardians? Who will support lab time for students if you use a lab environment for them to access computers? What will the process be for maintaining and distributing passwords?
- Which courses will be available to Online Arena Scheduling?
- What time frame will each grade level be given to create their schedules? Will there be time allowed between groups of students for schedule approval so that seat counts are more accurate?
- Which seat count value (Minimum Students, Optimum Students and Maximum Students) will be used as the maximum number of seats that grade level can fill for each section? Will the value used for each group of students be the same or different?
- What will the process be for staff to review student schedules as they are being created? Will an advisor or counselor review each student's schedule and change their Scheduling Status once a student submits a schedule?

Configuration in Family Access

The following configuration options in Family Access are helpful to know as you configure Web Access:

Option	Description
Add Teacher Name as a Search and Display	Can be used to suppress the appearance of the Teacher Name for each course while guardians/students create a schedule.
Only list Class Sections for Courses Student Requested	Limits the courses that the guardian/student can schedule to only those the student has a as request. Caution: Select this option because it maintains the integrity of the Master Schedule, which you built based on student requests. If you allow students or guardians to create their schedule in Family Access based on courses they did not request, there may be adverse consequences. For example, a student or guardian may not schedule courses that meet the student's requirements, or the schedule may have many conflicts.
Allow Add and Remove of Courses	Allows the guardian/student to add or remove courses. If this option is not enabled, courses can only be viewed
Allow Add of Alternate Requests	Allows the guardian/student to add alternate requests to their schedule. If the alternate request is later removed from the schedule by the guardian/student, it is added back as a regular request for the student, not as an alternate request. If alternate requests have been entered for students, they can also be scheduled separately from regular requests. See "Step 3: Schedule Student Alternate Requests" in this section for more information.
Force Students to Schedule Co-Requisite Courses	Pertains to corequisites. If a student has requests for courses that are co-requisites of each other, when one course is scheduled, the student will be prompted to select a section of the co-requisite course and both courses are scheduled. If a section of the co-requisite course isn't selected, neither course is scheduled.
Do Not Show Room Number in Class List	Hides the room number when the course and class information is viewed on the Available, Selected or Submit Classes tabs in Family Access (using the Class hyperlink).
Allow Students to Schedule Courses Previously Passed	Allows a class to be added to the student's schedule that the student has already passed.

Configure Online Arena Scheduling

The configuration options in Web Access include the following:

- Enable Entity Year options
- Select Course Master options
- Set Student Scheduling Status
- Define Scheduling Time Periods

This section discusses each of these options.

Enable Entity Year Options

The following Entity Year Options (WS\OF\FS\PS\CF\SE) are specific to Online Arena Scheduling. You must select the first option, but the second one is optional.

- Use Online Arena Scheduling
- Use Advisor Schedule Verification

Use Online Arena Scheduling must be selected in order to see information from the Course Master that are specific to the Online Arena Scheduling process.

Use Advisor Schedule Verification allows staff to view and change a student's schedule, change a student or group of student's Scheduling Status, report which students have submitted their schedules for approval, and post a message for a guardian/student to read and access any messages or responses. The schedule approval functionality is discussed in detail later in this section. See "Student Schedule Status." For information regarding messaging functionality, see the *WSIPC Guide to Family and Student Access for Administrators* and the *WSIPC Guide to Family and Student Access for Students and Guardians*.

Select Course Master Options

Two options in the Course Master (WS\OF\FS\BC\CM) affect how a course appears to a student in Family Access for Online Arena Scheduling. Those options are:

- Available To Online Scheduling
- Prohibit Student from Dropping

Available To Online Scheduling determines whether a course is available for Online Arena Scheduling. If a course is not available, it will not appear in Family Access to the guardian and student as a course that can be selected. The check box appears only if the Use Online Arena Scheduling check box is selected in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE).

NOTE	If this check box is not selected and the course has already been scheduled (either manually by office staff or through an Actual Scheduling Run), the course still cannot be dropped from the student's schedule when using the Online Arena Scheduling process in Family Access.
-------------	--

Prohibit Student from Dropping determines whether a student can drop the class when using Online Arena Scheduling in Family Access. This check box appears only if the Use Online Arena Scheduling check box is selected in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE) and if the Available To Online Scheduling check box is selected for the course. If this course has already been scheduled for a student and they attempt to delete it from their schedule, a message will advise them that they cannot remove it from their schedule

Both of these values on the Course Master can be changed in mass from Yes to No or No to Yes for a range of courses using the Mass Change Course Master Fields utility.

Set Student Scheduling Status

Student Scheduling Status is a flag used for each student to determine if their schedule can be updated using the Online Arena Scheduling process. The initial default value for Student Scheduling Status is Locked. Before a guardian or student can make changes to a student's schedule, the status must be changed to Open. This can be done for an individual student or for a group of students by using the Mass Assign Student Scheduling Status utility. This utility will be discussed in further detail in this section.

The Student Scheduling Status is typically used in conjunction with the Advisor Schedule Verification option, so that when a student submits their schedule and their status is changed to Waiting, a counselor or advisor can review their schedule. The counselor or advisor can place the schedule back into Open status for the student to make additional changes, or place the schedule into Approved status if no further changes are required.

Once student schedules are being created, if counselors, advisors or other staff members want to review the schedules and maintain the Student Scheduling Status they must do this through Scheduling By Student. You can select a Browse of Scheduling Status in the Filter Options and view the Next Year Scheduling Status of each student. You can further define the filter to show students you are responsible for (such as 9th grade students A-M). You will be able to view the student's schedule, and in the Scheduling Status area you can view messages from the student and office staff and edit the student's Scheduling Status.

Table 37 provides a list of possible Student Scheduling Status values and their meanings.

Value	Status	Description
O	Open	Schedule is Open and may be updated by a guardian/student through Online Arena Scheduling in Family Access.
W	Waiting	Schedule is Waiting for approval by staff and may not be updated by a guardian/student. Typically a staff member reviews the schedule and sets the status to Approved or, if more changes are needed by the student, sets the status back to Open.
A	Approved	Schedule has been Approved and may not be updated by a guardian/student. This status helps you see which schedules have been approved by staff versus those in Locked status because they were never set to Open status (because, for example, the student is Inactive or not being scheduled.)
L	Locked	Schedule has been Locked and may not be updated by a guardian/student.

Table 37 – Possible Student Scheduling Status Values and their meanings

To mass-assign Student Scheduling Status:

1. Go to WS\OF\FS\SS\PS\UT\MS.
2. Configure the Mass Assign Student Scheduling Status screen (Figure 68). See Table 38 for details about options on this screen.
3. Click Run. A screen lists all students that will be processed.
4. Click Process to complete the processing and change the status of the students. Click Back to stop the utility (the statuses of the students in the list will not be changed).
5. If you clicked Process in Step 4, a message asks if you would like to continue. Click OK.

NOTE The student's Scheduling Status can be viewed and/or changed in Scheduling By Student (WS\OF\FS\SS\BS). Click the plus sign next to the student's last name and then click the plus sign next to the Scheduling Status for the appropriate school year.
--

https://www2.training.tsd.wa-k12.net/scripts/cgiip.exe/WService=wdev606s71/sschdedit082.w?isPopu|

... | Product Setup | Utilities | Mass Assign Student Scheduling Status

This utility will mass assign student scheduling status for Online Arena Scheduling.

School Year: 2011-12

Student Ranges

Low High

Name Key: ZZZZZZZZZZ

Grad Yr/Grade: 2012 12 2015 09

Advisor Key: ZZZZZZZZZZ

NY Scheduling Team: ZZZ

CY Status

☒ Both
☐ Active
☐ Inactive

NY Status

☐ Both
☒ Active
☐ Inactive

CY Member

☒ Both
☐ Yes
☐ No

Special Ed Students

☒ Include
☐ Exclude
☐ Only

CY Scheduling Status

☒ Include All Status Values
☒ Include 'Locked'
☒ Include 'Open'
☒ Include 'Waiting'
☒ Include 'Approved'

NY Scheduling Status

☒ Include All Status Values
☒ Include 'Locked'
☒ Include 'Open'
☒ Include 'Waiting'
☒ Include 'Approved'

Change Options

CY Scheduling Status

☒ No Change

New Value

☐ Locked
☐ Open
☐ Waiting
☐ Approved

NY Scheduling Status

☐ No Change

New Value

☐ Locked
☒ Open
☐ Waiting
☐ Approved

Run
Run using Processing List
Back

Figure 68 – Mass Assign Student Scheduling Status screen with status selections to change all active students' NY Scheduling Status to Open.

Area	Description of Area
Student Ranges	Determines the students that will be processed by the utility.
Options In This Area	Description of Options
Name Key	Students that will be selected for processing in the utility by Name Key.
Grad Yr/Grade	Students to be processed by Graduation Year/Grade Level.
Advisor Key	Students to be processed by the Advisor assigned to them (Student Profile/Entity Info tab).
NY Scheduling Team	Students to be processed based on the NY Scheduling Team assigned to them (Student Profile/Entity Info tab).
CY Status	Determines whether students will be processed according to their Current Year Status (Student Profile/Entity Info tab).
NY Status	Determines whether students will be processed according to their Next Year Status (Student Profile/Entity Info tab).
CY Member	Determines whether students will be processed according to their Current Year Member status (Student Profile/Entity Info tab).
Special Ed Students	Determines whether Special Education Students will be included in the students to be processed according to their Special Ed flag status (Student Profile/Profile tab).
CY Scheduling Status	Determines which students will be included for processing according to their Current Year Scheduling Status flag. You must uncheck the Include All Status Values check box in order to check or uncheck other status boxes.
NY Scheduling Status	Determines which students will be included for processing according to their Next Year Scheduling Status flag. You must clear the Include All Status Values check box in order to check or uncheck other status boxes. Typically when you are using this utility to change all students' statuses to Open for the first time, you can leave the Include All Status Values box checked.

Area	Description of Area
Change Options	This area of the screen determines what changes will be made to the student's Scheduling Status, for those students who were selected in the Student Ranges area.
Options In This Area	Description of Options
CY Scheduling Status	Determines the value of the Current Year Scheduling Status field for the students selected in the Student Ranges area. If there shouldn't be a change to this value, select No Change.
NY Scheduling Status	Determines the value of the Next Year Scheduling Status field for the students selected in the Student Ranges area. If you are changing all students to Open status so they can create their schedule in Family Access using Online Arena Scheduling, uncheck No Change and select Open as the New Value.

Table 38 – Options on Mass Assign Student Scheduling Status screen

Define Scheduling Time Periods

Scheduling Time Periods must be created for guardians and/or students to access Online Arena Scheduling. They define specific time periods when groups of students are allowed access to update their schedules. The groups of students are defined by Grade Level and there can be multiple groups per grade level, defined by Student Key. Each group has an assigned Date range and Time range which defines their access for Online Arena Scheduling and determines whether a schedule can be created. Each group also requires definition of when the students will no longer be able to schedule classes, which is defined by seat counts.

To define Scheduling Time Periods:

1. Go to WS\OF\FS\RP\PS\CF\OS.
2. Configure the Online Arena Scheduling Time Period Setup screen (Figure 69). See Table 39 for details about options on this screen.
3. Click Save.

In Figure 69, next year's 12th Grade Students can schedule during a three-day range beginning 5/16/2011 at 7:00 a.m. and ending 5/18/2011 at 5:00 p.m. Scheduling into classes for 12th grade students is limited to the Optimum Seat Count on each section.

https://www2.training.tsd.wa-k12.net/scripts/cgiip.exe/WService=wdev606s71/sfoasedit001.w?isPopup=true

... | Configuration | Online Arena Scheduling Time Periods Setup | Online Arena Scheduling Time Period Setup

Online Arena Scheduling Time Period Setup

Entity: 401 WSIPC High School

School Year: 2011-12 Grade Level: 12

* Year: Entire School Year Terms: 01-02

Year starts on 08/31/2011

Start Stop

Student Key: ZZZZZZZZZZ

Date: 05/16/2011 Monday 05/18/2011 Wednesday

Time: 07:00 AM 05:00 PM

* Class Request Maximum: Optimum

Asterisk (*) denotes a required field

Save Back

Figure 69 – Online Arena Scheduling Time Period Setup screen

Option	Description
Grade Level	Grade Level for the group of students being granted access to Online Arena Scheduling. Another group with the same Grade Level can only be created if the Student Key range is different.
Student Key	Students who will be granted access according to their Student Key.
Date	Identifies both the Start and Stop date as the range of dates guardians and/or students will have access to Online Arena Scheduling to create student's schedules. When no other group exists, the default values are today's date. When other groups exist, the dates default to the dates used in the group with the highest grade level. In either case, change the default dates to the correct dates.
Time	Identifies both the Start Time and Stop Time as the range of times (in accordance with the Date ranges) the guardians and students can access Online Arena Scheduling to create schedules. The start and stop times are not specific to each date. The Start Time is specific to the Start Date only, and the Stop Time is specific to the Stop Day only. The default times are 12:00 AM and remain at that time unless changed.

Option	Description
Class Request Maximum	Defines the section seat count limit after which students will no longer be able to schedule classes. For example, if the group Grade Level is 10 and the Class Request Maximum is Optimum, if a 10 th grade student attempts to schedule a section of Art that has an Optimum Count of 20 and that count has been reached, the student can't schedule that class. However, if a 12 th grade student attempts to schedule the same section and the 12 th Grade Level group's Class Request Maximum is Maximum, and the section's Maximum count is 25 and only 23 students are scheduled, the 12 th grader can schedule the class.

Table 39 – Online Arena Scheduling Time Period Setup screen options

Step 3: Use Reports to Analyze Student Schedules

Now that students are scheduled, you'll run reports to analyze the results of the schedules that were created. Some reports are more appropriate if the schedules were created using the Auto Scheduler, and not as useful if guardians/students created their own schedules through Online Arena Scheduling. There are other reports that are useful regardless of which method you used to create the schedules.

The reports that are useful once student schedules have been created are divided into two areas:

- *Scheduling Run Details and Reports.* These reports are run after a scheduling run using the Auto Scheduler is complete.
- *Student Schedule Generation Reports.* These reports focus on information about individual student schedules and help you analyze any student schedule whether it was created using the Auto Scheduler or Online Arena Scheduling.

This section discusses all reports in the two areas above.

View Schedule Run Details and Reports

When the Auto Scheduler generates a scheduling run, details and reports based on the outcome of the scheduling run are generated. You use these details and reports to find out which students and courses have conflicts.

The following reports are available from a schedule generation run in the Auto Scheduler:

- Student Conflict Detail Report
- Course Conflict Report
- Conflict Totals Report

For more information on these reports, see “Run and Interpret the results of the Student Conflict Detail Report,” “Run and Interpret the results of the Course Conflict Report,” or “Run and Interpret the results of the Conflict totals Report” later in this section.

In addition to these reports, details about the Actual scheduling run are available, including details about the options selected when the scheduling run was generated, the totals information that was displayed in report format after the scheduling run was generated, and a Free Period Matrix (if the Free Period Matrix option was selected when the run was generated).

To view schedule run details and reports:

1. Go to WS\OF\FS\SS\AS\RA.
2. Click the plus sign next to the Actual Run Type that you generated.
3. Click the plus sign next to Run Details. The details of the scheduling run appear, which include the selections made when generating the scheduling run.

NOTE	There is one exception in this display: Highest Period. This was not a selection made when generating the scheduling run. Instead, it shows the highest period number that the system finds in the classes that were scheduled by that scheduling run. For example, if the Highest Period value is six the system scheduled students into 1st through 6th periods. If you have a six-period school and a scheduling run indicates a Highest Period of four, it means students were not scheduled into 5th and 6th periods. You need to adjust the master schedule for those two periods.
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4. Links for each of the three available scheduling reports appear if applicable options were selected when generating the scheduling run. Click Student Detail Report, Course Conflict Report or Conflict Totals Report to view a report.

NOTE	The Student Detail Report link will not appear if Create Student Conflict Detail was not selected when generating the scheduling run.
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5. Click the plus sign next to Totals. The data that appears is the same data that was available in report format to view after the scheduling run was generated. It is also the same data that is available when the Conflict Totals Report is generated and the Detail Sequence option Totals Only is selected. For further information on the information available in this report, see “Run and Interpret the results of the Conflict Totals Report” later in this section.

- Click the plus sign next to Free Period Matrix. If the message The Free Period Matrix was not build during this Scheduling Run appears instead of the matrix, the Build Free Period Matrix option was not selected when the scheduling run was generated. It is also the same data available when the Conflict Totals Report is generated and the Detail Sequence option Free Periods By Grade Only or Free Periods By Grade & Totals is selected. For further information on the information available in this report, see “Run and Interpret the results of the Conflict Totals Report” later in this section.

Figure 70 shows the Student Scheduling Run Analysis with all of the options expanded. Notice the Run Details, which provides information about the options you selected when generating the Actual Run, and the hyperlinks which provide access to the Student Conflict Detail Report, Course Conflict Report and Conflict Totals Report.

Available Auto Scheduling Run Records for the 2011-12 School Year

Term	Run Type	Start Date	Start Time	End Date	End Time	Str Grd	End Grd	Student Conflict Percent	User Name
YR (01-04)	Actual	04/15/2011	8:52 AM	04/15/2011	8:52 AM	12	09	68.4% (80/117)	WSIPCWilliams, Julie

[Expand All](#) [Collapse All](#) [Show Details In New Window](#) [Modify Details](#) (displaying 3 of 3)

[Run Details](#) [Student Conflict Detail Report](#) [Course Conflict Report](#) [Conflict Totals Report](#)

Highest Period: **07** Build Free Matrix: **Yes** Start Graduation Year: **2012** End Graduation Year: **2015**
 Close Sections When Filled: **No** Create Conflict Detail: **Yes** Include Imbalances as Conflicts: **No** Encountered Error: **No**

Totals

Grade	Total Students	Conflicts	Conflict Percent	Imbalances	Imbalance Percent
09	0	0	0.0%	0	0.0%
10	27	3	11.1%	24	88.9%
11	30	28	93.3%	2	6.7%
12	60	49	81.7%	3	5%
Totals	117	80	68.4%	29	24.8%

Free Period Matrix

Grade: **12**

DAY	TERM:	1	GRADE:	12	STUDENTS:	60
		--1--	--2--	--3--	--4--	--5--
MON	17	14	22	14	42	2
TUE	17	14	22	14	42	2
WED	17	14	22	14	42	2
THU	17	14	22	14	42	2
FRI	17	14	22	14	42	2
DAY	TERM:	2	GRADE:	12	STUDENTS:	60

23 records displayed Start Date:

Figure 70 – Student Scheduling Run Analysis screen for Actual Scheduling Run with all options expanded.

Run and Interpret the results of the Student Conflict Detail Report

This report lists each student with a scheduling conflict. It explains why a student was or was not scheduled using codes that designate each course’s status. The codes are described in Table 40, Table 41 and Table 42.

To run the Student Conflict Detail Report:

- Go to WS\OF\FS\SS\ASRA.
- Click the plus sign next to the Actual Run Type that you generated.
- Click the plus sign next to Run Details.

4. Click the Student Detail Report link.

NOTE	The Student Detail Report link will not display if Create Student Conflict Detail was not selected when generating the scheduling run.
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5. Select a Student Key range.
6. Select a Grad Yr/Grade range.
7. Select a Report Format.
8. In the Printer Orientation area, select Portrait or Landscape. Details below the area state how many periods will print across the page based on the Report Format and Printer Orientation selected.
9. Select the remaining options as needed:
 - Print One Conflict per Page inserts a page break between students.
 - Double-Space the Report inserts a carriage return between courses.
 - Sort Course by Subject lists courses for a student by subject.
 - Print Conflicts and Imbalances lists any imbalances if the option Include Imbalances As Conflicts was selected when the scheduling run was generated.
 - Print Supplemental Auto Scheduling Arbitrary Scheduling Techniques lists supplemental codes (P, p, O, o, Q and q) to detail how the student was scheduled into a course. If this option is not selected, the technique will be printed as A (Arbitrary).
10. Click Run. The report appears. Table 40, Table 41 and Table 42 explain the report detail and how to interpret the results.

lsoneyr04.p 14-2		NY Sched HS 400 (Instructor)		04/17/11	Page:1
12.02.00		ACTUAL SCHEDULING CONFLICT REPORT FROM 04/15/2011			5:33 PM
Column T		Column F		Indicates whether the students schedule contains a conflict.	
Bronson, Diana		BRONSDIA000 GRADE 12 SEQ# 30		CONFLICT	
COURSE LEN T F DESCRIPTION		-----1----- -----2----- -----7-----			
AMGOV YR *		AMERICAN GOVERN		02 YR -----	
FSCIEN YR I		FRESH. SCIENCE		01 YR MTWRF	
ALGEB2 YR I		ALGEBRA 2		02 YR MTWRF	
CALC 1 YR *		CALCULUS 1		01 YR -----	
WELDG YR I		WELDING		01 YR MTWRF	
SOCIAL SM I		SOCIAL STUDIES		01 S2 MTWRF	
USGOVT SM I		U.S. GOVERNMENT			
WGHTTR SM *		WEIGHT TRAINING		01 T4 MTWRF	
ART 1 TM I		ART 1		02 T4 -----	
ECON TM A		ECONOMICS		01 T2 -----	
FMCOL TM *		FAMILY LIVING		01 T4 -----	
IPROG TM A		INTRO TO PROGR		02 T4 -----	
ART 2 TM I		ART 2		01 T2 MTWRF	
		Conflict Codes can display here (before and after the course length). In this example, the '-----' Conflict Code displays.			

Figure 71 - Student Conflict Report based on the Actual Scheduling Run with the Section/Terms Days Report Format Selected.

To interpret the results of the Student Conflict Detail Report:

1. Locate Column T (Figure 71). The codes that display in Column T designate *how* the course was scheduled. Refer to Table 40 for the specific values that appear in this column.
2. Locate Column F (Figure 71). The codes that display in Column F denote *special scheduling types* for the course. Refer to Table 41 for the specific values that appear in this column.
3. Locate any Conflict Codes (Figure 71). Conflict codes print for any course which the system is not able to schedule. Courses with no conflicts have the days of the week or day rotation numbers that the class is scheduled for, beneath the period assigned column. Refer to Table 42 for the specific values that appear in this column.

