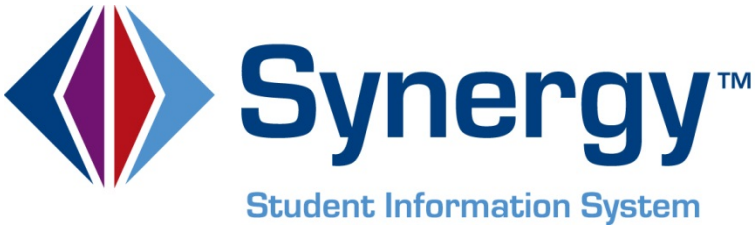

Synergy SIS™

Master Schedule Builder Guide

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This edition applies to Synergy SIS™ Student Information System software and all subsequent releases and modifications until indicated with new editions or revisions.

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The illustrations, procedural steps, and sample reports in this manual may be slightly different from the actual software due to modifications in the software based on state requirements and/or school district customization.

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ABOUT THIS MANUAL

Edupoint Educational Systems develops software with multiple release dates for the software and related documentation. The documentation is being released in multiple volumes to meet this commitment.

The table below lists the release date, software version, documentation volume number, and the content included in each volume of documentation to date.

Software and Document History

Date	Volume	Edition	Revision	Content
June 2011	1	1	0	Initial release of this document
January 2014	1	1	1	Complete update of the guide to version 8.0.6.1
January 2014	1	1	2	Updated to include course link synchronization and removed nonfunctional options. (8.0.7.0)

CONVENTIONS USED IN THIS MANUAL

Bold Text

Bold Text - Indicates a button or menu or other text on the screen to click, or text to type.

Tip – Suggests advanced techniques or alternative ways of approaching the subject.

Note – Provides additional information or expands on the topic at hand.

Reference – Refers to another source of information, such as another manual or website

Caution – Warns of potential problems. Take special care when reading these sections.

BEFORE YOU BEGIN

Before installing any of the Edupoint family of software products, please be sure to review the system requirements and make sure the district's computer hardware and software meet the minimum requirements. If there are any questions about the system requirements, please contact an Edupoint representative at (877) 899-9111.

Caution - The Edupoint family of software does not support the use of pop-up blockers or third-party toolbars in the browser used to access Synergy SIS. Please disable any pop-up blockers (also known as pop-up ad blockers) and extra toolbars in the browser before logging into any Edupoint product.

At any point, if there are any technical difficulties, please contact the Edupoint technical support team at support@edupoint.com or by phone at 1-877-899-9111 option 1.