Symbol in Column T	Description
(*)	Course could not be scheduled. If other possible sections are shown, those sections conflict with other scheduled sections. If other possible sections are not shown, this course could not be scheduled for any reason other than a conflict with another assigned course. Other codes will be printed for that information.
M	Course was manually placed into the student's schedule by the user. The course was not scheduled by the system.

I	Course was scheduled as an imperative because it is a single-section course or a derived singleton.
i	Course was scheduled as an imperative after another course was arbitrarily scheduled, forcing this course to have only one possible section.
A, O, P, Q, o, p, q	The scheduling program made an arbitrary decision in its attempt to build a schedule. It first attempts to balance the number of students between sections at the point the student is being scheduled.

Table 40– Descriptions of the codes used in Column T of the Student Detail Report

Symbol in Column F	Description
M	Course has a Schedule Type of Manually Scheduled.
D	Course has a Schedule Type of Dropped Course.
G	Course is part of a Lock Group. While a course may appear to be able to be scheduled, if other courses in the Lock group cannot be scheduled into a different term, the course cannot be scheduled. Examine the other courses in the Lock Group to determine how they were scheduled or why they had conflicts.

Table 41 – Descriptions of the codes used in Column F in the Student Detail Report

Conflict Codes	Description
-----	Another period for which the course has a section offered. These dashes print for all of the courses, whether they have conflicts or not. If the section does not meet every day, dashes display only for days the course meets and there will be spaces for the days the course does not meet.
+++++	Student has been blocked from being scheduled into a section for a variety of reasons, including section filled, prerequisite, corequisite or group block. A single letter appears to the left of the Course Length value to indicate the specific reason the student has been blocked.
f	Section is full. If the day pattern also prints, the student is scheduled into the section. If plus symbols appear (+), the student did not get scheduled into the section because it was full.
c	Course has a corequisite. If a student is blocked (+) from being scheduled, it is because its corequisite could not be scheduled.

p	The student has a prerequisite course request for this course. If a student is blocked (+) from being scheduled for this course request, it is because the prerequisite course request could not be scheduled.
b	Course has both a corequisite and a prerequisite course request.
g	Course is part of a Lock Group that should be scheduled in opposite terms.

Table 42 – Descriptions of the Conflict Codes used in the Student Conflict Detail Report

When evaluating this report for conflicts, review student schedules on the report for conflicts that exist for individual students.

Run and Interpret the Results of the Course Conflict Report

This report is a summary of the information of how students were scheduled into sections of courses. It offers totals based on each course and section (if desired), and indicates for each course how many students requested the course, how many received the course, and how many students did not receive the course due to schedule conflicts.

To run the Course Conflict Report:

1. Go to WS\OF\FS\SS\AS\RA.
2. Click the plus sign next to the Actual Run Type that you generated.
3. Click the plus sign next to Run Details.
4. Click the Course Conflict Report link.
5. Select the Detail Sequence of Course Only or Course & Class.

NOTE	Selecting Course Only displays information regarding the Course. This information includes the total number of requests, how many students were scheduled, and the number of conflicts that occurred. Selecting Course & Class displays additional information regarding the sections. The information includes Meeting Pattern detail and Optimum, Maximum and Assigned seat counts.
-------------	---

6. Select Print Courses/Classes Scheduled Period Zero if you want courses still placed in period zero included in the report.
7. Click Run. The report appears.

lsonyr03.p 16-2		NY Sched HS 400 (Instructor)										04/17/11				Page:1					
04.10.12.00.00		Actual Course Conflict Run (Course & Class) Report From 04/15/2011																		5:38 PM	
COURSE		DESCRIPTION			SCD			TOT		COR			CONFLICT'S OPEN PERIODS								
SEC	TEACHER	TRM	PD	DAYS	OPT	MAX	ASG	TYP	REQ	SCD	CONF	LGT	--1-	--2-	--3-	--4-	--5-	--6-	--7-		
ADVPHO	ADV. PHOTOGRA							N	20	14	6	SM	1	2		1	3		2		
01	JTHOMPSON	S2	03	MTWRF	15	20	14														
AEROB	AEROBICS							N	11	11	0	SM									
01	<None>	S2	05	MTWRF	25	30	11														
AGRICU	AGRICULTURE							N	23	14	9	TM	2	2	1	4	4		1		
01	MR WHITE	T1	01	MTWRF	15	20	7														
02	JTHOMPSON	T1	01	MTWRF	15	20	7														
ALGEB1	ALGEBRA 1							N	16	12	4	YR			1						
01	MS GOMPER	YR	03	MTWRF	20	25	6														
02	<None>	YR	03	MTWRF	20	22	6														
ALGEB2	ALGEBRA 2							N	11	7	4	YR							1		
01	MS GOMPER	YR	02	MTWRF	25	30	3														
02	<None>	YR	06	MTWRF	20	22	4														
ALGEBR	PRE-ALGEBRA							N	12	10	2	SM	1			1	2				
01	MS GOMPER	S1	07	MTWRF	15	20	7														
03	<None>	S1	05	MTWRF	20	22	3														

Figure 72 – Course Conflict Report with Course & Class Detail Sequence option selected

To interpret the results of the Course Conflict Report:

1. Locate first row of columns on the Course Conflict Report that you generated. The column descriptions in Table 43 describe the course information and help interpret the results of the report.
2. Locate the second row of columns on the Course Conflict Report that you generated (if you selected the Detail Sequence of Course & Class). The column descriptions in Table 44 below describe the section information for each course and help interpret the results of the report.

Course Column Headings	Description
COURSE	Key of the course.
DESCRIPTION	Short description of the course from the Course Master.
SCD TYP	Schedule Type attached to the course. Schedule Types include N (normal), M (manually scheduled), S (special education) and D (dropped course).
TOT REQ	Number of requests for the course. This count is the total of all grade levels, even if the schedule generation was run for only one or a few Grad Years or Grade Levels.

SCD	Number of students who could be scheduled during the schedule generation run. This count includes only students with the Grad Years or Grade Levels selected during the schedule generation run.
CONF	Number of students who could not be scheduled during the schedule generation run. The count includes students within the Grad Years or Grade Levels selected during the schedule generation run.
COR LGT	Identifies the Course Length of the course from the Course Master.
CONFLICTS OPEN PERIODS	Columns identify by period the number of students who would have been able to take the course had it been offered in a different period (the period under which the value is displayed). In the case of Semester length courses, the count includes students who are free that period for either semester.

Table 43 – Course column headings for the Course Conflict Report

Section Column Headings	Description
SEC	Course section number.
TEACHER	Teacher assigned to the section.
TRM	Term in which the section is going to be taught.
PD	Period in which the section is going to be taught.
DAYS	Days of the week in which the section is going to be taught.
OPT	Optimum number of students to be assigned to the section.
MAX	Maximum number of students to be assigned to the section.
ASG	Number of students assigned to the section during schedule generation.
OPTIMUM EXCEEDED	This message prints for the section when the optimum number of students for the section is exceeded. Students are still scheduled even if the optimum is exceeded.
MAXIMUM EXCEEDED	This message prints for the section when the maximum number of students for the section is exceeded. If the option Close Sections when Filled is set to No, this message is informational and students are scheduled into the section. If the option Close sections when Filled is set to Yes, this message will be “conflicted” out of the course since there are no longer seats available in that section.

Table 44 – Section column headings for the Course Conflict Report

Use this report to see how sections are balanced by reviewing the ASG (assigned) values for each section of a course. In addition, use this report to see how many students could not be assigned to a section by comparing the SCD (scheduled) and CONF (conflict) values for each course. Use this report in conjunction with the Student Conflict Detail Report to determine which students are in conflict.

Run and Interpret the Results of the Conflict Totals Report

This report prints summary information regarding the schedule generation run. The report shows you how many students were scheduled into each period, the total percent of conflicts based on grade level and the total number of students scheduled per period based on grade level.

To run the Conflict Totals Report:

1. Go to WS\OF\FS\SS\AS\RA.
2. Click the plus sign next to the Actual Run Type that you generated.
3. Click the plus sign next to Run Details.
4. Click the Conflict Totals Report link.
5. Select the Detail Sequence of Free Periods By Grade & Totals, Totals Only or Free Periods By Grade Only.
6. Click Run. The report appears.

lsonyr02.p 04-2		NY Sched HS 400 (Instructor)					04/17/11	Page:1
04.10.12.02.00		Auto Scheduling Run - Free Periods By Grade & Totals Report From 04/15/2011						5:40 PM
DAY	TERM: 1	GRADE: 12		STUDENTS: 60				
		--1--	--2--	--3--	--4--	--5--	--6--	--7--
MON		17	14	22	14	42	2	31
TUE		17	14	22	14	42	2	31
WED		17	14	22	14	42	2	31
THU		17	14	22	14	42	2	31
FRI		17	14	22	14	42	2	31

Figure 73 – Conflict Totals Report with Detail Sequence of Free Periods By Grade & Totals selected. In this example, the Free Periods By Grade portion of the report is shown for Grade 12 only and for Term 1 only. Each additional Term is represented in the report, followed by every other Grade Level/Term.

AUTO SCHEDULING RUN TOTALS BY GRADE

GRADE	STUDENTS	CONFLICT	PERCENT	IMBALANCE	PERCENT
09	0	0	11.1%	0	88.9%
10	27	3	11.1%	24	88.9%
11	30	28	93.3%	2	6.7%
12	60	49	81.7%	3	5.0%
Total	117	80	68.4%	29	24.8%

***** End of report *****

Figure 74 - Conflict Totals Report with Detail Sequence of Free Periods By Grade & Totals selected. In this example, the Totals portion of the report is shown, which is at the end of the report.

The following information will help you interpret the Conflict Totals Report.

- The information in this report provides you with an impression concerning the general success of the scheduling run.
- The Free Periods by Grade Detail Sequence option shows in a matrix by period, day of the week and term, the number of students who were not scheduled or would not be scheduled, for each period, in the period column listed. A matrix is available for each grade level that was processed during the schedule generation.
- The Totals Detail Sequence option shows each Grade Level that was processed, the number of students, the conflicts, percent of conflicts, imbalances (if selected when generating the scheduling run) and the imbalances percent (if applicable).
- The higher the percent of conflicts, the more work you must do to individual student schedules. In some cases, a conflict rate of 10% is acceptable, even excellent. In others, a 5% conflict rate may be the goal. For example, if the percent of conflicts is 15% but the Course Conflict Report shows most courses have 1 or 2 conflicts, there is not much left to be done to schedules.

View Student Schedule Generation Reports

The Student Schedule Generation Reports area (WS\OF\FS\SS\RE) contains reports that focus on individual student schedules and identifying conflicts in a student's schedule. Each report is described below.

Student Conflict Report

The Student Conflict Report lists all students within the selected ranges that currently have a scheduling conflict. The report can be sorted by student or by course. If you sort by student, the report generates a list by student and all courses in conflict along with any alternate course requests if that option is also selected. If you sort by course, the report generates a list by course and then all students with conflicts in the course. You can display one of two types of conflicts on this report using one of the two following options:

- **Auto Scheduled Conflicts** - This option includes courses that cannot be scheduled for a student because it causes conflicts with other courses that were scheduled by the Auto Scheduler (but not courses that were manually scheduled or scheduled through Online Arena Scheduling). This report shows the conflicts (requests that could not be scheduled) that are also shown on the Student Conflict Detail Report.
- **Actual Conflicts** - This option includes courses that have already been scheduled (regardless of the scheduling method) and are conflicting. This includes students being double-scheduled (placed into two different courses during the same period). This can happen when a student is manually scheduled into a course after an Auto Scheduling run is performed.

Free Period Report

The Free Period Report generates a list of students who are not scheduled into a section for a specific period of a term. This report can be used as a guide for assigning students to study halls or other course/sections to give them a complete schedule.

Student Credit Count Report

The Student Credit Count Report generates a list of all the students who meet the Credit Range Options criterion. You can use this report to find those students with too few and/or too many scheduled or requested course credits.

Student Schedule Credit Report

The Student Schedule Credit Report generates a list of students who fall within a certain range of course credits. You can use this report to check students' schedules to ensure they have the proper number of credits (GPA or Earned) for the year. The report displays by total credits per semester.

Schedule Changes Report

The Schedule Changes Report generates a list of students who have a drop, add or scheduling transaction adjustment on or during the date range you indicate on the report template. It contains a signature line for each transaction, so students might use this report to obtain a teacher's signature in a class they are dropping or adding to their schedule. This would be turned in to the registrar to verify that the teacher has been notified of change to their class roster.

Scheduled Request Percentage Report

The Scheduled Request Percentage Report allows you to report on the percent of students who were fully scheduled, the percent of students with one unscheduled request, the percent of students with two or more unscheduled requests, and the percent of students with no requests. This report produces results only after the Auto Scheduler has been run. You can re-run the report after schedule changes have been made to obtain updated percentages.

Make Adjustments to Student Schedules

Once you have run, reviewed and interpreted reports, make changes to student schedules to resolve any conflicts. In addition, if the Auto Scheduler was run, use the information you have gathered to determine whether the scheduling run was successful. At this point in the process, remaining conflicts are typically resolved manually. However, if you have layered your scheduling runs (processing certain courses while “ignoring” others), you may want to unschedule students and begin again with a different approach until the conflicts are more acceptable. If Alternate Requests were entered for students, consider resolving conflicts by scheduling the Alternate Requests. You can do this manually or using the Auto Scheduler. See “Step 3: Schedule Student Alternate Requests” for additional information about scheduling alternate requests.

Step 4: Schedule Student Alternate Requests

If Alternate Requests were entered, they can be used to resolve conflicts and fill empty periods in a student’s schedule. You can use the following methods to process Alternate Requests:

- Review Student Alternate Request Report and schedule Alternate Requests manually
- Schedule Alternate Requests using the Auto Scheduler

The first method uses the Student Alternate Request Report to provide a list of the Alternate Requests that were entered for students who have conflicts in their schedules. This list can be given to staff who will work with students to resolve the conflicts and fill the empty periods of their schedule. This method was discussed earlier in this Guide and is not discussed in this section. See “Part Two: Managing Student Requests, Step 2: Enter Requests, Process Alternate Requests” for more information about using this process.

The second method listed, Schedule Alternate Requests is discussed below. This process utilizes the Auto Scheduler but schedules the requests separately from regular requests. An Actual Scheduling Run must be completed prior to running this process.

In general, when processing the Auto Scheduler for Alternate Requests the logic only locks manually scheduled classes and prevents them from being changed in a student’s schedule, potentially allowing any other courses to be changed to a different section, or be left unscheduled. However, there are processing options within the Auto Scheduler for alternate requests that can prevent this from occurring.

When you use the Auto Scheduler to schedule an alternate request, both the regular and alternate requests are set back to their original request types (regular or alternate) if there is a conflict after the Auto Scheduler attempts the scheduling process.

The Auto Scheduler allows alternate requests to be processed in one of three ways:

- Student Paired alternates - This method processes alternate requests that have been paired at the student level. It will swap existing classes for a paired alternate course *regardless of whether the existing class was scheduled or was a conflict*, trying to get a conflict-free schedule. This method is typically considered time-consuming and is not usually used to schedule alternates.
- Course Paired alternates - This method processes all student alternates. It swaps requests that couldn't be scheduled for an alternate course if the conflicting course has the student's alternate in its course alternate list, trying to get a conflict-free schedule.
- Unpaired alternates - This method processes all student alternates. It swaps a scheduled elective course for an alternate course to get a conflict-free schedule. There is an option in this process that does not allow scheduled elective courses to be changed in the student's schedule.

Before running the Auto Scheduler for alternate requests, the requests must be entered for a student or course, the requests must be paired if you are going to run the scheduler for Student Paired alternates, and the alternate requests should be prioritized according to the student's preference. See "Part Two: Managing Student Requests, Step 2: Enter Requests, Process Alternate Requests" for additional information on entering , pairing and prioritizing alternate course requests. Or, see "Part One: Preparing to Schedule, Step 7: Maintain the Course Master, Add Course Alternates" for more information on creating course alternate requests.

Before running the Auto Scheduler for alternate requests, consider how options are configured for courses if alternates are scheduled as Unpaired. Only elective courses can be replaced with alternate course requests. Therefore, courses must have the correct Elective/Required selection in the Course Master. In addition, when the Auto Scheduler determines which elective courses to process, if you are not only processing those electives that have conflicts, the logic processes courses first by Scheduling Priority (and then by alphakey). Therefore, it is important to understand the Scheduling Priority assigned to each Elective course in the Course Master.

To Schedule Student Alternate Requests:

1. Go to WS\OF\FS\SS\AS\SA.
2. Configure the Schedule Alternate Requests Maintenance screen (Figure 75). See Table 45 for details about options on this screen.
3. Click Save and Run.

A report is generated that shows the number of students processed and the number of students who had alternate requests scheduled for each graduation year that was processed.

... | Schedule Alternate Requests | Schedule Alternate Requests Maintenance

Template Settings

* Template Description:

☐ Share this template with other users in entity 400

Alternate Schedule Generation Options

Year To Schedule Alternates For: 2011-12

Terms: Entire Year Terms: 01 - 04

* Grad Yr/Grade: 2012 12 2015 09

☐ Close Sections When Filled

☒ Unschedule Manually Scheduled Sections

Alternate Options

☒ Try Alternates 1 at a Time ☐ Try Alternates 2 at a Time

Alternates to be Processed

☐ Student Paired ☐ Course Paired ☒ Unpaired ?

Unpaired Alternate Options

☒ Only Swap Out Electives that have Conflicts

Asterisk (*) denotes a required field

Figure 75 – Schedule Alternate Requests Maintenance screen, which is used to schedule paired or unpaired Alternate Requests for students.

Option	Description
Grad Yr/Grade	Ranges of students to be scheduled by Graduation Year/Grade Level.
Close Sections When Filled	Determines whether sections of a course will be closed when they are full. The auto-scheduler stops scheduling students into a section once the maximum number of student's value for that section is reached.
Unschedule Manually Scheduled Sections	Allows sections that were manually scheduled to be unscheduled during the scheduling run and possibly changed to a different section, and to be replaced with an alternate request. This option is not available when Course Paired is selected.

Option	Description
Try Alternates 1 at a Time	Based on the Scheduling Priority of the course, the system will use the selected method (Student Paired, Course Paired, Unpaired) and swap courses for the student's alternate requests one at a time. The process tries to schedule the first alternate request. If there is still a conflict it reverts the schedule and try the second alternate request. This process continues, processing all alternate requests if needed, until there is a conflict-free schedule. If an alternate request is scheduled that will give the student a perfect schedule, the process is stopped. If it cannot find an alternate that would eliminate all conflicts in the schedule, it backs out of the schedule and will not save any changes. The schedule will look like it did before the alternate scheduler was run. A benefit to using one alternate at a time may be that the student would get his or her original requested schedule with the exception of one alternate. However, swapping one course out may not be able to resolve the conflicts in a student's schedule. At that point, trying two alternates at a time may be more useful.
Try Alternates 2 at a Time	Based on Scheduling Priority of the course, the system uses the selected method (Student Paired, Course Paired, Unpaired) and swap courses for the student's alternate requests two at a time. The process will attempt every combination of two alternate requests until there is a conflict free schedule. For example, if a student has four alternate requests listed, the system will try two requests at a time, based on the alternates priority: • 1st and 2nd alternates • 1st and 3rd alternates • 1st and 4th alternates • 2nd and 3rd alternates • 2nd and 4th alternates • 3rd and 4th alternates If, by scheduling two alternates, the schedule process results in no conflicts, the process saves the new schedule and moves on to the next student. If there is a conflict, the process undoes the changes and moves on to the next two alternates based on priority.

Option	Description
Student Paired	This method processes alternate requests that have been paired at the student level. It will swap existing classes for a paired alternate course regardless if the existing class was scheduled or was a conflict, trying to get a conflict free schedule.
Course Paired	This method processes all student alternates. It will swap courses with conflicts for an alternate course if the conflicting course has the student's alternate in its course alternate list, trying to get a conflict-free schedule.
Unpaired	This method processes alternate requests for any student that has a conflict in their schedule, swapping elective courses for alternate course requests, attempting to get a conflict-free schedule. Alternate requests should be prioritized in the order the student would like them selected. The following logic is used to process students: • Each student with a conflict, in the range identified, is processed. • Unpaired alternate requests (by order of the alternate) are processed, either 1 or 2 at a time (option on ranges screen). • Alternate requests are swapped for an Elective course, scheduled or not, unless the Only Swap Out Electives that have Conflicts option is selected. Then, only an Elective course with a conflict is swapped and scheduled Elective courses remain scheduled. • Once the student schedule has no remaining conflicts, no additional alternate requests are processed.
Only Swap Out Electives that have Conflicts	Determines which Elective courses are replaced with an alternate request. If selected, only an Elective course that is a conflict is swapped or replaced with an alternate course request. If this option is not selected, any Elective course can be replaced by an alternate course request to attempt to resolve a conflict. This option is only available if Unpaired is selected as the Alternates to be Processed method.

Table 45 – Schedule Alternate Requests Maintenance screen options

PART FIVE: CONCLUDING THE SCHEDULING PROCESS

Now that you've used the scheduling tools to create student schedules and have identified the conflicts in the schedules, the conflicts must be resolved using manual scheduling techniques. In addition, students who weren't included in the scheduling process must be scheduled. Once all students are as fully scheduled as possible, you will also run reports to produce printed student schedules, class rosters, and teacher schedules.

Schedule an Individual Student

There are several ways to schedule an individual student into a specific section. The methods described below address the common methods of building a schedule for an individual student or resolving conflicts. There are other ways to schedule students that involve adding requests and scheduling those existing requests. Those methods, Scheduling Groups and the Walk-In Scheduler, are discussed later in this section.

- By Course
- By Period
- By Subject
- By Teacher
- By Open Classes
- By Class (using the Schedule By Class button)

By Course

The Add By Course method for scheduling a student into a section allows you to locate a course by its Course Key and then select the course's section.

To schedule a student into a section by course:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the arrow to the right of the Add Course box and select Add By Course. Add Course appears next to the heading that has the next year's dates and the word *Schedule*. For example, 2011-12 Schedule.
5. On the browse screen, locate the course into which you want to enroll the student and click the plus sign next to it.

NOTE	The Course Code appears in red font for any course request currently listed on the student's schedule (scheduled or unscheduled).
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6. Locate the section you want to enroll the student into. If the word No appears under the Fit heading of a section's browse details, the section does not fit into the student's scheduled classes. If the word Yes appears, the section fits. If the word Enr appears, the student is already enrolled in the section. See Figure 76 below for an example of a course with sections that fit and do not fit into the student's schedule.
7. Click Schedule Section. If your Entity allows students to enroll in a subset of a course (for example, if a student is allowed to enroll in Semester 1 of a year-long course), a Class Control Sets dialog box appears. Highlight the Control Set you want to enroll the student into and click Select.
8. The student is scheduled into the section you selected. If you must enroll the student into other sections by course, repeat steps 5 through 7 for all course/sections you're enrolling the student into.
9. When you're done, click Finish.

Home Page | Office | Future Scheduling | Student Schedule Generation | Future Scheduling By Student | Add By Course

Student: Alex Adams Grad Yr: 2013 Grade: 11 DOB: 07/20/1995 Age: 16 Total Credits: 3,500

2011-12 Available Courses - Skyward Default

Course	Description	Fit	Length	Subject	Required/ Elective	Grades	Credits	Number of Sections	Number of Requests	Total Av
FORLAN	FOREIGN LANGUAGES	Yes	YR	FOR	Elective	09-12	1,000	2	12	
Section 01 Schedule Section										
Fit	Term	Prd	Str	Stp	Days	Teacher	Bld	Room	Max	Avail
No	YR (01-04)	06	01	04	MTWRF				25	20
Section 02 Schedule Section										
Fit	Term	Prd	Str	Stp	Days	Teacher	Bld	Room	Max	Avail
Yes	YR (01-04)	02	01	04	MTWRF		400		22	18
FPE	FRESHMAN PHYSICAL EDUCATION	Yes	YR	PE	Required	09-12	1,000	4	14	
FSCIEN	FRESHMAN SCIENCE	Yes	YR	SCI	Required	09-12	1,000	2	10	
GBIOLO	GENERAL BIOLOGY	Yes	YR	SCI	Elective	09-12	1,000	2	9	

25 records displayed

Figure 76 – Add By Course screen with Course selected that has Sections that fit (indicated by Yes) and do not fit (indicated by No) into the selected student's schedule for 2011-12.

By Period

The Add By Period method for scheduling a student into a section allows you to locate a course by the period of the day it's offered and select which section to enroll the student into. This is very helpful when resolving a conflict when a student has a free period that needs to be filled.

To schedule a student into a section by period:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.

4. Click the arrow to the right of the Add Course box and select Add By Period. Add Course appears next to the heading that has the next year's dates and the word *Schedule*. For example, 2011-12 Schedule.
5. In the Display Period Entry dialog box enter the period you want to schedule a course/section for and click OK.
6. On the Add By Period screen, locate the course you want to enroll the student into and click the plus sign next to it.

NOTE	The Course Code appears in red font for any course request currently on the student's schedule (scheduled or unscheduled).
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7. Locate the section you want to enroll the student into. If the word No appears under the Fit heading of a section's browse details, the section does not fit into the student's scheduled classes. If the word Yes appears, the section fits. If the word Enr appears, the student is already enrolled in the section.
8. Click Schedule Section. If your Entity allows students to enroll in a subset of a course (for example, if a student is allowed to enroll in Semester 1 of a year-long course), a Class Control Sets dialog box appears. Highlight the Control Set you want to enroll the student into and click Select.
9. The student is scheduled into the section you selected. If you must enroll the student into other sections by period, click New Period and repeat steps 5 through 9 for all course/sections you're enrolling the student into.
10. When you're done, click Finish.

By Subject

The Add By Subject method for scheduling a student into a section allows you to locate a course by the subject that is assigned to the course in the course master and select which section to enroll the student into. This is very helpful when resolving a conflict when a student needs a course in a certain subject area to complete their schedule.

To schedule a student into a section by subject:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the arrow to the right of the Add Course box and select Add By Subject. Add Course appears next to the heading that has the next year's dates and the word *Schedule*. For example, 2011-12 Schedule.

5. In the Subject box, select a subject that you want to schedule a course/section for and click OK.
6. On the Add By Subject screen, locate the course you want to enroll the student into and click the plus sign next to it.

NOTE	The Course Code appears in red font for any course request currently on the student's schedule (scheduled or unscheduled).
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7. Locate the section you want to enroll the student into. If the word No appears under the Fit heading of a section's browse details, the section does not fit into the student's scheduled classes. If the word Yes appears, the section fits. If the word Enr appears, the student is already enrolled in the section.
8. Click Schedule Section. If your Entity allows students to enroll in a subset of a course (for example, if a student is allowed to enroll in Semester 1 of a year-long course), a Class Control Sets dialog box appears. Highlight the Control Set you want to enroll the student into and click Select.
9. The student is scheduled into the section you selected. If you must enroll the student into other sections by period, click New Subject and repeat steps 5 through 9 for all course/sections you're enrolling the student into.
10. When you're done, click Finish.

By Teacher

The Add By Teacher method for scheduling a student into a section allows you to locate all sections of a course taught by a teacher and then select the section to enroll the student into.

To schedule a student into a section by teacher:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the arrow to the right of the Add Course box and select Add By Teacher. Add Course appears next to the heading that has the next year's dates and the word *Schedule*. For example, 2011-12 Schedule.
5. In the Show Classes With box, select a Specific Teacher.
6. Type or select the teacher's Name Key in the Teacher box and click OK.
7. Locate the course you want to enroll the student into and click the plus sign next to it.

8. Locate the section you want to enroll the student into. If the word No appears under the Fit heading of a section's browse details, the section does not fit into the student's scheduled classes. If the word Yes appears, the section fits. If the word Enr appears, the student is already enrolled in the section.
9. Click Schedule Section. If your Entity allows students to enroll in a subset of a course (for example, if a student is allowed to enroll in Semester 1 of a year-long course), a Class Control Sets dialog box appears. Highlight the Control Set you want to enroll the student into and click Select.
10. The student is scheduled into the section you selected. If you must enroll the student into other sections by teacher, click New Teacher and repeat steps 5 through 9 for all course/sections you're enrolling the student into.
11. When you're done, click Finish.

By Open Classes

The Add By Open Classes method for scheduling a student into a section allows you to locate only those sections of a course that have sections with available seats and then select the section to enroll the student into.

To schedule a student into a section by open classes:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the arrow to the right of the Add Course box and select Add By Open Classes. Add Course appears next to the heading that has the next year's dates and the word *Schedule*. For example, 2011-12 Schedule.
5. Locate the course you want to enroll the student into and click the plus sign next to it.
6. Locate the section you want to enroll the student into. If the word No appears under the Fit heading of a section's browse details, the section does not fit into the student's scheduled classes. If the word Yes appears, the section fits. If the word Enr appears, the student is already enrolled in the section.
7. Click Schedule Section. If your Entity allows students to enroll in a subset of a course (for example, if a student is allowed to enroll in Semester 1 of a year-long course), a Class Control Sets dialog box appears. Highlight the Control Set you want to enroll the student into and click Select.

8. The student is scheduled into the section you selected. If you must enroll the student into other open sections, repeat steps 5 through 7 for all course/sections you're enrolling the student into.
9. When you're done, click Finish.

By Class

Scheduling by Class (Section) is one of the primary areas used to enroll a student into a section. Unlike the Scheduling by Student area, where you locate a student and then add a section to the student's schedule by course, period, teacher or scheduling group, in the Scheduling by Class area you first locate the course and section and then enroll the student into it.

To schedule a student into a section in the Scheduling By Class area:

1. Go to WS\OF\FS\SS\BC.
2. Locate the course and section on the Scheduling By Class screen.
3. Click the plus sign next to the course/section.
4. Next to the Class List heading, click Add Student.
5. On the Add Students to Class screen, locate the student you're scheduling.
6. Select the Add check box next to their name.
7. Click Save. If your Entity allows students to enroll in a subset of a course (for example, if a student is allowed to enroll in Semester 1 of a year-long course), a Class Control Sets dialog box appears. Highlight the Control Set you want to enroll the student into and click Select.

The student is scheduled into the section.

You can use the Scheduling by Class area to simultaneously schedule many students into the same course and section. To do this, during step 5 and 6 of the process, locate all of the students you want to enroll and select the Add check box for each of them.

Use Scheduling Groups to Schedule a Student

Scheduling Groups group sections and/or courses together and assign them to a student for Current or Future Scheduling purposes. The courses that comprise a Scheduling Group can be assigned at the request level or at the scheduled class level. A Scheduling Group allows for the request or scheduling of the same group of classes all at once rather than individually by course or section. This is useful for assigning requests, or creating a schedule for students that were not registered when Future Year Scheduling was performed.

An example might be a Scheduling Group called “9th Grade” which groups all core classes that 9th graders are required to take. After creating a “9th Grade” Scheduling Group, you can then assign the Scheduling Group to a 9th grader which in one step then gives that 9th grader a request for all requested courses in the group. You would then use the Walk-In Scheduler to schedule the requests for the student.

Create a Scheduling Group

Before assigning a student to a Scheduling Group, the group must be created and courses/classes assigned to the group. When creating the group you must specify whether the group will consist of Requests Only (unscheduled at the course level), Classes Only (scheduled at the section level) or Both (a mixture of unscheduled and scheduled courses/classes).

To create a Scheduling Group:

1. Go to WS\OF\FS\BC\PS\CO\SG.
2. Click Add.
3. In the Code box, type a code up to eight characters long to identify the group.
4. In the Grade Level box, enter a grade level. This restricts the Scheduling Group to students with the same Grade Level only.
5. Select a Type value that represents the type of courses/classes that the group will contain.
6. Enter a Description for the group, up to 20 characters in length.
7. Click Save.
8. To add courses to the Scheduling Group, click the plus sign next to the Group Code.
9. Click Add Course Request to add unscheduled request or Add Class Section to add course sections. These options are dependent on the Type selected when the group was created.
10. Select applicable courses and/or classes from the Add Course Request screen that you want to include in the Scheduling Group.
11. Click Save.

Clone Scheduling Groups

The Clone Scheduling Groups Utility allows you to clone Scheduling Groups from one school year to another instead of creating groups again each school year.

To clone Scheduling Groups:

1. Go to WS\OF\FS\BC\PS\UT\CS.
2. Select the School Year to copy from. This should be current school year.
3. Select the School Year to copy to. This should be the next school year.
4. Select Overwrite details of existing Scheduling Groups if you want any existing Scheduling Groups in the next school year, to be overwritten with the Scheduling Groups from the current school year.
5. Select the check box next to the Scheduling Group(s) that you want cloned to the next school year.
6. Click Clone.

Assign a Scheduling Group to a Student

The Add By Scheduling Group method allows you to add requests or schedule a student into all sections of the scheduling group simultaneously.

To assign a Scheduling Group to a Student:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the arrow to the right of the Add Course box and select Add By Scheduling Group. Add Course appears next to the heading that has the next year's dates and the word *Schedule*. For example, 2011-12 Schedule.
5. On the Scheduling Group Entry dialog box select the appropriate Scheduling Group from the Scheduling Group box and click OK.

NOTE	If Scheduling Group selections do not appear, then there are not any Scheduling Groups for the selected school year with a Grade Level equal to the student's Grade Level.
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6. On the Add by Scheduling Group screen if the word No appears under the Fit heading, the section does not fit into the student's scheduled classes. If the word Yes appears, the course/section fits into the student's current schedule. Click Finish to exit the screen without adding a Scheduling Group to the student. Click Add to continue and add the courses/sections to the student's schedule.
7. Click Continue on the Run Schedule Process message.

8. If your Entity allows students to enroll in a subset of a course (for example, if a student is allowed to enroll in Semester 1 of a year-long course), a Class Control Sets dialog box appears for each applicable course/section. Highlight the Control Set you want to enroll the student into for the selected course/section and click Select. Repeat this process for each course that the Class Control Sets screen appears.
9. When the process is done, click OK.
10. Click Finish.

If requests for courses were added to a student's schedule with the Scheduling Group, run the Walk-In Scheduler to schedule the course requests. See "Using the Walk-In Scheduler" for more information about this process.

Use the Walk-In Scheduler to Schedule a Student

All of the methods for scheduling a student explained so far involve scheduling by hand. In other words, you decide which section of a course the student is scheduled into. If you'd prefer to use an automatic scheduling program for an individual student, use the Walk-In Scheduler.

NOTE	Before you can use the Walk-In Scheduler, you must assign course requests to a student. You can assign course requests for a student using the same methods you used to schedule a student into a section: By Course, By Period, By Subject, By Teacher, By Scheduling Group or By Open Classes. See "Schedule an Individual Student" and "Use Scheduling Groups to Schedule a Student" for details on these procedures.
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To use the Walk-In Scheduler to schedule a student:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Next to the heading that has the next year's dates and the word *Schedule* (e.g. 2011-12 Schedule) click Utilities.
5. On the Utilities menu, click Walk-In Scheduler.
6. In the Scheduling Options area on the Walk-In Scheduler screen, select the options that you want. See the table below Figure 77 for an explanation of each option.
7. Click Save.
8. Click Auto Schedule.

9. Do one of the following:

- Click Accept to accept the schedule as the utility scheduled it. If you like most of the schedule but not all of it, accept the schedule and unlock the courses you want to reschedule.

To unlock a single course, double-click its record in the Courses To Be Scheduled list. Click Auto Schedule to run the utility again to see if you get different results. The results are typically the same unless changes have been made in the Course Master area, such as adding more sections or changing a period on a class.

- Click Revert to reject the schedule as the utility scheduled it. You can then use the Ignored Courses area to ignore a course on another scheduling run to see if the run schedules the student more successfully.

To use the Ignored Courses area, highlight the course to be ignored in the Courses To Be Scheduled list and click Remove. Then click Auto Schedule. When courses in the Courses To Be Scheduled Area are scheduled to your satisfaction, click Accept. In the Ignored Courses area, click Add to place courses back in the Courses To Be Scheduled area. Click Auto Schedule to schedule the remaining courses. Repeat this process until you have an acceptable schedule.

NOTE	When Revert is selected In the Courses To Be Scheduled area, only courses not locked are unscheduled. Unlock All allows scheduled classes to be unscheduled and rescheduled again. Lock All allows scheduled courses to be locked so that they aren't unscheduled when the scheduler is run again.
-------------	--

10. After you accept the schedule, click OK.

Home Page | Office | Future Scheduling | Student Schedule Generation | Future Scheduling By Student | Walk-In Scheduler

Scheduling Options
☐ Unschedule Manually Scheduled Sections Save
☐ Close Sections When Filled Reset
☐ Check Prerequisites
☒ Always Display Prerequisites
☐ Only Display Prerequisites When Not Met

Term(s) To Schedule/Unschedule
All=All Year Schedule Terms=01-04
Note: Any Course Scheduled in the Other Term(s)
(Including Year Long Courses) will Not be Affected by this Process.

Ignored Courses [Add All Ignored Courses](#)

Course	Description	Term	Credits	R/E
--------	-------------	------	---------	-----

OK

Info

Back

Courses To Be Scheduled for Adams, Alex

Locked	Course	Description	Term	Period	Days Meet	Start	Stop	Room	Teacher	Credits	R/E	Seq
	ADVPHO	ADV. PHOTOGRAPH	SM							0.5000	E	
	AMGOV	AMERICAN GOVERN	YR							1.0000	R	
	ENGL10	ENGLISH 10	YR							1.0000	R	
Yes	PE10 /01	PHY ED 10	YR	04	MTWRF	1	4		-None-	1.0000	E	M

Remove

Remove All

Auto Schedule

Lock All

Unlock All

Accept

Revert

4 records displayed

Figure 77 – Walk-In Scheduler Scheduling Options in upper-left corner of screen with recommended options selected.

Option	Description
Unschedule Manually Scheduled Sections	Allows the Walk-In Scheduler to unschedule manually scheduled sections.
Close Sections When Filled	The Walk-In Scheduler will not schedule a student into a section once the maximum number of students value for that section is reached.
Check Prerequisites	The system validates course prerequisites before permitting the student to be scheduled into a section.
Term(s) To Schedule/Unschedule	Determines which terms the student should be scheduled for.

Table 46 – Scheduling Options on the Walk-In Scheduler screen

Deleting Unscheduled Requests

When a scheduling run is complete and student conflicts are resolved, any remaining unscheduled requests on a student's schedule can either be kept or deleted. If the unscheduled requests are kept, they can be used later if a student drops a course as useful information to place the student into another course. For a cleaner student schedule, the unscheduled requests can be deleted. This process does not delete alternate requests.

To delete unscheduled requests:

1. Go to WS\OF\FS\RP\PS\UT\MA.
2. Click Add.
3. Verify that the year in the School Year box is correct. The default is the school year being scheduled.
4. Click Range. Make selections on the Range screen as needed. Be sure the range includes students whose unscheduled requests should be deleted.
5. Click Save.
6. If the Range option is selected, you can click Exclusions and select courses. Requests for students in the ranges are not deleted if the student already has a request for a course selected as an exclusion. The exclusion feature is typically not used when deleting requests.
7. Click Save or Back.
8. In the Process Type box, select Delete Course/Class. This deletes course request(s) for the students identified in Process By. Click Course to delete unscheduled requests for the selected student(s).
9. Make Course selections and click Save.
10. Click Save and Process.
11. The utility is processed through the Print Queue. Click Preview Data to Process to view the list of students that will be processed. If the list of students is correct, click Back and click Run the Update. If the list of students is not correct, click Back and refine the student selections (Individual or Range) or click Remove From Update to remove the student from the process of having unscheduled requests deleted.
12. A message asks if you want to continue. Click OK.

The results are processed through the Print Queue. A report shows the students and the Courses that were processed as well as the students name and the number of courses deleted for each student. The total Exclusions (if selected) value is listed (the number of students for which a request was *not* deleted). The last page of the report shows the total number of students processed and the total number of Student Class Records that were updated.

Running Reports

There are several reports available in the Future Scheduling module that provide information that is useful once student schedules are created and conflicts are resolved. Each report is described below.

To access these reports:

- Go to WS\OF\FS\RE.

Class Mailing Labels Report

The Class Mailing Labels Report is useful when documents must be mailed to the homes of students in particular classes. For example, you can use this report to generate labels to send home a welcome/introduction letter for all English 101 classes. The mailing labels can be generated for students or their parents/guardians for a selected group of classes or by a range of classes. You can include students who are currently enrolled in the section and/or those who have dropped it.

Class Roster Report

The Class Roster Report generates a list of student names and can include certain student demographic information such as date of birth, address, and home phone. This report can be generated for a single section, for several sections of different courses, or for a range of sections. The contents of the report are determined by the choices you make in the Roster Options, Items to Print, Formatting and Student Ranges areas of the report template.

Course/Class Count Report

The Course/Class Count Report generates a list of courses with specific enrollment capacity information according to the Report Options you identify on the report template. This report can provide a breakdown of course section enrollment by gender, grade level, ethnicity and school. This report is often used to justify the need for additional teacher FTE in an Entity.

Student Schedules

The Student Schedules Report generates a student's schedule. The report can be run for a single student, several students or a range of students. The Student Printing Options for this report template allow you to use this report to identify students who:

- Do not have a schedule (select Print Blank Schedules).
- Have unresolved conflicts (select Print Only Auto-Scheduled Conflicts and Print Unassigned Courses).

- Are over-scheduled or under-scheduled - have too many or not enough sections scheduled (select Print Students with _____ # Scheduled Courses).
- Had a scheduling transaction occur on a specific date (select Only Schedules with Changes on TranFile).

This report is also available in Scheduling By Student (WS\OF\FS\SS\BS).

Schedule Cards Report

The Schedule Cards Report is another report that generates a student's schedule. This report has fewer printing options compared to the Student Schedules report because it is intended to be printed on card stock, which most Data Center printers do not support.

Teacher Schedules Report

The Teacher Schedules Report generates a matrix view by period of a teacher's assigned sections. You can also use the report to:

- Identify teachers without scheduled classes (select Print Teachers Without Scheduled Classes).
- Identify staff who are assigned scheduled classes but who are not flagged as teachers in the staff table (select Print Staff Members Not Flagged as a Teacher Assigned to a Class).
- Print period times on this report, but to appear correctly on this report you must set up the Scheduling Period Times information in Build Course Master Codes area (WS\OF\FS\BC\PS\CO\SP). Select Print Period Start/Stop Time in Header.

MISCELLANEOUS SCHEDULING MAINTENANCE

Outside of the sequential scheduling process, there are several processes in the Future Scheduling module that help you maintain schedules. This includes the following:

- Changing and Deleting a Student's Schedule
- Managing Student Schedule Transaction Records
- Using Scheduling Screen Defaults
- Managing Scheduling Codes
- Running Utilities
- Running Reports

This section explains each of these topics.

Changing a Student's Schedule

After creating student schedules, you may need to make changes to a schedule. Future Scheduling allows you to make many kinds of changes to a student's schedule. For example, you can drop a student from a section or change the amount of credit that the student earns for the section. This section shows you how to make changes to a student's schedule.

WARNING	If the Allow Students to be Double-Scheduled check box is selected in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE), you can schedule students into sections that do not fit their schedule.
----------------	---

Editing a Student's Section

When you schedule a student into a section, a personal section record is created for the student. This record contains specific information about the student's enrollment in the section. For example, it specifies the following:

- How many credits the student earns
- How long the student is enrolled in the section (for example, Term 1 of Semester 1)
- Whether the student earns Student Transcript GLO (Grade Level Override)
- Whether the student earns Washington Course Designators

You can edit this information by editing the personal section record. For example, you can specify that a particular student earns .33 credits for a passing grade rather than .50 credits.

To edit a student's section:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.

3. Click the plus sign next to the student's name.
4. Click the plus sign next to the heading that has next year's dates and the word *schedule*. For example, 2011-12 Schedule.
5. Locate the course and section you want to change and click the E link next to it.
6. On the Student Class Maintenance screen, change any of the values in the Student Class Information area that you want and then click Save.