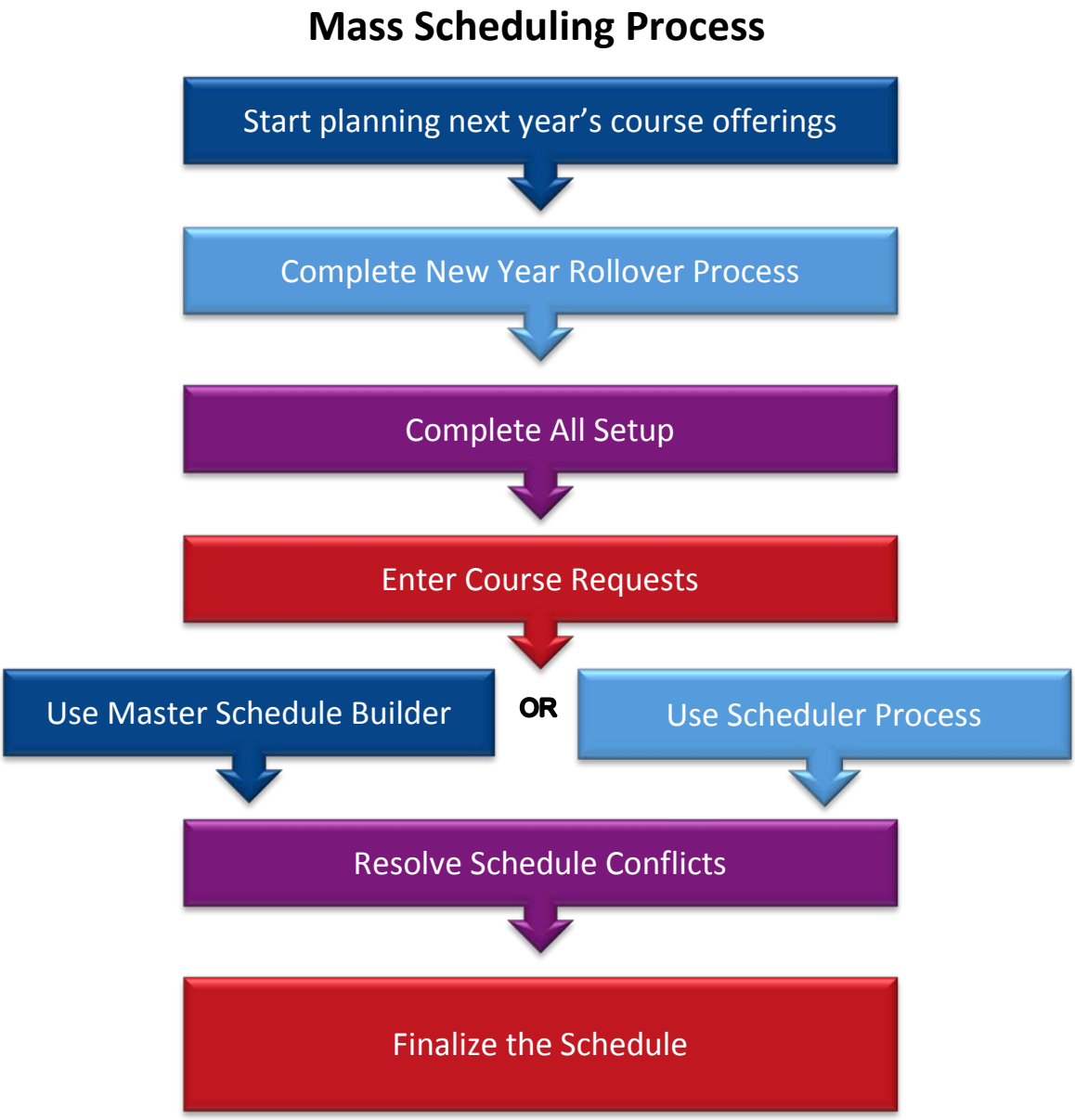
Chapter One: OVERVIEW

In this chapter, the following topics are covered:

OVERVIEW OF SCHEDULING

The Mass Scheduling module within Synergy SIS enables you to create schedules for your middle and high schools. When designing a school schedule, you have to try to balance student course request with you school's resources, such as staff, room availability, etc. The overall goal is to fulfill the greatest number of course requests, with the least amount of scheduling conflicts, all while ensuring that your students have the appropriate number of credits and required classes to graduate.

Within the Mass Scheduling process, there are two separate methods you can use to create student schedules. You can use the Scheduler or the Master Schedule Builder.



Note - Master Schedule Builder is an add-on module to Synergy SIS. It requires the purchase of a separate license key..

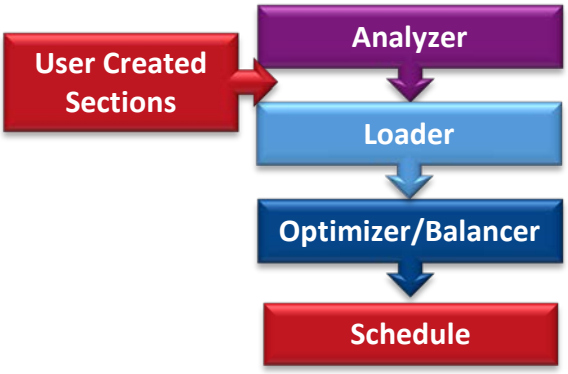
This guide explains how to use Master Schedule Builder.

All other components of the Mass Scheduling process are described in the *Scheduling and Course Guide*. Review the *Scheduling and Course Guide* before using Master Schedule Builder.