This process can also be performed in the Scheduling By Class area of Web Access Student Management (WS\OF\FS\SS\BC).

Dropping or Deleting a Student's Section

You can drop a section from a student's schedule, and in some cases you can delete it. Dropping a section retains all transaction records in the transaction file, but deleting it removes these records and in some cases can also delete grades, if you are scheduling a future term in the current school year and if any grades exist.

Before dropping or deleting a section, consider the information in step 6 below.

To drop or delete a section from a student's schedule:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the plus sign next to the heading that has the next year's dates and the word *schedule*. For example, 2011-12 Schedule.
5. Locate the course and section you want to drop or delete and click the D link next to it. One of two things occurs:
 - The Delete or Drop/Inactive This Class dialog box appears if the student has no Gradebook assignment grades in the section's Gradebook.
 - The Drop/Inactive This Class dialog box appears if the student has existing Gradebook assignment grades in the section's Gradebook.

6. Click Drop or Delete. You can click Delete only if the following are true:
 - You know the student will not be reactivated (re-enrolled) into the section.
 - Gradebook Assignment grades do not exist.
 - The student will not receive a grade in the section after being dropped.
 - You know the student will not be reactivated (re-enrolled) into the section.

This procedure can also be performed in the Scheduling By Class area of Web Access Student Management (WS\OF\FS\SS\BC).

Changing a Student's Section

Use the Change feature to move a student from one section of a course to another. This feature drops (or deletes) the student from one section and enrolls them into another section of that course.

To change a student's section for the same course:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the plus sign next to the heading that has the next year's dates and the word *schedule*. For example, 2011-12 Schedule.
5. Locate the course and section you want to change and click the C link next to it.
6. The Change Section screen appears and lists all of the sections for this same course, including the one the student is currently scheduled into. If the word No appears under the Fit heading of the browse, the section does not fit into the student's scheduled classes. If the word Yes appears, the section fits. When the word Enr appears, this is the section the student is currently scheduled into.
7. Highlight the section you want to move the student into and click Schedule. One of two things occurs:
 - The Delete or Drop/Inactive This Class dialog box appears if the student has no Gradebook assignment grades in the section's Gradebook.
 - The Drop/Inactive This Class dialog box appears if the student has existing Gradebook assignment grades in the section's Gradebook.

8. Click Drop unless:

- No Gradebook Assignment grades exist.
- The student will not receive a grade in the section after being dropped.
- You know the student will not be reactivated (re-enrolled) into the section.

If the section fits into the student's schedule without conflict, the transaction completes and the student is enrolled into the new section. However, if there is a conflict the Scheduling Conflict screen appears. You must first drop the conflicting section before the section change transaction can complete.

NOTE	A Class Control Sets dialog box may appear if your Entity allows students to enroll in a subset of a class. If this occurs, highlight the control set you want to enroll the student into and click Select.
-------------	---

Replacing a Student's Section with a Section from a Different Course

Use the Replace feature to replace the section a student is currently enrolled in with a section from *different* course. This feature drops (or deletes) the student from one section and enrolls them into another course and section.

To replace a student's section with a section from a different course:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the plus sign next to the heading that has the next year's dates and the word *schedule*. For example, 2011-12 Schedule.
5. Locate the course and section you want to replace and click the R link next to it. The Replace Section screen appears with a list of the Course Master courses.
6. On the browse screen, locate the course you want to enroll the student into and click the plus sign next to it. The section browse details appear. If the word No appears under the Fit heading of a section's browse details, the section does not fit into the student's scheduled classes. If the word Yes appears, the section fits. If the word Enr appears, the student is already enrolled in the section.

7. Locate the section you want to enroll the student into and click Schedule Section next to it.

One of two things occurs:

- The Delete or Drop/Inactivate This Class dialog box appears if the student has no Gradebook assignment grades for the section you want to drop.
- The Drop/Inactivate This Class dialog box appears if the student *does* have existing Gradebook assignment grades for the section you want to drop.

8. Click Drop unless:

- No Gradebook Assignment grades exist.
- The student will not receive a grade in the section after being dropped.
- You know the student will not be reactivated (re-enrolled) into the section.

If the section fits into the student's schedule without conflict, the transaction completes and the student is enrolled into the new section. However, if there is a conflict the Scheduling Conflict screen appears. You must first drop the conflicting section before the section change transaction can complete.

NOTE	A Class Control Sets dialog box may appear if your Entity allows students to enroll in a subset of a class. If this occurs, highlight the control set you want to enroll the student into and click Select.
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Activating a Student's Dropped Section

Use the Activate feature to re-enroll a student into a section they dropped. This action can be performed only on a student's dropped section, not on a deleted section.

To activate a student's dropped section:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the plus sign next to the heading that has the next year's dates and the word *schedule*. For example, 2011-12 Schedule.
5. Locate the course and section you want to activate and click the A link next to it. The Class Control Sets dialog box may appear if your Entity allows students to enroll in a subset of a class. If this occurs, highlight the control set you want to enroll the student into and click Select.

NOTE	A section dropped from a student's schedule appears in the Schedule list with an A link next to it. This indicates the section was dropped and can be activated. A section deleted from a student's schedule no longer appears in the Schedule list. Dropped courses appear in the browse details in green highlight. To view dropped courses, set your Defaults to display dropped classes. See "Understanding the Scheduling Browse Screen Defaults" for details.
-------------	---

If the section fits into the student's schedule without conflict, the student becomes active in the section. However, if there is a conflict the Scheduling Conflict screen appears. You must first drop the conflicting section before the student becomes active once again in the section you're activating.

This process can also be performed in the Scheduling By Class area of Web Access Student Management (WS\OF\FS\SS\BC).

Deleting a Student's Schedule

Instead of dropping a student from each section individually, you can use the Mass Delete Schedule utility to drop the student from all scheduled sections at once.

To delete a student's entire schedule:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Next to the heading that has the next year's dates and the word *schedule* (for example, 2011-12 Schedule) click Utilities.
5. On the Utilities menu, select Mass Delete Schedule.
6. Enter an Effective Date for the sections being dropped or deleted. A future date cannot be used.

7. If the Classes With Grades area is available, select Drop/Inactivate on the Mass Delete Schedule dialog box unless:

- You want to retain any Gradebook Assignment grades that exist.
- The student will not receive a grade in the section after you've dropped them.
- You know the student will not be reactivated (re-enrolled) into the section.

The Classes With Grades area is available if the Allow Delete of Class With Grades Present check box is selected in the Scheduling Options area of Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE).

8. Select Drop/Inactivate in the Classes Without Grades area on the Mass Delete Schedule dialog box unless:

- No Gradebook Assignment grades exist.
- The student will not receive a grade in the section after you've dropped them.
- You know the student will not be reactivated (re-enrolled) into the section.

WARNING	Sections that have Gradebook grades can be deleted if the Allow Delete of Class With Grades Present check box is selected in Scheduling Entity Year Setup, Scheduling Options (WS\OF\FS\PS\CF\SE).
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9. Click Run.

Managing Student Schedule Transaction Records

Every time a change occurs to a section a student is scheduled into (including add and drop or delete), a transaction record containing information about the change is created. This information provides a historical record of the changes in a student's schedule, affects proper attendance entry, and affects your ability to add or drop other sections from the student's schedule.

NOTE	To record transaction records for the next year, the Track Student Schedule Changes option must be enabled in the <i>current</i> School Year for the Future Year in the Scheduling Options area of Scheduling Entity Year Setup (WS\OF\FS\PS\DF\SE>Edit). The option is located in the Scheduling Change Tracking Options area of the screen.
-------------	---

Viewing a Transaction Record

Transaction records contain information such as the date a student was added into a section, the date the student was dropped, the name of person who performed the transaction, and the date and time the transaction took place.

To view a student's scheduling transaction records:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the plus sign next to the heading that has the next year's dates and the words *scheduling transactions* (for example, 2011-12 Schedule Transactions).
5. The Scheduling Transactions browse details appears showing the most recent transaction records (up to 16).
6. To view all scheduling transaction records for the student, click View All Transactions next to the Scheduling Transactions heading.

Modifying a Transaction Record

A transaction record can be modified to apply attendance from one class (dropped) to another class (added) or to change the effective date of the record.

To modify a student's scheduling transaction record:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the plus sign next to the heading that has the next year's dates and the words *scheduling transactions* (for example, 2011-12 Schedule Transactions). The Scheduling Transactions browse details appears displaying the most recent transaction records (up to 16).
5. Click Edit next to the record you want to modify.

6. Update the New Effective Date and select the Apply Attendance from Old Class to New Class check box to move attendance. You have the option to Apply Attendance from Old Class to New Class only for a Drop record, not an Add record. After you select the option, select the New Class to which you want to move the attendance.

CAUTION Be careful when selecting the New Class to apply attendance to. Attendance can be applied to a section the student isn't enrolled in.
--

7. Click Save.

Deleting a Transaction Record

Sometimes a scheduling transaction record can cause problems in attendance entry for a student and can prevent other scheduling transactions, such adding or dropping a section. Under such circumstances, it may be necessary to delete a student's scheduling transaction record.

CAUTION Although you can delete a student's scheduling transaction record, doing so can also cause attendance and scheduling problems for the student. Before deleting a scheduling transaction record, consult a Student Records Coordinator.

To delete a student's scheduling transaction record:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Current Scheduling By Student screen.
3. Click the plus sign next to the student's name.
4. Click the plus sign next to the heading that has the next year's dates and the words *scheduling transactions* (for example, 2011-12 Schedule Transactions). The Scheduling Transactions browse details appears displaying the most recent transaction records (up to 16).
5. Click Delete next to the record you want to delete.

Viewing the Transaction Record Audit Trail

The Audit Trail log lists every transaction record for a student's schedule. The Audit Trail log includes all Add, Drop, Delete, Change, Replace and Activate transaction records that are created when you schedule or unschedule a student. The Audit Trail log also contains any transaction records deleted from the Transaction Record file.

To view a transaction record audit trail:

1. Go to WS\OF\FS\SS\BS.
2. Locate the student on the Future Scheduling By Student screen.

3. Click the plus sign next to the student's name.
4. Click Audit Trail next to the heading that has the next year's dates and the words *scheduling transactions* (for example, 2011-12 Schedule Transactions).

Configuring the Scheduling Screen Defaults

You can configure the Future Scheduling module so that certain features automatically appear under specific conditions when working in the Scheduling By Student or Scheduling By Class areas of Future Scheduling.

To configure Scheduling screen defaults:

1. Go to WS\OF\FS\SS\BS or WS\OF\FS\SS\BC.
2. Click Options.

These features are defined under Options at each location. The default settings affect transaction update options and preference and display options.

Options in the Transaction Update Options area affect how and what information is included in the scheduling transaction record that is created when you add, edit, change, replace or delete a section from a student's schedule.

Options in the Preference and Display Options area determine which records (dropped, active) appear on the browse screen and which warning messages appear when you add, edit, change, replace or delete a section from a student's schedule, among other things.

Settings in each area apply to the other area. For example, if you select an option in the Defaults area of Future Scheduling By Class, that setting applies to the Future Scheduling By Student area and vice versa.

Refer to Table 47 for an explanation of each Scheduling Screen default.

... | Future Scheduling By Student | Default Settings

Transaction Update Options

* Calendar: 400 ▼ 400 CALENDAR

☒ Include Effective Date in Save

* Effective Date: 06/30/2011

☐ Prompt For Effective Date

☐ Record Person Requesting Schedule Change

Requested By:

Save

Back

Preference and Display Options

Schedule Display Options

☒ Display All Classes

☒ Display Enrolled Classes

☒ Display Dropped Classes

☒ Display Period By Period Course Availability

☒ Display 'Adjusted' Records in Light Blue

☒ Display 'Double Booked' Records in Yellow

☐ Display Only Courses At Student's Grade Level On Add

☒ Display Class Control Set Selection Screen on Add

☐ Display Only Classes that Fit when Adding By Open Classes

☐ Display Only Same Term/Period/Day Classes When Replacing a Course

☒ Display Student Enrollment By Term on Add

☐ Hide Teacher Name in Future Scheduling

☐ Hide Room Number in Future Scheduling

☐ Display Supplemental Auto-Scheduling Arbitrary Scheduling Techniques

Alert Message Options

☐ Alert When Adding to Students That Have Graduated

☐ Alert When Adding a Course the Student Has Already Passed ?

☒ Alert When Adding a Class That Violates a Scheduling Constraint

Asterisk (*) denotes a required field

Figure 78 – Default Settings for Future Scheduling by Student screen

... | Scheduling by Class | Default Settings

Transaction Update Options

* Calendar: 400 400 CALENDAR

☒ Include Effective Date in Save

* Effective Date: 06/30/2011 Thursday

☐ Prompt For Effective Date

☐ Record Person Requesting Schedule Change

Requested By:

Preference and Display Options

☒ Display Class Control Set Selection Screen on Add

☐ Hide Teacher Name in Future Scheduling

☐ Hide Room Number in Future Scheduling

Alert Message Options

☐ Alert When Adding a Course the Student Has Already Passed ?

☒ Alert When Adding a Class That Violates a Scheduling Constraint

Save

Back

Asterisk (*) denotes a required field

Figure 79 – Default Settings for Future Scheduling by Class screen

Option	Description
Calendar	Available but for display purposes only. Remaining screen options are not calendar-specific.
Include Effective Date in Save	Date used as effective date for all scheduling transactions unless changed manually. The effective date is typically the date on which the transaction occurs.
Prompt For Effective Date	Causes a dialog box to appear, allowing you to enter the transaction effective date. See Figure 80 below this table for an example of this dialog box.
Record Person Requesting Schedule Change	Records the name you enter into the Requested By box on the scheduling transaction record as the Done By person.
Display All Classes Display Enrolled Classes Display Dropped Classes	Shows all active, dropped or both types of sections in the Schedule browse detail area of the screen. See Figure 81. Dropped sections appear in green highlight.

Option	Description
Display Period by Period Course Availability	Shows information about the course and section including the current period the student is enrolled in and any open or closed sections offered during other periods. In Figure 81, see the column with the heading 01234567890. For a legend of the display, click the Legend button.
Display ‘Adjusted’ Records in Light Blue	Shows a blue highlight on a section that has a term adjustment. See Figure 81.
Display ‘Double Booked’ Records in Yellow	Shows whether a student is double-booked in a certain period and term. The option Allow Students to be Double-Scheduled must be selected in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE) for a student to be double-booked.
Display Only Courses At Student’s Grade Level on Add	Shows only courses that are marked for the student’s grade level when scheduling the student into a section.
Display Class Control Set Selection Screen on Add	Shows the Class Control Set Selection dialog box when adding, editing, replacing or changing a section on a student’s schedule if your Entity allows students to enroll in subsets (term adjustments).
Display Only Classes that Fit when Adding By Open Classes	Shows only those courses that fit into the students schedule when scheduling By Student - By Open Classes.
Display Only Same Term/Period/Day Classes When Replacing a Course	Shows only sections that fit into the student’s schedule when replacing an already scheduled class. For example, if you’re replacing a Semester 2, period 3, MTWRF section on a student’s schedule, when the replace screen appears, only courses that meet Semester 2, period 3, MTWRF are available for selection.
Display Student Enrollment By Term on Add	Shows the enrollment count of the class by term rather than the highest enrollment number among all terms when you add a student to that class.
Hide Teacher Name in Future Scheduling	Hides the Teacher Name when scheduling By Student or By Class.
Hide Room Number in Future Scheduling	Hides the Room Number when scheduling By Student or By Class.

Option	Description
Display Supplemental Auto-Scheduling Arbitrary Scheduling Techniques	Lists supplemental codes (P, p, O, o, Q and q) to show how the student was scheduled into a course. If this option is not selected, the technique is printed as A (Arbitrary).
Alert When Adding to Students That Have Graduated	Displays the message “WARNING! This student has Graduated.”
Alert When Adding a Course the Student Has Already Passed	Displays a message warning you that the course you’ve selected has been previously taken. This warning appears only if the Repeatable for Credit check box is not selected for this course in the Course Master.
Alert When Adding a Class That Violates a Scheduling Constraint	Displays a message warning you that the course or section you’ve selected to schedule the student into violates a scheduling constraint for that student. A <i>scheduling constraint</i> is the same as a scheduling conflict.

Table 47 – Scheduling Screen Default Setting options

Figure 80 – Prompt for Effective Date dialog box

2011-12 Schedule												
Change Schedule Sort												
	Course	Description	Term	Period	Days Meet	Room (Bld)	Teacher	Credits	Scheduling Technique	Rcmd	Type	12345678901234567890
E D C R	COLENG 02	COLLEGE ENGLISH	S1Y (01-02)					0.500	M			
E D C R	ADVPHO01	ADV. PHOTOGRAPH	S2 (03-04)	01	MTWTF	101 (400)	JTHOMPSON	0.500	M - Manual			X.....
E D C R	AMHIST02	AMERICAN HIST	YR (01-04)	03	MTWTF	(400)		1.000	M - Manual			m.X.....
E D C R	CHEMIS01	CHEMISTRY	S2 (03-04)	03	MTWTF			0.500	M - Manual			...*.0.....
E D C R	ENGL1002	ENGLISH 10	YR (01-04)	04	MTWTF	(400)		1.000	M - Manual			...*.0.....
A E D	AMLIT01	AMER. LIT.	T1 (01-01)	05	MTWTF		B WHITEMAN	0.250	M - Manual			...*.0.....
E D C R	AEROB01	AEROBICS	S2 (03-04)	05	MTWTF			0.500	M - Manual			...X.....
Total Scheduled:								4.000				

Figure 81 – Schedule browse detail area of Scheduling by Student, with display of enrolled/active sections (non-highlighted), term adjustment section (blue highlight), double booked sections (yellow highlight) and dropped section (green highlight).

Managing Scheduling Codes

Scheduling Codes define scheduling features. This section explains these codes and how they affect the performance of the Future Scheduling module.

Future Scheduling Codes

To create or maintain Future Scheduling Codes, go to WS\OF\FS\PS\CO.

Buildings

An Entity is the theoretical framework that contains buildings; *buildings* are the physical structures themselves. For example, a high school Entity may contain a gym, library, performing arts center, metal shop and main campus. Each of these locations is a building within the Entity, and each building is assigned rooms. Buildings and rooms are used in conjunction with Meet records in the Course Master.

Graduation Years

Graduation Year Codes connect corresponding graduation years, graduation dates, and credits needed to graduate. This information appears on Skyward transcripts, not on Washington State transcripts.

Homerooms

Homerooms are classrooms to which students report during the school day but not necessarily to receive instruction. A homeroom period can occur during any period of the day, though typically it is the first period. Homerooms are maintained in a homeroom table where they are linked to a specific room and building contained in the Building Codes. You can use the Homeroom feature to group students for reporting or tracking.

Student Tracks

Student Tracks were created for districts that use year-round schooling where there are four groups of students but only three groups attend school at any one time. This feature is currently not functional.

Build Course Master Codes

To maintain Build Course Master Codes, go to WS\OF\FS\BC\PS\CO.

Course Length Sets

Course Length Sets define the length of time a course meets during the school year. For example, a Semester Course Length Set defines a class that spans an 18-week period.

Course Types

Course Type Codes specify the type of course. Common values for this box are Normal, Running Start, Skill Center and Vocational.

Day Patterns

Day Patterns specify the days of the week a course/section meets (such as MTWRF, MWF, TR). They are used when establishing Scheduling Period Times to specify which days of the week a period meets.

Departments

The Department box defines the code used to group similar courses in an Entity. For example, a Department Code of *Humanities* might be used to group all English and Social Studies courses. This code can identify certain courses on reports. Department Codes may also be assigned to teachers. This can help when using the Interactive Scheduling Board because you can sort teachers by Department to verify course and section placement for the Master Schedule.

When you add or edit a Department Code, you'll see an area called New Report Card Options. These options are used only by a few specialized districts in other states that need to calculate and report composite (group) grades, or have the system flag and report students who are retained based on grades in certain core classes.

Report Card Groups

A Report Card Group groups sections of *different* courses or sections of the *same* course on the same line when report cards are printed.

Each course you want to group on the report card must be assigned to the same Report Card Group. If everything is configured correctly, the Grade Marks from the two classes print on the same line of the report card. The course information that displays with the grades (such as description and teacher) comes from the class that occurs later in the year. For example, when printing a Semester 1 and a Semester 2 course as a Report Card Group, the grades print with the Semester 2 class information.

Room Types

Room Types define the classroom by its function. For example, the names Art, Band, Choir, and Gym specify the purpose of the room. This information can then be used when assigning a room to the Meet record of a section.

Scheduling Categories

Scheduling Categories allow students to be scheduled into specific sections of a course. If a student is assigned a Scheduling Category that matches the Scheduling Category assigned to a section of a course, they can be scheduled into that section of a course. Students without a matching Scheduling Category cannot be scheduled into the section using an automated process. See “Step 9: Create Scheduling Categories” for more information about Scheduling Categories.

Scheduling Groups

Scheduling Groups group sections and courses and assign them to a student for Current or Future Scheduling purposes. The courses that comprise a Scheduling Group can be assigned as an unscheduled or scheduled request. A Scheduling Group allows the same group of classes to be requested or scheduled at once rather than individually by course or section. An example might be a Scheduling Group called “9th Grade” which groups all core classes that 9th graders are

required to take. After creating a “9th Grade” Scheduling Group, you can assign the Scheduling Group to a 9th grader which either gives that 9th grader a request for all courses in the group or schedules the student into all of the sections that are part of the group.

Scheduling Period Times

Scheduling Period Times define the scheduling start and stop times of each period of each day of the week. Some scheduling reports display these times, so it is important to have complete and accurate data in this table. If the Use Period Redefinition check box is selected in the Entity Year Options area of Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE), you can define the Scheduling Period for Period Redefinition. The Scheduling Periods Times also define the period columns that appear in the Interactive Scheduling Board.

Subjects

The Subject box summarizes the subject content for the course. Subjects are used by the Curriculum Master, which is used in Graduation Requirements. If you attach a Subject code to courses that have a common curriculum, you can organize these courses faster in Curriculum Spanish, German, Japanese and Chinese courses. See the *Curriculum Master Overview V4* document for information about the Curriculum Master. Currently, only Data Center Coordinators have access to this document.

Lock Groups

Connects two or more courses of the same Course Length that a student should not take at the same time. To use a Lock Group, you must create a Lock Group Code and assign the courses that are not to be taken at the same time to the same Lock Group Code.

Example:

ENG 101 and ENG 102 are offered both Semester 1 and Semester 2. These courses share a Lock Group Code. A student requests both of them. The student will be scheduled into each course in a different semester.

Scheduling Team Codes

Scheduling Teams ensure that only certain students (those that share the assigned team) can be scheduled into a section with the same code, by the automated scheduling processes. See “Step 8: Create Scheduling Teams” for more information about Scheduling Teams.

Advanced Placement Codes

Advanced Placement Codes define a course as an Advanced Placement course. The code is assigned to a course in the Course Master and causes an indicator to appear next to the course in CEDARS, on the Washington State Transcript, and on the Academic History Report. Each Advanced Placement Code should be linked to an Advanced Placement Type Code. Advanced Placement Type codes are defined by OSPI, and the table is updated by WSIPC.

Request Processing Codes

To maintain Request Processing Codes, go to WS\OF\FS\RP\PS\CO.

Course Request Scanner Codes

Course Request Scanner Codes must be created if course requests are entered using a bubble form read by a scanner. Otherwise, the program can't recognize the data. The codes identify the scanner and must be created before the Course Request Scanner Form List Codes. One of three Scanner Types must be selected for each Scanner Code that is created: Scanning Systems, National Computer Systems or Scantron.

Course Request Scanner Form List Codes

Course Request Scanner Form List Codes must be created when course requests are scanned. The Form List Codes are used as a way to enter the codes for the forms that will be used for the course request entry. The Course Requests Scanner Fort List Codes must be created before the Course Request Forms Codes.

Course Request Forms Codes

Course Request Forms Codes are a list of available scanner forms to be used in when scanning course requests. An existing form (from the Course Request Scanner Form List Codes) must be selected, which determines the Scanner (from the Course Request Scanner Codes) that is attached to the Course Request Scanner Form List Code that was selected. On the configuration screen for this code, you can also define the Number of Courses and X/Y axis printer adjustments.

Course Wish Group

A Course Wish Group identifies a group of courses that will be generated through an Availability List. An Availability List contains courses generated from the Course Master for a specific grade level. Students use the list to designate their course requests.

Running Utilities

Utilities are located in six major areas of the Future Scheduling module:

- Future Scheduling (WS\OF\FS\PS\UT)
- Build Course Master (WS\OF\FS\BC\PS\UT)
- Request Processing (WS\OF\FS\RP\PS\UT)
- Build Master Schedule (WS\OF\FS\BM\PS\UT)
- Student Schedule Generation (WS\OF\FS\SS\PS\UT)
- Scheduling By Student (WS\OF\FS\SS\BS)

Each area contains utilities that change or update information associated with the area in which they reside. For example, the utilities located in the Build Course Master area affect information about the Course Master. Each of these utilities are discussed below.

Future Scheduling Utilities

The Future Scheduling Utilities area contains four utilities. Three of the utilities allow you to clone specific Entity information: year and term definitions, calendar information and schedule master files. The fourth utility verifies the cloning status of the other three utilities.

To access these utilities:

- Go to WS\OF\FS\PS\UT.

Status of Clone Utilities

Before you clone Entity Year and Term Definitions, Calendar Information, and Schedule Master Files from the current school year to the school year being scheduled, you can use the Status of Clone Utility to check the status of each of the utilities that clone scheduling information to see if the information has already been cloned processed. For more information about this utility and how it is used in the future scheduling process, see “Check the Status of Clone Utilities” in “Part One: Preparing To Schedule.”

This utility is also available in Build Course Master Utilities (WS\OF\FS\BC\PS\UT\SC).

Clone Entity Year and Term Definitions

Entity Year and Term Definitions must be created before the Future Scheduling process can begin. For more information about this utility and how it is used in the future scheduling process, see “Clone the Entity Year and Term Definitions” in “Part One: Preparing To Schedule.”

Clone Calendar Information

This utility copies Calendar information, Calendar Master, Detail and Terms from one year to another. To generate schedules for the upcoming school year, the Future Scheduling process requires that a Calendar Master be available. After cloning, you can edit specific information such as dates. For more information about this utility and how it's used in the future scheduling process, see “Clone the Calendar Information” in “Part One: Preparing To Schedule.”

Clone Schedule Master Files

This process creates Schedule Master Files for the school year to create from the Schedule Master Files for the school year to be scheduled. The utility can also be used to clone a Schedule Master to or from another school year. This is helpful when cloning courses such as Transfer courses. To do this, in the School Year to Use box, select the school year of the Schedule Master you want to clone *from*. This could be any previous school year, the current school year or the next school year. In School Year To Create, select the school year of the Schedule Master you want to clone *to*. For more information about this utility and how it is used in the future scheduling process, see “Clone the Calendar Information” in “Part One: Preparing To Schedule,”

NOTE	When selecting the school years, the School Year To Create can be only one year greater than the School Year To Use. In addition, if you select the current school year in the School Year To Create, you will receive a Warning advising that scheduling records exist for the year to create and that courses with one or more requests will not be processed. You must select OK to proceed.
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This utility is also available in Build Course Master Utilities (WS\OF\FS\BC\PS\UT\SM).

Build Course Master Utilities

The Build Course Master Utilities area contains utilities that affect the Course Master information. Each utility is described below.

To access these utilities:

- Go to WS\OF\FS\BC\PS\UT.

Clone Scheduling Groups

The Clone Scheduling Groups utility clones Scheduling Groups from one school year to another instead of creating groups again each school year. For more information about this utility and how it is used in the future scheduling process, see “Clone Scheduling Groups” in “Part Five: Concluding the Scheduling Process.”

Update Estimated Number of Sections

To estimate the number of sections you need for each course in the Master Schedule Builder or Interactive Scheduling Board to create the Schedule Master, you run the Update Estimated Number of Sections utility. This utility determines the ideal number of sections for each course and updates the Estimated Number of Sections box on each course. The calculation is based on the values in the Current Requests and Maximum Seats Available boxes of each course. The Maximum Seats Available box is automatically updated based on the total of the value in the Maximum Students box for each section. The Estimated Number of Sections value is used later to determine how many sections of each course will actually be offered.

This process must be run if you are using the Master Schedule Builder or the Interactive Scheduling Board. For more information about this utility and how it is used in the future scheduling process, see “Estimate the Number of Sections Needed” in “Part Three: Building the Schedule Master.”

Create a Schedule Master Save Point

Running the Create a Schedule Master Save Point utility is optional but highly recommended. This utility saves the Schedule Master and all associated Schedule Master detail records. You can run a utility later to restore to a selected Schedule Master. However, only changes to the Class Meeting Pattern information are restored. Changes to Section and Course information are not restored. The restore works this way because you are making changes to create a Schedule Master to the Class Meeting Period to refine the schedule—changes such as which period the class is taught and who is teaching the class. Therefore, this is the information that is saved and restored.

Create a Course Master backup at key points in the future year scheduling process. Create this backup as soon as the Course Master has been cloned from the prior year, *before any changes have been made to any of the Class Meet Patterns*. After this, it is up to the scheduling team to make backups along the way as they reach decisions in the process and try out methods in the Course Master. Create a Course Master backup before moving periods and teachers around so that you can restore to the backup. For more information about this utility, how it is used in the future scheduling process and examples of data that is saved and restored, see “Create a Course Master Back up” in “Part One: Preparing to Schedule.”

This utility is also located in Build Master Schedule Utilities (WS\OF\FS\BM\PS\UT\SP).

Restore Schedule Master to Previous Save Point

The Create a Schedule Master Save Point utility restores the Schedule Master and associated Schedule Master detail records. Running this utility is optional but highly recommended if unwanted changes were made to the Course Master for the year being scheduled, you can revert to a previous Course Master saved using the Create a Schedule Master Save Point utility.

This utility restores only Class Meeting Pattern information. The restore does not affect changes you make to Section and Course information after a backup is made. In other words, if you add a section to a course after a save is completed and then process a restore, the section still exists. If you delete a section after a save and then a restore is processed, the section is *not* restored. The restore works this way because you are making changes to create a Schedule Master’s Class Meeting Period (such as what period the class is taught in and who teaches the class) to refine the schedule. Therefore, this is the information that is saved and restored. For more information about this utility, how it’s used in the future scheduling process and examples of data that is saved and restored, see “Restore to a Selected Course Master Backup” in “Part One: Preparing to Schedule”

This utility is also located in Build Master Schedule Utilities (WS\OF\FS\BM\PS\UT\PS).

Re-synchronize Student Class Counts

The Re-synchronize Student Class Counts utility corrects the values in the Current Requests box on the Course Master and the Number of Requests box for each section. As you add and drop sections and requests from a student’s schedule, these counts should update automatically. However, if you think the counts may be off for the next school year, run this utility.

In addition, after you have cloned the Schedule Master from the current year to next year, run this utility to re-set the counts.

To learn how this report fits into the future scheduling process, see “Part One: Preparing to Schedule, Step 6: Run Course Master Utilities, Calculate Student Section Counts.”

Update Control Sets Possible

You don’t need to run this utility if you will use the Advanced Master Schedule Builder (AMSB), but you must run the utility if you will use any other method to build the Schedule Master.

A Control Set (also called a Class Control Set) specifies which specific term, semester or trimester a section is offered. Control Sets Possible specifies all possible Control Sets for all sections of the course. It is important that this information is correct because the Master Schedule Builder considers the possible Control Set information when building and placing Course Master sections in the Schedule Master. This is done to create the best Schedule Master possible with the least chance of scheduling conflicts.

The Update Control Sets Possible Utility scans all active courses in the Course Master and assigns the Control Sets Possible values for that course. You can update the Control Sets Possible field with all possible (available) Control Set values in your Entity or with only those Control Set values already assigned to existing sections of the course. The utility also removes any incorrect Control Set Possible values.

This utility was probably run when you cloned the Schedule Master from the current year to next year in “Step 2 – Maintain Scheduling Setup and Codes.” However, if you perform additional cloning from another Entity or add additional courses, determine whether you should re-run this utility. If you did not run this utility when you cloned the Schedule Master from the current year, run this utility now.

The Equally Distribute Section Percentage to Assigned Control Sets check box appears on this utility’s screen only if the Use Advanced Master Schedule Builder check box is selected in Entity Year Setup (WS\OF\FS\PS\CF\SE). Refer to the AMSB training document for more information on this option. Currently, this document is available only to Data Center Coordinators.

To learn how this report fits into the future scheduling process, see “Update Control Sets Possible” in “Part One: Preparing to Schedule.”

Clone Schedule Master Files

This process creates Schedule Master Files for the school year to create from the Schedule Master Files for the school year to be scheduled. The utility can also be used to clone a Schedule Master to or from another school year. This is helpful when cloning courses such as Transfer courses. To do this, in School Year to Use select the school year of the Schedule Master you want to clone from. This could be the any previous school year, the current school year or the next school year after you have cloned courses to the Schedule Master. In School Year To Create

select the school year of the Schedule Master you want to clone to. For more information about this utility and how it's used in the future scheduling process, see "Clone the Calendar Information" in "Part One: Preparing To Schedule."

NOTE	When selecting the school years, the School Year To Create can only be one year greater than the School Year To Use. In addition, if you select the current school year in the School Year To Create box, you will receive a warning that scheduling records already exist for the year to create and that courses with one or more requests will not be processed. You must select OK to proceed.
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This utility is also available in Future Scheduling Utilities (WS\OF\FS\PS\UT).

Status of Clone Utilities

Before you clone Entity Year and Term Definitions, Calendar Information, and Schedule Master Files from the current school year to the school year being scheduled, you can use the Status of Clone Utility to check the status of each of the utilities that clone information to see if the information has already been cloned. For more information about this utility and how it is used in the future scheduling process, see "Check the Status of Clone Utilities" in "Part One: Preparing To Schedule."

This utility is also available in Future Scheduling Utilities (WS\OF\FS\PS\UT\SC).

Mass Change Course Master Fields

Running the Mass Change Course Master Field utility is optional. It mass-updates course, section and Meets information. This utility has two parts. In the first part, you select which course, section and Meet will be updated. In the second part, you enter the current value that is in the field or fields to be updated and the new value you want to replace it with.

Mass Change Section Minutes Per Week

The Mass Change Section Minutes Per Week Utility mass-updates the minutes-per-week value on sections. You must have accurate information in the Minutes Per Week boxes on every section in the course master for P223 reporting purposes if your calculations are based on the student's schedule. You can select the sections you want to update by course, period, meet days, scheduling group or any combination of these.

Auto-Generate Sections and Class Meets

If you determine that additional sections for courses are needed, you can automatically generate them by running the Auto-Generate Section and Class Meets utility.

To determine whether sections are needed, the utility does one of the following based on your selection:

- Uses the value in Estimated Number of Sections.
- Divides the number of Current Requests by the optimum number of students per section.

If the utility determines that new sections are required, section values default to the values entered in Section Defaults in the course. To reduce the number of changes necessary after running this utility, make sure that as much detailed default information as possible has been entered.

NOTE	This utility does not delete any extra sections and Meeting Patterns. They must be deleted or inactivated manually.
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For more information about this utility and how it is used in the future scheduling process, see “Step 2: Create Sections” in “Part Three: Building the Scheduling Master.”

Cross-Entity Enrollment Verification Utility

The Cross-Entity Enrollment Verification Utility updates all Cross-Entity Enrollment information for Student-Class records. Each Cross-Entity “Home” course should have a Student-Class record as well as a Cross-Entity “Away” course. Any linked records that don’t exist are created and those that are incorrect are fixed by this utility. A report is generated that details what was created or corrected by the utility.

CAUTION	Avoid using the Cross-Entity Enrollment feature. It causes inaccurate Washington state enrollment reporting.
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Mass Assign Additional GPA Methods

This utility helps you fill in appropriate GPA Set(s) for newly created GPA Method(s) by assigning a GPA Set to each GPA Method. The current GPA Credit value from GPA Set 1 on selected courses is copied to the additional GPA Credit value(s).

Request Processing Utilities

The Request Processing Utilities area contains utilities that allow the entry of requests, whether it is done individually by student or by a mass entry process. Each utility is described below.

To access these utilities:

- Go to WS\OF\FS\RP\PS\UT.

Create Course Availability List

This process creates a list of available courses for each Graduation Year using the ranges for the selected Course Wish Group. When a list is created, certain information for all active courses in the Course Master is stored. This information includes the Grade Ranges of the course, whether the course is required or is an elective, the Course Type, Category and Schedule Type.

This information must be accurate in the Course Master before you generate the availability list. If, for example, a Grade Range is incorrect on the Course as offered to grades 09-12, but is really only intended for 12th grade students, the course prints on the availability list for grades 9-12 instead of only 12th grade students.

Course Availability Lists can be appended or re-created. If this is done, the additional information is also stored.

When you create a Course Availability List, a unique request number is assigned to each course. This number can help with the entry of student requests but is not required. If a list is appended and new courses are added, the next available request number is assigned. When the availability list is printed, the course appears in the proper position according to the sort selection. In addition, the request number assigned to the course displays.

When an *existing* availability list is appended, the process validates courses on the current list and updates any courses that have been inactivated or put in a Dropped status. These courses are flagged as ‘Dropped – CWL’ (where CWL = Course Wish List) if any of the following criteria is met (and has occurred *after* the list was first created):

- The Status of the course has changed to Inactive.
- The Schedule Type of the course has changed to Dropped.
- The Grade Ranges of the course have changed and are no longer available to the Grad Year of the selected Availability List.

For more information about this utility and how it’s used in the future scheduling process, see “Part Two: Managing Student Requests, Step 1: Create Availability List, Create a Course Availability List.”

Mass Add/Change/Delete Student Requests

Often, a large group of students share common requests (such as core classes), especially in elementary and middle schools and in schools using block scheduling. To reduce the time it takes to enter student requests, use this utility to assign groups of students the same request(s). Once added, only unusual situations or elective requests need to be entered. In addition, you can use the utility to change or delete requests for a course, or to mass-delete all requests.

An option in the utility called Exclusion allows you to prevent students with specific course requests from being included when the utility is run. In other words, all of the students within the entered ranges are assigned the selected Course/Section except students who have the course selected using the Exclusion option.

Example:

All 10th grade students are to be given a request for Biology except students with a request for AP Biology or Introduction to Biology. Both AP Biology and Introduction to Biology are selected as exclusions. The students in the basic and advanced courses are typically manually scheduled into those courses or requests for those classes were entered earlier for specific students.

For more information about this utility and how it is used in the future scheduling process, see “Use Mass Utility to Add, Change or Delete Requests” in “Part Two: Managing Student Requests.”

This utility is also located in Student Schedule Generation Utilities (WS\OF\FS\SS\PS\UT\MC).

Assign Scheduling Teams by Student

The Assign Scheduling Teams by Student utility allows you to assign students to a team on a student-by-student basis or modify existing individual team assignments for scheduling purposes. Use this option if you want to place students on a specific Scheduling Team rather than having the system randomly assign a student to a team, or if you need to modify the team a student was assigned to. For more information about this utility and how it is used in the future scheduling process, see “Assign Scheduling Teams by Student” in “Part One: Preparing to Schedule.”

Mass Assign Student Scheduling Status

Before a guardian or student can make changes to a student’s schedule through Online Arena Scheduling, the status must be changed to Open. This can be done using the Mass Assign Student Scheduling Status utility to process a group of students together. This utility can be used at a later time to change specific status values to other status values, such as changing schedule status to Locked when scheduling is complete so that students and guardians cannot make further schedule changes.

For more information about this Student Scheduling Status and this utility and how it’s used in the future scheduling process, see “Perform Online Arena Scheduling” in “Part Four: Scheduling Students.”

This utility is also located in Student Schedule Generation Utilities (WS\OF\FS\SS\PS\UT\MS).

Mass Add/Delete Student Scheduling Categories

The Mass Add/Delete Student Scheduling Categories utility efficiently assigns or deletes Scheduling Categories for selected students. Scheduling Category Codes can be assigned to selected students using the utility, or one Scheduling Category Code can be randomly assigned to selected students. You can also use the utility to change the Scheduling Category assigned to students or delete Scheduling Category Codes from selected students.

NOTE	If the Add One Category Randomly process type option is selected and the student already has an assigned scheduling category, the random category code selected for the student may be the same category. If this is the case, that student is not assigned the same scheduling category code twice.
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For more information about this utility and how it is used in the future scheduling process, see “Mass Add and/or Delete Student Scheduling Categories” in “Part One: Preparing to Schedule.”

Mass Assign Student Scheduling Teams

The Mass Assign Student Scheduling Teams utility allows you to mass assign Student Scheduling Teams to a range of students. After you enter a value in the Total Number of Sections box, the program calculates the average number of students per Student Scheduling Team based on the total number of students selected through the parameters on the range screen. The utility also allows you to balance students on the Scheduling Teams by gender, race and/or

Student Type. For more information about this utility and how it is used in the future scheduling process, see “Part One: Preparing to Schedule, Step 8: Create Scheduling Teams, Assign Students to a Team, Run the Mass Assign Students Scheduling Teams Utility.”

Copy Student Scheduling Teams

The Copy Student Scheduling Teams Utility copies the student’s current year Scheduling Team assignment to the student’s next year Scheduling Team or vice versa. For more information about this utility and how it is used in the future scheduling process, see “Part One: Preparing to Schedule, Step 8: Create Scheduling Teams, Assign Students to a Team, Run the Copy Student Scheduling Teams Utility.”

Mass Request Recommended Courses

The Mass Request Recommended Courses utility creates a course request for each course that has been recommended for a student by their teacher(s).

Build Master Schedule Utilities

The Build Master Schedule Utilities area contains a collection of utilities that help you construct a master schedule. These utilities use the student course requests that you’ve gathered to prepare the system to make course placement suggestions in the course master that will ultimately cause the fewest conflicts and provide for the most successful scheduling run. All of the Build Master Schedule Utilities are discussed below.

To access these utilities:

- Go to WS\OF\FS\BM\PS\UT.

Advanced Master Builder Setup

This utility helps you setup of data for use with the Advanced Master Schedule Builder (AMSB). It is intended to be run on Current Year data before cloning the Schedule Master for next year. To learn more about AMSB, refer to the AMSB training document. Currently, this document is available only to Data Center Coordinators.

Initialize Class Meet Details

You may need to delete or reset some data in Meeting Pattern records before you can place the Meeting Patterns in the Schedule Master. This is called *initializing*. Meeting Patterns clone over with data from the current school year’s Course Master. Initialize them if you use the Master Schedule Builder or Interactive Scheduling Board to create the Schedule Master. If you don’t initialize them, the system can’t suggest the best possible placement for each course.

Initializing the Scheduling Period to 0 (zero) allows the Master Schedule Builder / Scheduling Board logic to determine the best period in which to place a course. The Display Periods and Attendance Periods on the Meeting Pattern do not reflect the initialized/zero period. Instead, the current value (the period the course is being offered in the current year) is maintained until a period assignment is made through one of Master Schedule Builder processes (Non-Interactive, Interactive or Advanced) or through the Interactive Scheduling Board process. The data in the Meeting Pattern is initialized using the Initialize Class Meet Details utility.

This is a very important step in the process of scheduling students—especially initializing the Scheduling Period so that the system can recommend the best placement in the master schedule for each section. Because each master schedule is uniquely constructed from student requests, if you don't allow the system to determine the best placement of courses based on those requests the likelihood of conflicts is higher when you schedule students into the courses.

CAUTION	Before running this utility, save a copy of the Course Master using the Create a Schedule Master Save Point utility (WS\OF\FS\BC\PS\UT\SP) because you will be changing data in the Meeting Patterns. This allows you to use the Restore Schedule Master to Previous Save Point utility (WS\OF\FS\BC\PS\UT\PS) to restore the Course Master to its original state.
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For more information about this utility and how it's used in the future scheduling process, see "Part Three: Building the Schedule Master, Step 4: Prepare Meeting Patterns for Placement in the Schedule Master."

Create Course Conflict Matrix and View Course Conflict Matrix

The Master Schedule Builder and the Interactive Scheduling Board refer to the Conflict Matrix when suggesting periods for classes. Therefore, if the Master Schedule Builder and Interactive Scheduling Board will be used to create the Schedule Master, you must run the Conflict Matrix.