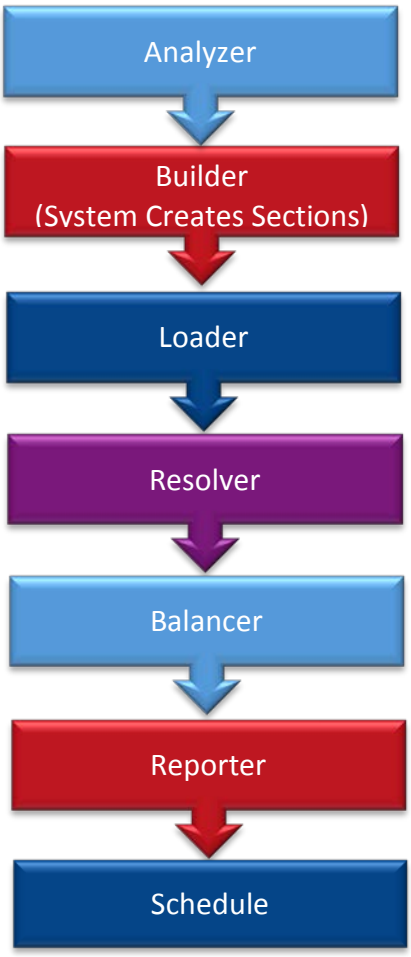
BENEFITS OF THE MASTER SCHEDULE BUILDER

There are several differences between the Scheduler and the Master Schedule Builder. The main difference is that when using the Scheduler, you create the sections and the system schedules students into them. In Master Schedule Builder, the system builds the sections and schedules the students into them.

Scheduler Process



Master Schedule Builder Process



The Master Schedule Builder uses six processes to create a schedule.

- **Analyzer** - analyzes attributes, rules, and course requests. This process always runs and cannot be turned off.
- **Builder** - builds the schedule and creates the sections.
- **Loader** - schedules students into sections. The system schedules students one at a time by the order of difficulty of their schedule. Those students with more singleton or doubleton requests are scheduled first.
- **Resolver -** reviews schedule conflicts and attempts to resolve them.
- **Balancer -** reviews sections that are over the maximum class size and tries to reschedule those students into other sections to create a better balance without creating more conflicts in other students' schedules.
- **Reporter** - creates all of the MSB reports during each scheduling run.

PREREQUISITES TO USING MASTER SCHEDULE BUILDER

This guide assumes that you have completed all the preceding steps in the Mass Scheduling process. Before attempting to build a master schedule, please ensure that the following items are completed and/or configured. Please see the *Synergy New Year Rollover Process Guide V2*, *Scheduling and Course Guide, Synergy SIS – Course History Administrators Guide*, and the *System Administrators Guide* for information on the following tasks.

- New Year Rollover processed.
- Room Type and Teacher Type Lookup tables setup..
- District Setup completed.
- School Setup completed.
- Courses entered into District Course.
- Courses opted into for each school.
- School Scheduling Options entered.
    - Meeting Days
    - Section ID Width
    - Auto Sequence
- Student Course Requests entered.

Caution - If the items mentioned above are not completed, you cannot build a master schedule successfully.

IMPLEMENTATION CONSIDERATIONS

The Master Schedule Builder uses a series of rules and constrains that you enter to determine how many sections of a course it needs to create, which teachers can teach those sections, which rooms can house those sections, and which students should be scheduled in them. You will enter these rules and constraints when you create Subject Categories. However, before you even begin the Master Schedule Builder process, you need to make some determinations and decisions. They help you define your Subject Category rules and constraints.

Course Options

- **What is the maximum number of students that can be scheduled in a section?** Many states have legislation that defines the maximum number of students in a class.
- **What is the minimum number of course requests needed for a class to be taught?** Some schools have identified the minimum number of students that must request a course for it to be financially feasible.
- **What is the ideal, or optimum, number of students in a class?**
- **How many days per week do the sections meet?** For example, a class that meets Monday-Wednesday-Friday has 3 days as opposed to an all-week course that has 5 days.
- **How many class periods are in a day?**
- **How many terms are in a school year?**
- **Are there grade level limits on the course?** Some courses may only be available to freshmen or seniors.
- **What priority should be given when scheduling a course?** Required core courses are generally scheduled before electives.