The Course Conflict Matrix Maintenance process lets you create and view the Conflict Matrix. The option to create the Conflict Matrix creates a data file containing information about the cross-reference conflict (that is, for each pair of courses in the course file it looks at how many students have requested both courses). You can view the Conflict Matrix, but there is typically no reason to do so. You can view the conflicts (student names) between courses within the Interactive Master Schedule Builder and Interactive Scheduling Board.

BEST PRACTICE	Re-run the Conflict Matrix after adding or removing a Section/Meeting Pattern to the Course Master or if changes are made to student requests. If this option is not re-run after changes are made, the Master Schedule Builder and Interactive Scheduling Board will not be accurate.
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For more information about this utility and how it's used in the future scheduling process, see "Part Three: Building the Schedule Master, Step 5: Determine Potential Conflicts in the Schedule Master."

Update Estimated Class Counts by Grade

Before creating the Schedule Master, it is necessary for the system to know how many students would be scheduled into each section based on student requests. The system can calculate this information if you run the Update Estimated Class Counts by Grade utility. This process updates the estimated number of students in each section and the information is available in the Interactive Master Builder and Interactive Scheduling Board.

The estimate assumes a perfect scheduling run, which means all students would get into every one of their requested courses. The estimate is calculated by taking the number of requests for a course and separating the students into all available sections, leveling by gender, grade level, and by how full the section is.

Example:

A two-section course with equal class maximums is requested by 20 juniors and 30 seniors. This process will estimate that $\frac{1}{2}$ (10) juniors and $\frac{1}{2}$ (15) seniors (total of 25 students) will be scheduled into each section.

This process only needs to be re-run if course requests or sections are added or removed since the last time it was run.

For more information about this utility and how it's used in the future scheduling process, see "Part Three: Building the Schedule Master, Step 3: Estimate the Number of Students in Each Section."

Clone Schedule Master Files to Another Entity

The Clone Schedule Master Files to Another Entity utility (WS\OF\FS\BM\PS\UT\CS) clones a Course Master (or parts of a Course Master) from one Entity to another within the same or different school years. If you use this utility to clone courses that another Entity already maintains and that you need in your Course Master, you will save time by not having to add new courses from scratch. For more information about this utility and how it's used in the future scheduling process, see "Part One: Preparing to Schedule, Step 7: Run the Clone Course Master from Another Entity Utility."

Create a Schedule Master Save Point

Running the Create a Schedule Master Save Point utility is optional but highly recommended. This utility saves the Schedule Master and all associated Schedule Master detail records. You can run a utility later to restore to a selected Schedule Master. However, only changes to the Class Meeting Pattern information are restored. Changes to Section and Course information are not restored. The restore works this way because you are making changes to create a Schedule Master to the Class Meeting Period to refine the schedule—changes such as which period the class is taught and who is teaching the class. Therefore, this is the information that is saved and restored.

Create a Course Master backup at key points in the future year scheduling process. Create this backup as soon as the Course Master has been cloned from the prior year, *before any changes have been made to any of the Class Meet Patterns*. After this, it is up to the scheduling team to make backups along the way as they reach decisions in the process and try out methods in the Course Master. Create a Course Master backup before moving periods and teachers around so that you can restore to the backup. For more information about this utility, how it's used in the future scheduling process and examples of data that is saved and restored, see "Part One: Preparing to Schedule, Step 6: Run Course Master Utilities, Create a Course Master Back up."

This utility is also located in Build Course Master Utilities (WS\OF\FS\BC\PS\UT\SP).

Restore Schedule Master to Previous Save Point

The Create a Schedule Master Save Point utility restores the Schedule Master and associated Schedule Master detail records. Running this utility is optional but highly recommended if unwanted changes were made to the Course Master for the year being scheduled, you can revert to a previous Course Master saved using the Create a Schedule Master Save Point utility.

This utility restores only Class Meeting Pattern information. The restore does not affect changes you make to Section and Course information after a backup is made. In other words, if you add a section to a course after a save is completed and then process a restore, the section still exists. If you delete a section after a save and then a restore is processed, the section is *not* restored. The restore works this way because you are making changes to create a Schedule Master's Class Meeting Period (such as what period the class is taught in and who teaches the class) to refine the schedule. Therefore, this is the information that is saved and restored. For more information about this utility, how it's used in the future scheduling process and examples of data that is saved and restored, see "Part One: Preparing to Schedule, Step 6: Run Course Master Utilities, Restore to a Selected Course Master Backup."

This utility is also located in Build Course Master Utilities (WS\OF\FS\BC\PS\UT\PS).

Student Schedule Generation Utilities

The Student Schedule Generation Utilities area contains a collection of utilities that update information on the students' schedules and mass assign students to various scheduling teams. Each utility is described below.

To access these utilities:

- Go to WS\OF\FS\SS\PS\UT.

Unschedule Student Classes

This utility allows you to unschedule students from their classes. This utility is typically run when an Actual Scheduling Run has been processed and the results of the run need to be unscheduled. There are options to include manually scheduled classes and to only unschedule students with auto scheduled conflicts.

View Historical Unschedule

This log can be used to check if and when a particular Actual Scheduling run was unscheduled and who performed the action. The log also includes when the Unschedule Student Classes utility was run, the ranges used and the number of students unscheduled.

Purge Historical Unschedule Runs

This utility deletes the transactions created when the Unschedule Student Classes utility is run. These transactions are displayed in the View Historical Unschedule log. The log can contain many transactions and searching for a particular transaction can be cumbersome. Therefore, purging some or all of the transactions can make locating another transaction faster.

Mass Add\Change\Delete Student Requests

Often, a large group of students share common requests (such as core classes), especially in elementary and middle schools and in schools using block scheduling. To reduce the time it takes to enter student requests, use this utility to assign groups of students the same request(s). Once added, only unusual situations or elective requests need to be entered. In addition, you can use the utility to change or delete requests for a course, or to mass delete all requests.

An option in the utility called Exclusion allows you to exclude students with specific course requests from being included when the utility is run. In other words, all of the students within the entered ranges are assigned the selected Course/Section except students who have the course selected within the Exclusion option.

Example:

All 10th grade students are to be given a request for Biology except students with a request for AP Biology or Introduction to Biology. Both AP Biology and Introduction to Biology are selected as exclusions. The students in the basic and advanced courses are typically manually scheduled in those courses or requests for those classes were entered earlier and for specific students.

For more information about this utility and how it's used in the future scheduling process, see "Part Two: Managing Student Requests, Step 2: Enter Requests, Add Student Course Requests, Use Mass Utility to Add, Change or Delete Requests."

This utility is also located in Request Processing Utilities (WS\OF\FS\RP\PS\UT\MA). In this location, Student Schedule Generation Utilities, it can be run against a Processing List.

Purge Schedule Generation Data

Each time a scheduling run is performed in an Entity, a record of that scheduling run is created that can be viewed and analyzed. This utility deletes the record of the scheduling run from the database. This utility is typically used when it has been decided that records of previous scheduling runs are no longer needed for reference, perhaps for previous school years. Others may choose to retain this data because it is useful to refer back to the next year.

Study Hall Scheduler

The Study Hall Scheduler Utility allows you to schedule a student into a course that has been identified in the Course Master with a Category of Study Hall. The most critical part of using the Study Hall Scheduler is setting up the courses, sections and Meet records which must match when students have free periods. To be affected by this utility, students must already be scheduled into at least one section of any course and must have a free period in their schedule.

Mass Add Students to Course/Class

The Mass Add Students to Course/Class Utility moves or copies students from one scheduled or requested course (Source Course) to one or more scheduled or requested courses (Target Course). This utility is helpful when you have a group of students with a particular request and need to give them requests for a different course or if you need to move a group of students from one section of a course to another section of the same course or to a different course and section.

The Exclusion selection allows you to exclude students from the process who are scheduled or requested into another particular course/section. For example, you can enroll all 9th grade students who are in 9th grade English 101 into 9th grade English 102 except those who are enrolled in 9th grade Honors English. The utility generates a report of the students who will be affected.

Mass Assign Student Scheduling Status

Before a guardian or student can make changes to a student's schedule through Online Arena Scheduling, the status must be changed to Open. This can be done using the Mass Assign Student Scheduling Status utility to process a group of students together. This utility can be used at a later time to change specific status values to other status values, such as changing schedule status to Locked when scheduling is complete so that students and guardians cannot make further schedule changes.

For more information about this Student Scheduling Status and this utility and how it's used in the future scheduling process, see "Part Four: Scheduling Students, Step 2: Scheduling Student Requests, Perform Online Arena Scheduling, Set Student Scheduling Status."

This utility is also located in Request Processing Utilities (WS\OF\FS\RP\PS\UT\MS).

Mass Assign Variable Earned Credits

The Mass Assign Variable Earned Credits Utility adjusts the credits a student earns for successfully completing a course to an amount different from what the student would typically earn for that course. This utility is helpful because it allows you to adjust credits for multiple courses and students instead of adjusting it manually by individual student. The option Use Audit/Variable Credits must be selected in Scheduling Entity Year Setup (WS\OF\FS\PS\CF\SE) for variable credits to apply.

Mass Delete Dropped Scheduling Records

This utility mass-deletes all scheduling records that are labeled as dropped for the selected Entity and School Year. The Entity Year Grading option that allows classes with grades present to be deleted is honored.

Mass Change Transaction Records

This utility allows you to mass-change the Effective Date on scheduling transaction records marked as Add or Drop. The date being changed (Old Date) and the date the record is being changed to (New Date) must fall within the dates in the School Year Ranges boxes.

Mass Delete Orphaned Student Class Records

This process analyzes all Student Class and Student Class Transaction records for *every* year in each Entity, verifying that the student exists in the student file and that the courses exist in the course file. If a student or course is not found, the Student Class and/or Student Class Transaction record(s) will be deleted and cannot be recovered. A warning is printed on the resulting report for valid Student Class records if a discrepancy is found on the Entity, Year or Section Number.

Use this utility if you notice problems with incomplete scheduling transaction information such as a missing student name key.

CAUTION	Other major scheduling or grading processes, such as mass add processes, should not be running or be started while this utility runs.
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Scheduling By Student

Mass Delete Schedule

When students withdraw from an Entity, they should be dropped or deleted from all of their sections. Instead of dropping a student from each section individually, you can use the Mass Delete Schedule utility to drop all scheduled sections at once. For more information about this utility, see “Miscellaneous Scheduling Maintenance: Deleting a Student’s Schedule.”

Pre-requisite Verification

This utility is available in Scheduling By Student to check a student’s requests and ensure they are not requesting any courses that have pre-requisites. If the selected student is not requesting any courses that have pre-requisites, a message will display indicating this. If the selected student does have requests for courses with pre-requisites, the requests will be listed in a table of Requested Courses. The pre-requisites will be divided into two categories and displayed in the appropriate table: Missing Pre-requisites or Pre-requisite Courses Taken. If a course request is missing the Pre-requisite, a Request button is available which can be selected to automatically request the Pre-requisite for the student. This utility is an alternate process for an individual student, to running the Pre-Requisite Verification Report.

Revert Student’s Schedule at Start

The Revert Student’s Schedule At Start Utility completely undoes any changes you’ve made to the student’s schedule (including scheduling transaction records) since you first entered the Future Scheduling By Student screen. This utility only works for the current session you’re in. Once you leave this screen, you cannot return to the screen and use the utility to revert the schedule to the changes you made in your previous session.

Study Hall Scheduler

The Study Hall Scheduler Utility schedules a student into a course that has been identified in the Course Master with a Category of Study Hall. The most critical part of using the Study Hall Scheduler is setting up the courses, sections and Meet records which must match when students have free periods. To be affected by this utility, students must already be scheduled into at least one section of any course and must have a free period in their schedule.

This utility is also located in Student Schedule Generation Utilities (WS\OF\FS\SS\PS\UT), to run for more than one student at a time.

Walk-In Scheduler

This is an automatic scheduling program for an individual student. For more information about this utility, see “Part Five: Concluding the Scheduling Process, Use the Walk-In Scheduler to Schedule a Student.”

NOTE	Before you can use the Walk-In Scheduler, you must assign course requests to a student. You can assign course requests for a student using the same methods you used to schedule a student into a section: By Course, By Period, By Subject, By Teacher, By Scheduling Group or By Open Classes. See “Schedule an Individual Student” and “Use Scheduling Groups to Schedule a Student” for details on these procedures.
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Running Reports

Reports are located in five areas of Future Scheduling.

- Future Scheduling (WS\OF\FS\RE)
- Build Course Master (WS\OF\FS\BC\RE)
- Request Processing (WS\OF\FS\RP\RE)
- Build Master Schedule (WS\OF\FS\BM\RE)
- Student Schedule Generation (WS\OF\FS\SS\RE)
- Schedule By Student (WS\OF\FS\SS\BS)

Each area contains many reports that provide information about the area in which they reside. For example, the reports located in the Build Course Master area generate information about the Course Master. All reports are discussed below.

Future Scheduling Reports

The Future Scheduling Reports area contains reports that focus on information from sections (class roster list), student schedules and scheduling codes (Control Sets Report). Each report for this area is described below.

To access these reports:

- Go to WS\OF\FS\RE.

Class Mailing Labels Report

The Class Mailing Labels Report is useful when documents must be mailed to the homes of students in particular classes. For example, you can use this report to generate labels to send home a welcome/introduction letter for all English 101 classes. The mailing labels can be generated for students or their parents/guardians for a selected group of classes or by a range of classes. You can include students who are currently enrolled in the section and/or those who have dropped it. To learn how this report fits into the future scheduling process, see “Part Four: Concluding the Scheduling Process, Running Reports, Class Mailing Labels Report.

Class Roster Report

The Class Roster Report generates a list of student names and can include certain student demographic information such as date of birth, address, and home phone. This report can be generated for a single section, for several sections of different courses, or for a range of sections. The contents of the report are determined by the choices you make in the Roster Options, Items to Print, Formatting and Student Ranges areas of the report template. To learn how this report fits into the future scheduling process, see “Part Four: Concluding the Scheduling Process, Running Reports, Class Roster Report.”

Course/Class Count Report

The Course/Class Count Report generates a list of courses with specific enrollment capacity information according to the Report Options you identify on the report template. This report can provide a breakdown of course section enrollment by gender, grade level, ethnicity and school. This report is often used to justify the need for additional teacher FTE in an Entity. To learn how this report fits into the future scheduling process, see “Part Four: Concluding the Scheduling Process, Running Reports, Course/Class Count Report.”

Pre-Requisite Verification Report

The Prerequisite Verification Report generates a list of students who have requested courses, or are taking courses, for which there is a prerequisite. If a student requests a course (of any length) that has a prerequisite, the report verifies whether the student has taken the prerequisite course in the following areas: student’s history from previous years, student’s current year schedule, and student’s requests for next year.

This report can be generated for only courses with prerequisites met, only courses with prerequisites not met or both conditions. If prerequisites have been met, the report shows the prerequisite course’s name and the year it was taken.

This report is also available in Request Processing Reports (WS\OF\FS\RP\RE\PR).

To learn how this report fits into the future scheduling process, see “Part Two: Managing Student Requests, Step 3: Use Reports to Analyze Student Requests, Pre-Requisite Verification Report.”

Student Schedules

The Student Schedules Report generates a student’s schedule. The report can be run for a single student, several students or a range of students. The Student Printing Options for this report template allow you to use this report to identify students who:

- Do not have a schedule (select Print Blank Schedules).
- Unresolved conflicts (select Print Only Auto-Scheduled Conflicts and Print Unassigned Courses).
- Are over-scheduled or under-scheduled - have too many or not enough sections scheduled (select Print Students with _____ # Scheduled Course(s))
- Had a scheduling transaction occur on a specific date (select Only Schedules with Changes on TranFile).

This report is also available in Scheduling By Student (WS\OF\FS\SS\BS).

To learn how this report fits into the future scheduling process, see “Part Four: Concluding the Scheduling Process, Running Reports, Student Schedules.”

Schedule Cards Report

The Schedule Cards Report is another report that generates a student’s schedule. This report has fewer printing options compared to the Student Schedules report because it is intended to be printed on card stock, which most Data Center printers do not support. To learn how this report fits into the future scheduling process, see “Part Four: Concluding the Scheduling Process, Running Reports, Schedule Cards Report.”

Teacher Schedules Report

The Teacher Schedules Report generates a matrix view by period of a teacher’s assigned sections. You can also use the report to:

- Identify teachers without scheduled classes (select Print Teachers Without Scheduled Classes).
- Identify staff who are assigned scheduled classes but who are not flagged as teachers in the staff table (select Print Staff Members Not Flagged as a Teacher Assigned to a Class).
- Print period times on this report, but to appear correctly on this report you must set up the Scheduling Period Times information in Build Course Master Codes area (WS\OF\FS\BC\PS\CO\SP). Select Print Period Start/Stop Time in Header.

This report is also available in Build Master Schedule Reports (WS\OF\FS\BM\RE\TS).

To learn how this report fits into the future scheduling process, see “Part Four: Concluding the Scheduling Process, Running Reports, Teacher Schedules Report.”

Non-Occurrence Report

The Non-Occurrence Report generates a list of students who have not taken, have failed, or have dropped a specific course or courses. The report checks for specific courses in a student’s course history and in their current and future schedules. To learn how this report fits into the future scheduling process, see “Part Two: Managing Student Requests, Step 3: Use Reports to Analyze Student Requests, Non-Occurrence Report.”

Buildings Report

The Buildings Report generates a list of all of the buildings for the district that are in the Buildings Codes table (WS\OF\CS\PS\CO\CO\BU).

Building Rooms Report

The Building Rooms Report generates a list of all of the rooms for all of the buildings that are in the Buildings Codes table (WS\OF\CS\PS\CO\CO\BU).

Control Sets Report

The Control Sets Report generates a list of the term definitions which are defined in the Scheduling Entity Year Setup area (WS\OF\CS\PS\CF\CF\SE).

Department Codes Report

The Department Codes Report generates a list of the departments defined in the Department Code table in the Course Master Codes area (WS\OF\CS\BC\PS\CO\CO\DE).

Scheduling Groups Report

The Scheduling Groups Report generates a list of the Scheduling Groups defined in the Course Master Codes area (WS\OF\CS\BC\PS\CO\CO\SG).

Subjects Report

The Subjects Report generates a list of the Subject Codes defined in the Course Master Codes area (WS\OF\CS\BC\PS\CO\CO\SU).

Build Course Master Reports

The Build Course Master Reports area contains a collection of reports that focus on information about the Course Master. Each report is described below.

To access these reports:

- Go to WS\OF\FS\BC\RE.

Course/Class Count Report

The Course/Class Count Report generates a list of courses with specific enrollment capacity information according to the Report Options you identify on the report template. This report can provide a breakdown of course section enrollment by gender, grade level, ethnicity and school. This report is often used to justify the need for additional teacher FTE in an Entity.

This report is also available in Future Scheduling Reports (WS\OF\FS\RE\CC).

To learn how this report fits into the future scheduling process, see “Part Five: Concluding the Scheduling Process, Running Reports, Course/Class Count Report.”

Course Report By Course

The Course Report by Course Report provides a variety of ranges and report formats, including a user-defined format, for generating a report that contains course and section information. The best way to become familiar with the information this report provides is to experiment with the ranges and report formats and save the report templates.

Course Report By Section

The Course Report by Section Report provides a variety of ranges and report formats, including a user-defined format, for generating a report that contains detailed section information. The best way to become familiar with the information this report provides is to experiment with the range and report formats and save the report templates.

Course Validation

This process searches every course in an Entity's Course Master for the selected school year and shows any warnings and errors due to incorrect data or incorrect relationships among courses, sections and Meet records. You need only provide a Template Description and verify the School Year in order to run the report.

Though not required, items identified as warnings should be changed. Items identified as errors on the report must be changed before scheduling will work properly.

Examples of warnings:

- A section has a Maximum Number of Students value of zero.
- A value has not been selected in Control Sets Possible for the course.
- A section's Control Set value is not listed in the Course's Control Sets Possible values.
- The Estimated Number of Sections value does not equal the Actual Number of Sections value.
- A course has an invalid Curriculum Code.
- A Co-Requisite course is required to have a section during a specific period or term/semester, but one is not offered.
- A Prerequisite is not set up correctly (a required course is not offered before the identified course or is not offered this year, so the student cannot meet the requirement).

Examples of errors:

- A section does not have any Meet Patterns.
- A course has requests but does not have any sections created.
- A Co-Requisite section is not set up correctly (a section is not offered the same term/semester).

To learn how this report fits into the future scheduling process, see "Part One: Preparing to Schedule, Maintain the Course Master, Generate the Validation Report."

Graduation Requirement Application Report

The Graduation Requirement Application Report is a report of all courses that are linked through a Curriculum Master record, to a selected Graduation Plan. The report shows which Requirement Area a course satisfies. For a course to appear on this report, at least one Meet Pattern must exist.

Request Processing Reports

To access these reports:

- Go to WS\OF\FS\RP\RE.

Course Availability List

After you've created or appended a Course Availability List, it can be viewed or printed and distributed as needed for one graduation year or a range of graduation years. Typically, students use the lists to designate the courses they want to take in the upcoming year. Staff members then manually enter their course requests. Students and guardians can also use the list to prepare to enter course requests in Family/Student Access.

When printing a Course Availability List, there are three options for defining the output:

- **Print using Student Ranges.** This option prints an availability list for a range of students that is customized for each student. The header of the list includes the student's name, address, phone number, grade level, date of birth, gender, homeroom, advisor, graduation year, calendar and school. It is easier to enter requests when you know the student's identity and other information.
- **Print using Student Selection.** This option allows you to print an availability list for specific students. This is also a customized list for each student, including the same header information as when printed by student ranges. This option is helpful when a student's availability list is lost or unusable and another copy is needed.
- **Print using Template.** This option prints an availability list with no header information. Students must write their name and other information onto their copy of the list. The template is helpful when you need a list for a specific graduation year and aren't ready to print them for specific students. A template can also help obtain course information to include on a district-specific or customized list to hand out to students.

For more information about this report and how it's used in the future scheduling process, see "Part Two: Managing Student Requests, Step 1: Create Availability List, Print a Course Availability List."

Arena Scheduling Cards

These cards are actually labels used in the scheduling process that is sometimes referred to as "Tennis Shoe" registration. Labels are printed for each course based on the number of students each class should contain. Students walk into the gym or another facility, find each class they want to take, and are given a label for the class. Students collect labels until they have a full schedule. When labels are gone for a class, the class is full and no more seats are available. Each label indicates the sequence that it was distributed. For example, 3 of 20 would indicate this was the 3rd label/seat given out of 20 seats for the class that were available. Other information available on the labels includes Course Description, Teacher Name, Room Number, Control Set and Period(s).

Pre-Requisite Verification Report

The Prerequisite Verification Report generates a list of students who have requested courses, or are taking courses, for which there is a prerequisite. If a student requests a course (of any length) that has a prerequisite, the report verifies whether the student has taken the prerequisite course in the following areas: student's history from previous years, student's current year schedule, and student's requests for next year.

This report can be generated for only courses with prerequisites met, only courses with prerequisites not met or both conditions. If prerequisites have been met, the report shows the prerequisite course's name and the year it was taken.

This report is also available in Future Scheduling Reports (WS\OF\FS\RE\PR).

To learn how this report fits into the future scheduling process, see "Part Two: Managing Student Requests, Step 3: Use Reports to Analyze Student Requests, Pre-Requisite Verification Report."

Repeated Courses Report

The Repeated Courses Report generates a list of all students within the Student Ranges and Course Ranges on the report template who have taken the same course more than once during the selected school year. The report contains a summary of the students with repeated courses or, if you choose the Print Option of Detail, the report includes the course information. For this report to run effectively, the Curriculum Master must be properly implemented within the district and Entity. Refer to the *Curriculum Master Overview V4* document for information about Curriculum Master. To learn how this report fits into the future scheduling process, see "Part Two: Managing Student Requests, Step 3: Use Reports to Analyze Student Requests, Repeated Courses Report."

Course Requests in Course Sequence Report

The Course Requests in Course Sequence Reports generates a list of students who are scheduled into, or who have a request for, the individual or range of courses you select on the report template. There is an option to print student names on the report template. If you do not choose this option, only the course totals by grade level and gender appear on the report. This report is not a section-by-section breakdown or a class list. Students on the report with an asterisk next to their names are scheduled into a section of the course. To learn how this report fits into the future scheduling process, see "Part Two: Managing Student Requests, Step 3: Use Reports to Analyze Student Requests, Course Requests in Course Sequence Report."

Registration Confirmation Report

The Registration Confirmation Report generates a list of unscheduled course requests and/or scheduled classes, including credit and fee information. This report can be used to verify student schedules. To learn how this report fits into the future scheduling process, see "Part Two: Managing Student Requests, Step 3: Use Reports to Analyze Student Requests, Registration Confirmation Report."

Students With Specific Combination of Courses

The Student With Specific Combination of Courses Report generates a list of students who are scheduled into, or who have a request for, the courses you identify on the report template. Use this report to find students who are taking a specific combination of courses, or who aren't but should be (such as a Physics course and a Physics Lab course). To learn how this report fits into the future scheduling process, see “Part Two: Managing Student Requests, Step 3: Use Reports to Analyze Student Requests, Students with Specific Combination of Courses Report.”

Student Request Report

The Student Request Report generates a list of students and their scheduled and requested courses. You can report on All Students, Only Students with Requests, Only Students without Requests or Only Students with Dropped Courses. You can also use the Credit Ranges on the report template to generate the report for students who have less than, more than or an exact number of credits.

If a full schedule is six credits, enter *only* a maximum of six credits per student. If you enter more requests it will appear that more seats are needed than actually are required, and course and student conflicts will be inflated. If students do not have enough credits entered to represent a full schedule, there may not be enough sections created to accommodate all students. To avoid these situations when creating the Schedule Master, use this report to identify students who do not have a full set of requests.

Once you've determined this information, work with specific students to modify their requests. You can also use this report to report on the requests entered for all students and for any option selected, and you can print any Alternate Course Requests.

Run this report several times. Save a different template for each version of the report. At a minimum, run this report to identify the following students:

- *Students with no requests entered.* To find these students, select Only Students without Requests in the Report Option area.
- *Students who have too few requests entered to constitute a full schedule.* To find these students, select Only Students with Requests in the Report Option area. In the Credit Ranges area, select the less than option and enter the value that represents the number of credits for a full schedule. Then select the or and more than options and enter the same value (equal to the number of credits for a full schedule).
- *Students who have requests for courses that have a Schedule Type equal to Dropped Course:* To find these students, select Only Students with Dropped Courses in the Report Option area.

To learn how this report fits into the future scheduling process, see “Part Two: Managing Student Requests, Step 3: Use Reports to Analyze Student Requests, Student Request Report.”

Student Alternate Request Report

The Student Alternate Request Report generates a list of students and their Alternate Requests. When used with the Free Period Report, this report helps place students into an Alternate Request Course for any period they have open. To learn how this report fits into the future scheduling process, see “Part Two: Managing Student Requests, Step 3: Use Reports to Analyze Student Requests, Student Alternate Request Report.”

Course Alternate Request Report

The Course Alternate Request Report generates a list of student alternate requests, per course. The number of alternate requests is represented in the Requests count for the course. In addition, totals information is printed for each course showing how many alternate requests there are per Grade Level, detailed by Female and Male as well as an overall total count. In addition, for each course an Assigned count of all students currently scheduled into the course and an Available seat count for the course are provided.

Course Catalog Report

The Course Catalog Report generates a course catalog that can be used by students to select the courses they want to take. This report is typically used in the Future Scheduling process. To make the most of this report it is recommended that you use the Curriculum Master and that you maintain Curriculum Explanations in that area. See the *Curriculum Master Overview V4* document for information about the Curriculum Master. Currently, this document is available only to Data Center Coordinators.

Scheduling Team Roster

The Scheduling Team Roster Report generates a list of students assigned to the Scheduling Teams you select on the report template. You can run this report after Scheduling Teams have been assigned to students to see which students are teamed together and to determine whether changes must be made. If individual team assignment modifications are needed, you must perform these changes before scheduling students into classes. For more information about this report and how it's used in the future scheduling process, see “Part One: Preparing to Schedule, Step 8: Create Scheduling Teams, Produce a Scheduling Team Roster.”

Build Master Schedule Reports

To access these reports:

- Go to WS\OF\FS\BM\RE.

Load Analysis Report

The Load/Analysis Report generates a list of course/section enrollment counts by period. This report template offers five Report By options (Course, Class, Teacher, Building/Room and Department). For example, if you select the option Teacher, the report generates a list of all the teachers in the Entity and their student counts (load counts) by period of the day. The report also includes a column that displays the average student per period. You can use this report to determine if sections of a course should be moved to a different period of the day or if more sections should be created in a certain period of the day.

Teacher and Room Availability Report

The Teacher and Room Availability Report generates a list of course/sections and the assigned teacher and room. This report helps you determine which teachers or rooms are available or unavailable during the day.

Teacher Schedules Report

The Teacher Schedules Report generates a matrix view by period of a teacher's assigned sections. You can also use the report to:

- Identify teachers without scheduled classes (select Print Teachers Without Scheduled Classes).
- Identify staff who are assigned scheduled classes but who are not flagged as teachers in the staff table (select Print Staff Members Not Flagged as a Teacher Assigned to a Class).
- Print period times on this report, but to appear correctly on this report you must set up the Scheduling Period Times information in Build Course Master Codes area (WS\OF\FS\BC\PS\CO\SP). Select Print Period Start/Stop Time in Header.

This report is also available in Future Scheduling Reports (WS\OF\FS\RE\TS).

To learn how this report fits into the future scheduling process, see “Part Five: Concluding the Scheduling Process, Running Reports, Teacher Schedules Report.”

Schedule Balance Report

The Schedule Balance Report places students into all of their courses assuming no conflicts to show an estimate of how many students would be scheduled into each period of the day. It is useful when modifying the Course Master and building the Master Schedule to determine if there are enough available seats in each period of the day to accommodate all students. The report can be used to compare the number of seats available to the number of students in the school to determine what changes should be made to the course and section offerings to accommodate the entire student population for every period of the day. The report can be broken down by grade or Grad Year and printed with course and/or class detail for specific information on how the schedule would be balanced for each period of the day.

Print Course Conflict Matrix

This is a printable version of the Conflict Matrix that was generated. The Conflict Matrix does not have to be viewed or printed to determine class placement. Once the Conflict Matrix has been generated, the system can analyze classes and determine their best placement. However, if you desire to print the Conflict Matrix, this report allows you to do so.

Student Schedule Generation Reports

The Student Schedule Generation Reports area contains a collection of reports that focus on information about the students' schedules. Each report is described below.

To access these reports:

- Go to WS\OF\FS\SS\RE.

Student Conflict Report

The Student Conflict Report lists of all students within the selected ranges that currently have a scheduling conflict. The report can be sorted by student or by course. If you sort by student, the report generates a list by student and all courses in conflict along with any alternate course requests if that option is also selected. If you sort by course, the report generates a list by course and then all students with conflicts in the course. You can display one of two types of conflicts on this report:

- **Auto Scheduled Conflicts** - this option includes courses that cannot be scheduled for a student because it will cause conflicts with other courses that were scheduled by the Auto Scheduler (but not courses that were manually scheduled or scheduled through Online Arena Scheduling). This report will show the conflicts (requests that could not be scheduled) that are also shown on the Student Conflict Detail Report.
- **Actual Conflicts** - this option includes courses that have already been scheduled (regardless of the scheduling method) and are conflicting. This would include students being double scheduled (placed into two different courses at the same time). This can happen when a student is manually scheduled into a course after an Auto Scheduling run is performed.

To learn how this report fits into the future scheduling process, see “Part Four: Scheduling Students, Step 3: Use Reports to Analyze Student Schedules, View Student Schedule Generation Reports, Student Conflict Report.”

Free Period Report

The Free Period Report generates a list of students who are not scheduled into a section for a specific period of a term. This report can be used as a guide for assigning students to study halls or other course/sections to give them a complete schedule. To learn how this report fits into the future scheduling process, see “Part Four: Scheduling Students, Step 3: Use Reports to Analyze Student Schedules, View Student Schedule Generation Reports, Free Period Report.”

Student Credit Count Report

The Student Credit Count Report generates a list of all the students who meet the Credit Range Options criterion. You can use this report to find those students with too few and/or too many scheduled or requested course credits. To learn how this report fits into the future scheduling process, see “Part Four: Scheduling Students, Step 3: Use Reports to Analyze Student Schedules, View Student Schedule Generation Reports, Student Credit Count Report.”

Student Course Recommendation Report

The Student Course Recommendation Report displays all Previous Year (current school year) courses with their paired Recommended Course, by individual student. After a recommended course has been approved as a Requested Course it appears on the report in the Requested Course column. This report can display a student's grades for the current class for which the recommendation is assigned, aiding in your decision to approve the recommendation.

NOTE	In order for this report to appear, Use Course Recommendations must be enabled in Entity Year Options (WS\OF\FS\PS\CF\SE).
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Student Schedule Credit Report

The Student Schedule Credit Report generates a list of students who fall within a certain range of course credits. You can use this report to check students' schedules to ensure they have the proper number of credits (GPA or Earned) for the year. The report displays by total credits per semester. To learn how this report fits into the future scheduling process, see "Part Four: Scheduling Students, Step 3: Use Reports to Analyze Student Schedules, View Student Schedule Generation Reports, Student Schedule Credit Report."

Schedule Changes Report

The Schedule Changes Report generates a list of students who have a drop, add or scheduling transaction adjustment on or during the date range you indicate on the report template. It contains a signature line for each transaction so that a student might use this report to obtain a teacher's signature in a class they are dropping or adding to their schedule. Then would then be turned in to the registrar to verify the teacher's notification of change to their class roster. To learn how this report fits into the future scheduling process, see "Part Four: Scheduling Students, Step 3: Use Reports to Analyze Student Schedules, View Student Schedule Generation Reports, Schedule Changes Report."

Scheduled Request Percentage Report

The Scheduled Request Percentage Report allows you to report on the percent of students who were fully scheduled, the percent of students with one unscheduled request, the percent of students with two or more unscheduled requests, and the percent of students with no requests. This report will only produce results after the Auto Scheduler has been run. You can re-run the report after schedule changes have been made to obtain updated percentages. To learn how this report fits into the future scheduling process, see "Part Four: Scheduling Students, Step 3: Use Reports to Analyze Student Schedules, View Student Schedule Generation Reports, Scheduled Request Percentage Report."

Future Scheduling Tab in Student Profile

Some of the functions performed in the Future Scheduling Module can also be performed using the Future Scheduling tab in the student Profile area of Web Access. This section explains this tab.

Future Scheduling tab

The Future Scheduling tab lists the classes a student has requested or is scheduled into for the next school year.

The tab allows you to do the following:

- Look at different views of a student's schedule
- Add, drop, edit or change a section for a student's schedule
- Run the Walk-In Scheduler
- Process regular and alternate request entry

To access the Future Scheduling tab:

- Go to WS\ST\PR.

See the table below Figure 82 for information about using this area.

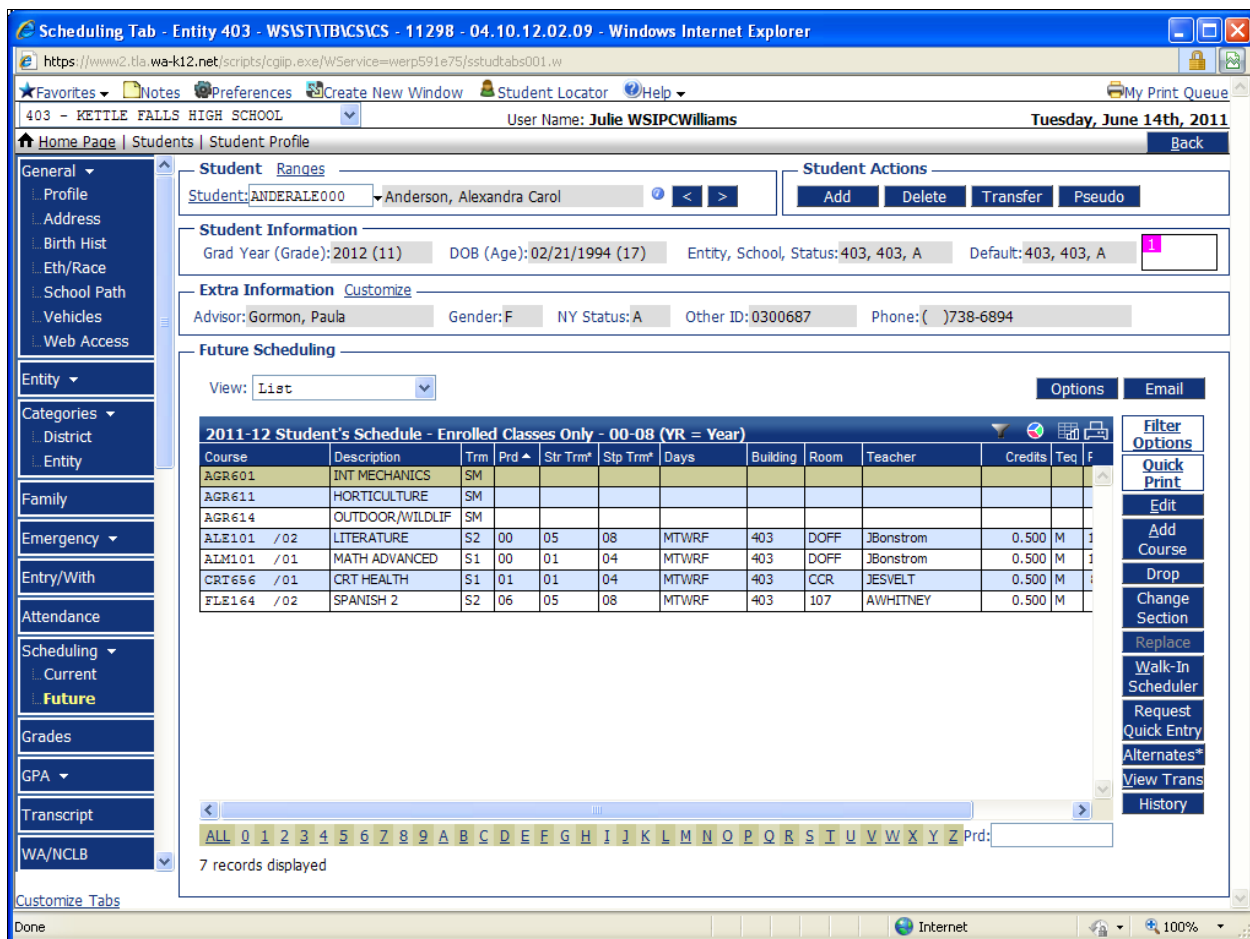


Figure 82 - Future Year Scheduling tab with three unscheduled requests and four scheduled classes.

Option	Description
View	Allows a student's schedule to be seen in different forms. The List view is shown in Figure 82. The Matrix view has columns by Period and rows by Term to display the student's schedule. The Semester-Day view displays courses in columns by day of the week for each Semester.
Options	See "Understanding the Scheduling Screen Defaults."
Email	Sends an email to anyone you address it to, regarding the selected student.
Edit	See "Editing a Student's Section."
Add Course	See "Schedule an Individual Student."
Drop	See "Dropping or Deleting a Student's Section."

Option	Description
Change Section	See “Changing a Student’s Section.”
Replace	See ‘Replacing a Student’s Section with a Section from a Different Course.’
Walk-In Scheduler	See “Use the Walk-In Scheduling to Schedule a Student.”
Request Quick Entry	See “Using the Request Quick Entry method on the Request Entry Screen.”
Alternates	See “To add Alternate Requests” and “To pair Alternate Requests.”
View Trans	See “Viewing a Transaction Record.”
History	Shows the student’s past, current and future class records in a list.

Table 48 - Future Scheduling tab options

Appendix A

Future Scheduling Checklist

This checklist will help you track your progress throughout the scheduling process. Each step in the checklist is followed by one of the terms in the table below.

Term	Description
Required	Step <i>must</i> be performed to create a Schedule Master and to schedule students using an automated method.
Recommended	Step <i>should</i> be performed to achieve best results in the scheduling process.
Perform as Needed	Data in this area may or may not need to be adjusted from last year's settings or configuration. Change data that needs updating.
Optional	Processes are not required to create a Schedule Master or to schedule students using an automated method.

PART ONE: Preparing to Schedule

- ☐ **Step 1:** Update Graduation Years and Grade Levels (**Required**)
- ☐ **Step 2:** Maintain Scheduling Setup and Codes (**Required**)
 - ☐ Check the Status of Clone Utilities
 - ☐ Clone the Entity Year and Term Definitions
 - ☐ Clone the Calendar Information
 - ☐ Clone the Scheduling Master Files
 - ☐ Ensure Course Length Sets and Class Control Sets are Accurate
 - ☐ Validate the Entity's Grading Setup
- ☐ **Step 3:** Add Students to an Entity (**Required**)
 - ☐ Run the Mass Add Students to an Entity Utility
 - ☐ Review the Report of Students Added to Other Entities
 - ☐ Check the Error Report
 - ☐ Delete Student Enrollment Records from the Receiving Entity
- ☐ **Step 4:** Maintain Staff (**Perform as Needed**)
 - ☐ Create Staff Records
 - ☐ Maintain Staff Entity Record
 - ☐ Add Department to Staff Records
 - ☐ Create Do Not Schedule Time Entry Record(s)

- ☐ **Step 5: Verify Scheduling Configuration (*Perform as Needed*)**
 - ☐ Review Scheduling Entity Year Setup
 - Maximum Semester, Term and Period Values
 - Entity Year Options
 - Scheduling Options
 - Term Definitions
 - Course Defaults
 - ☐ Select Scheduling Configuration Options
 - ☐ Choose Scheduling Lock Options
 - Lock Auto Scheduler
 - Lock Unschedule Utility
 - Lock Course Master Editing
- ☐ **Step 6: Run Course Master Utilities (*Recommended*)**
 - ☐ Create a Course Master Backup
 - ☐ Use the Mass Change Course Master Fields Utility
 - ☐ Calculate Student Section Counts
 - ☐ Update Control Sets Possible
 - ☐ Restore to a Selected Course Master Backup
- ☐ **Step 7: Maintain the Course Master (*Perform as Needed*)**
 - ☐ Clone Course Master Files from One Entity to Another
 - ☐ Add, Edit and Delete a Course, Section and Meet
 - ☐ Clone a Course in the Course Master
 - ☐ Build a Course Time Table
 - ☐ Pairing Alternate Courses
 - ☐ Assign a Co-Requisite to a Course
 - ☐ Assign a Co-Requisite to a Section
 - ☐ Create Prerequisite Requirements for a Course
 - ☐ Generate the Validation Report
- ☐ **Step 8: Create Scheduling Teams (*Optional*)**
 - ☐ Add Scheduling Team Codes
 - ☐ Update Course and Sections with Scheduling Team Assignments
 - ☐ Assign Students to a Team
 - ☐ Modify Individual Student Team Scheduling Assignments
 - ☐ Produce a Scheduling Team Roster
- ☐ **Step 9: Create Scheduling Categories (*Optional*)**
 - ☐ Add Scheduling Category Codes
 - ☐ Update Course Sections with Scheduling Categories
 - ☐ Mass Add and/or Delete Student Scheduling Categories
 - ☐ Modify Individual Student Scheduling Categories

PART TWO: Managing Student Requests

- ☐ **Step 1: Create an Availability List (*Optional*)**
 - ☐ Add a Course Wish Group

- ☐ Create a Course Availability List
- ☐ Print a Course Availability List
- ☐ **Step 2: Enter Requests (*Required*)**
 - ☐ Add Student Course Requests
 - ☐ Process Alternate Requests
- ☐ **Step 3: Use Reports to Analyze Student Requests (*Recommended*)**
 - ☐ Student Request Report
 - ☐ Course Requests in Course Sequence Report
 - ☐ Students with Specific Combinations of Courses
 - ☐ Non-Occurrence Report
 - ☐ Pre-Requisite Verification Report
 - ☐ Student Alternate Request Report
 - ☐ Repeated Courses Report
 - ☐ Registration Confirmation Report
 - ☐ Course Alternate Request Report

PART THREE: Building the Scheduling Master

- ☐ **Step 1: Calculate the Number of Sections Needed (*Required*)**
 - ☐ Estimate the Number of Sections Needed
 - ☐ Compare the Estimated Number of Sections and Actual Number of Section Values
- ☐ **Step 2: Create Sections (*Required*)**
 - ☐ Run the Auto-Generate Section and Class Meet Records utility
- ☐ **Step 3: Estimate the Number of Students in Each Section (*Recommended*)**
 - ☐ Run the Update Estimated Class Counts by Grade utility
- ☐ **Step 4: Prepare Meeting Patterns for Placement in the Schedule Master (*Recommended*)**
 - ☐ Run the Initialize Class Meet Details utility
- ☐ **Step 5: Determine Potential Conflicts in the Schedule Master (*Required*)**
 - ☐ Create the Conflict Matrix
- ☐ **Step 6: Learn to Use the Interactive Scheduling Board and the Master Schedule Builder (*Recommended*)**
 - ☐ Scheduling Using the Interactive Scheduling Board
 - ☐ How to Place Sections Using the Interactive Scheduling Board
 - ☐ Scheduling Using the Master Scheduling Builder
 - ☐ Scheduling Using both Methods Interchangeably
- ☐ **Step 7: Schedule Single-Section Courses into the Schedule Master (*Required*)**
 - ☐ Place Single-Section Courses in the Schedule Master
 - ☐ Run the Auto Scheduler in Imperative Mode or Pseudo Mode
 - ☐ Run Schedule Run Details and Reports
 - ☐ Make Adjustments to the Course Master
 - ☐ Place Multiple-Section Courses in the Schedule Master

PART FOUR: Scheduling Students

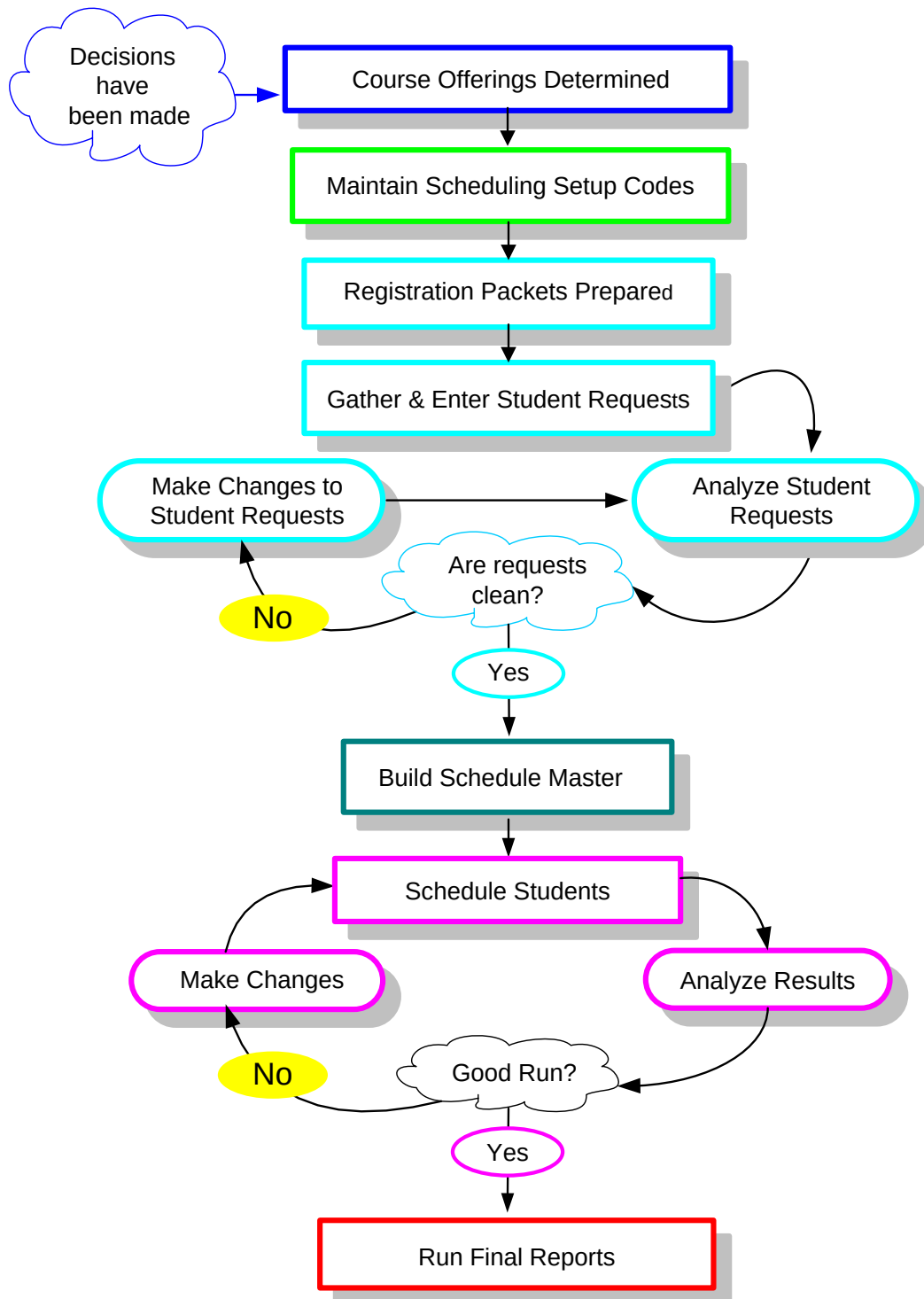
- ☐ **Step 1:** Manually Place Students in Sections (*Optional*)
- ☐ **Step 2:** Schedule Student Requests (*Required*)
 - ☐ Run the Auto Scheduler in Actual Mode, or
 - ☐ Perform Online Arena Scheduling
 - ☐ Configure Family Access / Assign Passwords and Web Access
 - ☐ Enable Entity Year Options
 - ☐ Select Course Master Options
 - ☐ Set Student Scheduling Status
 - ☐ Define Scheduling Time Periods
- ☐ **Step 3:** Use Reports to Analyze Student Schedules (*Recommended*)
 - ☐ View Schedule Run Details and Reports
 - ☐ Run and Interpret the results of the Student Conflict Detail Report
 - ☐ Run and Interpret the results of the Course Conflict Report
 - ☐ Run and Interpret the results of the Conflict Totals Report
 - ☐ View Student Schedule Generation Reports
 - ☐ Make Adjustments to Student Schedules
- ☐ **Step 4:** Schedule Student Alternate Requests (*Optional*)

PART FIVE: Concluding the Scheduling Process

- ☐ Schedule an Individual Student (*Optional*)
 - ☐ By Course
 - ☐ By Period
 - ☐ By Subject
 - ☐ By Teacher
 - ☐ By Open Classes
 - ☐ By Class
- ☐ Use Scheduling Groups to Schedule a Student (*Optional*)
 - ☐ Create a Scheduling Group
 - ☐ Clone Scheduling Groups
 - ☐ Assign a Scheduling Group to a Student
- ☐ Use the Walk-In Scheduler to Schedule a Student (*Optional*)
- ☐ Delete Unscheduled Requests (*Optional*)
- ☐ Running Reports (*Recommended*)
 - ☐ Class Mailing Labels Report
 - ☐ Class Roster Report
 - ☐ Course/Class Count Report
 - ☐ Student Schedules
 - ☐ Schedule Cards Report
 - ☐ Teacher Schedules Report

Appendix B

Scheduling Process Diagram



Appendix C

Summary of Auto Scheduler Logic

Determination of sequence of students to schedule

The highest level of student ordering is the student's Next Year graduation year or grade level. The ordering of grade levels can be controlled by using the Grad Yr/Grade range on the Student Schedule Generation screen. Each grade is processed through both the Imperative and Non-Imperative passes before the next grade level is started.

The order within each grade level is determined by whether or not the option to Balance by Student Attributes is selected and by the relative difficulty of the student's schedule. This is based upon the total number of sections (Estimated Sections) for all of the student's requests and the number of requests. Students with fewer sections and more requests are assumed to be more difficult to schedule. If the option to Balance by Student Attributes is selected, then the students will be first ordered or sorted by the attribute(s) and then by their difficulty.

The following example will illustrate this better:

- If the selected attributes are Race first and Gender second, the ordering within a grade level will be as follows:
 - Minority females first, minority males second, non-minority females third and non-minority males last.

NOTE	The term 'minority' above is referring to the Race Minorities for the Entity (Codes>Entity.Codes>Name>Race Minorities) which are associated to system Race Codes. That is the only use of this code value.
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Auto Schedule logic when scheduling individual student

The Auto Schedules process works in two separate stages. First it schedules the student's singletons based on imperatives and derived imperatives (defined as follows) and then it schedule all remaining multiple-section courses:

- True Imperatives - only 1 section of a course.
- Derived Imperative - only 1 section of a course is now available as any other section cannot be scheduled due to another course being scheduled in that section's time period.

The order the Auto Scheduler processes an individual student's singleton requests as follows:

- Type (required singleton's first, then elective singleton's)
- Length (Year first, then Semester, then Term)
- Internal Course ID (which may or may not be the same as the Course Key)

The order the Auto Scheduler processes the remaining individual student's requests (multiple-section courses) as follows:

- Scheduling Priority - A course with a Scheduling Priority of 9 is first and a 0 is last.

- In order to give Required courses in general a priority over Elective courses, the program automatically sets any Required course with a Scheduling Priority of 0, to a 5. If you have manually given a Required courses a Scheduling Priority other than 0, the program does not change the value. You will not see the value of 5 in the Scheduling Priority field on the course, but the program logic analyzes the courses with a Scheduling Priority of 0 as if it had a Scheduling Priority of 5 when it makes its determination of which course to schedule next for the student. In order to correctly use this feature, any required course that you have not assigned a Schedule Priority to, the course is automatically analyzed as if it has a value of 5. So if you are trying to give a course a priority over required courses, you must use a value greater than 5 so that the system will understand that the course has a greater priority.
- Percent of Fullness – this value is checked in the sections to determine the order of the remaining courses to schedule.
 - For courses with the same Scheduling Priority it determines the course to schedule based upon which course has the largest difference in percent of fullness amongst its own sections. Fullness is the number of students scheduled against maximum for the section. This is done to accomplish section balancing.
 - For example, Course A has 4 sections, with all 4 sections about 30% filled, Course B has 2 sections where one section is 10% filled, the other is 70% filled. In this case, it will place the student in the section of Course B which is 10% filled. If Course A has 4 sections, with percent filled ranging from 10% to 70%, and Course B has 2 sections both 10% filled, it will place the student in the section of Course A which is 10% filled.

Auto Scheduling of Prerequisites

Prerequisites are courses that have relationship to one another that are defined in the Course Master. A prerequisite for a course requires that one or more courses be taken prior to (or at the same time) as the specified course. A report must be run prior to running the Auto Scheduler to ensure that a student has fulfilled the prerequisites for the courses they have requested and remove the requests for which they have not met the prerequisites. The Auto Scheduler will still schedule requests for students if the prerequisites have not been met.

If a prerequisite requirement has been setup so that it is allowed to be taken concurrently (in the same year), the Auto Scheduler will honor the order in which the courses should be taken. The auto scheduler only looks at prerequisites if you are requesting a course and its prerequisite together.

- a) It will look at both the course request and its prerequisite and determine if it can schedule the prerequisite in a term prior to the other course.
- b) It will first attempt to schedule the prerequisite and then attempt to schedule the other course.

- c) If the prerequisite cannot be scheduled prior to the other course because it is not offered first, the other course will not be scheduled.
- d) If the prerequisite cannot be scheduled first due to conflicts (the course is available, but conflicts with another course), the other course will still be scheduled and it would be your responsibility to clean this up and make sure the prerequisite gets scheduled first manually.

Auto Scheduling of Co-requisites

Co-requisites are courses that have relationships to one another that are defined in the Course Master. They define courses that should be taken with specific requirements, either in same or different terms, same or different teachers and same or different periods. Co-requisite courses must be of the same length.

- a) If the course is year in length, then the only option is to have the same teacher for the opposing course.
- b) If the course is not year in length, then the user has the options of having the same period and same teacher and the option to put constraints on the terms the classes can meet. These term or semester constraints vary from none, same term, same semester-different terms, same semester-any term for term courses to same semester, different semesters or any semester for semester courses.
- c) For courses that are co-requisites there is the further option at the class level to actually link sections together. This allows forcing a student scheduled in the period 1 section first semester to be scheduled into the period 1 section of the other course second semester.

The auto scheduler will then honor the constraints put on the course section. The scheduling run Student Conflict Detail Report indicates when courses have co-requisites by placing a 'c' in front of the sections term and putting '+' signs in the days meet when a section was not available due to co-requisite constraints.

Auto Scheduling – Scheduling Teams

Team scheduling as described below is when both students and classes are assigned Scheduling Teams. The purpose of this is to group students into certain sections of courses based on the student's assigned Scheduling Team.

When team scheduling is used, the auto scheduling processes the courses and sections differently depending on the course's Team Scheduling Priority and the student's assigned team.

NOTE	If the student is not assigned to a team, it processes that student as if team scheduling is turned off. Likewise, if a section is not assigned to a team, it is available to any student regardless of the student's team.
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- a) If the priority on the course is set to No Priority, the course and sections are processed as if team scheduling is turned off.
- b) If the priority is set to Mandatory, only sections whose team matches the students are considered. This can actually create singletons out of courses that have multiple sections.
- c) If the priority is set to If At All Possible, the scheduler inflates the non-matching section counts (internally, during the processing) to one less than the class's maximum unless the count is already at or above the maximum and then it leaves it alone. For matching sections, it decreases the current counts by 50%.
- d) If the priority is set to 'If Feasible', the scheduler inflates the non-matching section's counts to the section's optimum size unless the count is already at or above that value. For matching sections, it decreases the current counts by 25%.

In both of the cases where the counts are changed, the scheduler will react positively toward teams by attempting to balance sections of a course for percentage of fullness.

Auto Scheduling – Scheduling Categories

Scheduling Categories are similar concept to Scheduling Teams, in that students and class sections are given one or more of these Categories and one or more of them must match before the student can be scheduled into it. If a student does not have at least one of a section's Scheduling Categories, they will not be scheduled into that section.

Frequently Asked Questions about the Auto Scheduler logic:

- Q: Does the schedule process students alphabetically?
- A: No. The system will create a list of students that will be processed based on the ranges selected. It will then process all students within the first graduation year selected. After processing the entire grade level it will then begin scheduling students with the next graduation year. In a high school setting this typically means seniors will be processed first followed by juniors and so on.
- Q: How many times can I run the Auto Schedule?
- A: Imperative and Pseudo scheduling runs, which simulate the scheduling process, may be run as many times as needed. The Actual scheduling run should be run only once to lock in student schedules. If the scheduling run needs to be processed again, the requests must first be unscheduled.
- Q: Can a scheduling run be undone?
- A: An Actual scheduling run can be unscheduled. An Unschedule Student Classes utility exists for this purpose.

Appendix D

Using Future Scheduling Tools to Schedule the Current School Year

The Future Scheduling module contains functionality to create a Master Schedule, enter student requests and mass generate student's schedules using scheduling tools (such as Request Processing, Master Builder and Auto Scheduler) for the current or next school year. However, these tools are not available in the Current Scheduling module. Therefore, to schedule in the current school year using the scheduling tools, you must do so through the Future Scheduling module.

When scheduling for the current school year using these tools in the Future Scheduling module, you can schedule either by a specific term (Term 1, Semester 2, etc.) or for the entire school year.

Current Year Scheduling Scenarios

1. You want to run Year End processes at the end of the school year, but prior to performing an Actual Scheduling Run (when schedules are generated). After year End is processed you want to schedule one or more terms (or the entire year) in what has now become the current school year.
2. You scheduled one or more terms prior to running Year End processes, but after Year End was processed you now need to re-schedule one or more terms in the current school year.
3. You would like to schedule only a single term (i.e. 1st Term or 1st Semester) of the next school year prior to Year End processing, knowing that there will be too many changes if additional terms are scheduled at this time. The additional terms will be scheduled after Year End has been processed, in the current school year (see scenario 2 above).

Scheduling in the Current Year

The steps below detail how to configure Scheduling Options to schedule in the Current Year, either for the entire year or a specific term.

To enable scheduling in the Current School Year for the entire year:

1. Go to WS\OF\FS\PS\CF\SE.
2. Click the plus sign next to the next school year.

3. Click Edit Scheduling Options next to the Scheduling Options heading.
4. Select Allow Current Year Scheduling.
5. Click Save.

To enable scheduling in the Current School Year for a specific Term:

1. Go to WS\OF\FS\PS\CF\SE.
2. Click the plus sign next to the next school year.
3. Click Edit Scheduling Options next to the Scheduling Options heading.
4. Select Schedule Multiple Times Per Year.
5. Select Semester or Term in Schedule By.
6. Select Allow Current Term/Semester Scheduling.
7. Click Save.

Future Scheduling Functionality for a Specific Term in the Current Year

The following Future Scheduling functionality has options to accommodate scheduling in the Current Year for a specific term:

- The Initialize Class Meet Details utility (WS\OF\FS\BM\PS\UT\IC) has an option Terms To Process.
- Course Availability Lists (WS\OF\FS\RP\RE\PC) can be printed for a specific control set(s).
- Request entry can be performed for a specific control set(s).
- Most reports have a Terms To Print, Term To Use or Control Sets option.
- The Scheduling Lock Options (WS\OF\FS\PS\CF\SL) are Term/Semester specific.
- The Auto Scheduler Generate Student Schedules (WS\OF\FS\SS\AS\GS) is run for a specific Term or Semester, based on the Time Period To Use selected from the Future Scheduling button.

- Requests will only be considered for scheduling if their terms fall within the Term/Semester being scheduled. Therefore, if requests exist for year long courses, they will not be scheduled by the system when scheduling a specific Term or Semester. Also, if requests exist for Semester long courses, they will not be scheduled by the system when scheduling a specific Term that falls within that Semester. For example: Semester 2 (of a 4 Term/2 Sem school) is being scheduled. There are requests for S2 and year long courses for a student. Only the S2 course requests will be considered for scheduling. The year long course requests will not be considered for scheduling. The student will not be scheduled into subsets of the year long course, even if the subset exists.
- A student's classes can be unscheduled using the Unschedule Student Classes utility. There is an option to specify the Terms To Process. Classes will only be unscheduled if their terms fall within the term being unscheduled. For example: Term 4 (of a 4 Term/2Sem school) is being unscheduled. A student is scheduled in a course with a length of year, but is enrolled in just the T4 subset of the year long course. When Term 4 is unscheduled, the course will be unscheduled for the student. The student is also enrolled in another year long course but in all 4 terms. When Term 4 is unscheduled, the system will not unschedule this year long course because the terms exceed the terms being unscheduled.
- A student's classes cannot be unscheduled for a specific Term or Semester if there are grades present for that class.

Future Scheduling Functionality for Family Access Request Entry in the Current Year

The following Future Scheduling school year information applies to request entry in Family Access to accommodate scheduling in the Current Year:

- The Course Availability List (WS\OF\FS\RP\RE\PC) is created just as it would be for the next school year, except the School Year field is equal to the current year. However, after creating the Course Availability List, it can then be printed for a specific control set(s).
- Entity setup for Students and/or Guardians is done through Web Access (WS\FA\FM\PS\CF\EC\Course Requests) for the current school year. Options are listed by Year and specific Sem/Term.
- The display in Family Access for Students and Guardians for Course Requests is listed by school year (e.g. 2007-2008 Courses) and a specific Term or Semester (e.g. Semester 2).

Future Scheduling Functionality for Online Arena Scheduling in the Current Year

The following Future Scheduling school year information applies to Online Arena Scheduling to accommodate scheduling in the Current Year:

- Entity setup for Students and/or Guardians is done through Web Access (WS\FA\FM\PS\CF\EC\Arena Scheduling) for the current school year. Options are listed by Year and specific Sem/Term.
- The display in Family Access for Students and Guardians for Arena Scheduling is listed by school year (e.g. 2011-2012 Courses) and a specific Term or Semester (e.g. Semester 2).

Appendix E

Troubleshooting Online Arena Scheduling Setup

The following problems and solutions can be used to ensure you have followed the configuration and setup required for both Web Access and Family Access if issues are encountered once the functionality has been deployed.

Problem:

A student and/or guardian cannot gain access to Family Access.

Solution:

Confirm the following conditions below are true (WS\ST\PR\General\Web Access):

- Student and/or guardian is assigned a Password.
- Student and/or guardian has the option Allow Web Access selected.

Problem:

A student and/or guardian can *only* view their schedule in Family Access Online Arena Scheduling (there are no Add or Remove buttons).

Solution:

Confirm the following conditions below are true:

- The option in Family Access, Allow Add/Remove of Courses, is enabled.
- Student's Scheduling Status equals Open (not Waiting, Approved or Locked).
- Student's Grade level equals the Grade Level for an Online Scheduling Time Period group.
- Student's Alpha Key falls within the Low and High defined for the Online Scheduling Time Period group.
- The current date falls within the Start Date and End Date defined for the Online Scheduling Time Period group.

Problem:

A student and/or guardian is not able to submit a schedule on the Submit Classes tab in Online Arena Scheduling:

Solution:

Confirm the following conditions below are true:

- Student's Scheduling Status equals Open (not Waiting, Approved or Locked).

Problem:

Courses, or certain courses, do not appear on the Available Classes list in Online Arena Scheduling.

Solution:

Confirm the following conditions below are true:

- Applicable courses in the Course Master have the Available To Online Arena Scheduling check box selected.
- The student's grade level falls within the Grade Ranges on the Course Master.

NOTE	If the option Only list class sections for courses student requested is enabled in Family Access, Entity Configuration for Available Classes any course that was requested for the student will be available.
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- The course was requested by the student (if the option Only list class sections for courses student requested is enabled in Family Access, Entity Configuration for Available Classes.)
- A Course Section has a Class Meeting record.