Teacher Options

- **What is the maximum number of class periods that can be assigned to a teacher in a day?** There may be a limit on the number of hours teachers can teach in a day stipulated in their contracts.
- **What is the maximum number of class periods that can be assigned to a teacher in a term?** This is the average number of periods per day across an entire term. Unlike the maximum per day, which is applied across all days, this would allow a teacher to be assigned to 6 periods one day and 4 the next, which would average out to 5.
- **What is the optimum number of class periods that can be assigned to a teacher in a day?** These are class periods, and do not count lunch or other periods outside a class teaching assignment.
- **What is the optimum number of class periods that can be assigned to a teacher in a term?** This is the average number of periods per day across an entire term. Unlike the maximum per day, which is applied across all days, this would allow

a teacher to be assigned to 6 periods one day and 4 the next, which would average out to 5.

- **What is the maximum number of sequential periods that can be assigned to a teacher in a day?** Many schools provide teachers with a prep period or lunch hour in the middle of the day.
- **What is the maximum number of students that can be assigned to a teacher in a period?**
- **Are there teachers that are restricted to only teaching students at a particular grade level?**
- **Are the teachers all full-time teachers?** Many districts have both part-time and full-time teachers.
- **Are teachers assigned to only one department?** Some teachers teach courses in multiple departments. For example, a teacher may teach both English and Social Studies classes.

Room Options

- **Are some rooms reserved for a specific department?** For example, a laboratory classroom may be reserved for use only by the Science department.
- **Are there rooms that are reserved for students at a specific grade level?**
- **What is the type of room for each room listed in SYNERGY SIS?** You will need to identify which schoolroom is a classroom, laboratory, or cafeteria.
- **What is the maximum number of students that can be accommodated in a classroom?** Fire codes and building codes determine the maximum number of people allowed in a room.
- **What is the optimum number of students that should be assigned to a room?**

You also need to decide which of these values take priority. If not all of the student course requests can be accommodated using a particular setup, the system uses the priority status to help determine which of these rules can be modified to adjust the schedule. Perhaps teachers can take on an extra period, or more students fit in a room.

Keep in mind that individual courses, teachers, and rooms may need different adjustments in the schedule. A lab section may only accommodate a small number of students, and a study hall or lunch period may be assigned more. The system uses Subject Categories to record these types of individual modifications and rules.

BEFORE YOU BEGIN

The initial setup for Master Schedule Builder can be a time consuming process. In addition, the initial test runs of a schedule can take a while to complete.

The Master Schedule Builder takes all your system data regarding courses, rooms, teachers, and students and applies a set of rules and restrictions that you provide during the setup process. From there, the system creates the most optimized and balanced schedule possible.

Does this mean that after you enter all of your data and run the Master Schedule Builder one time that the system gives you a finished master schedule?

No. Typically, you will have to run the Master Schedule Builder a few times, adjusting the rules, restrictions, and priorities in between each run in order to maximize the number of students scheduled.

We have outlined the Master Schedule Builder process on the next page. In the middle of the process, there is a loop. The loop is where you make adjustments, do another run, see the impact of those adjustments, and adjust some more until you are satisfied.

Does this mean that if you make enough adjustment, the system can schedule 100% of your students?

No. Statistically, it is very improbable for the system to do that. Plan on the fact that you will have to go into the system and adjust some student's course requests or modify sections.

Keep in mind, that the Master Schedule Builder is very robust, and can adjust to create student schedules in a variety of educational environments. However, the more rules and limits you apply, the more you restrict the system. The restricted system returns a lower percentage of successfully scheduled students. Edupoint recommends you use the rules, attributes, and constraints within the system very judiciously.

Please review the process flow before you begin working with Master Schedule Builder. The chapters in this manual correspond with each of the steps in the process illustrated on the next page.

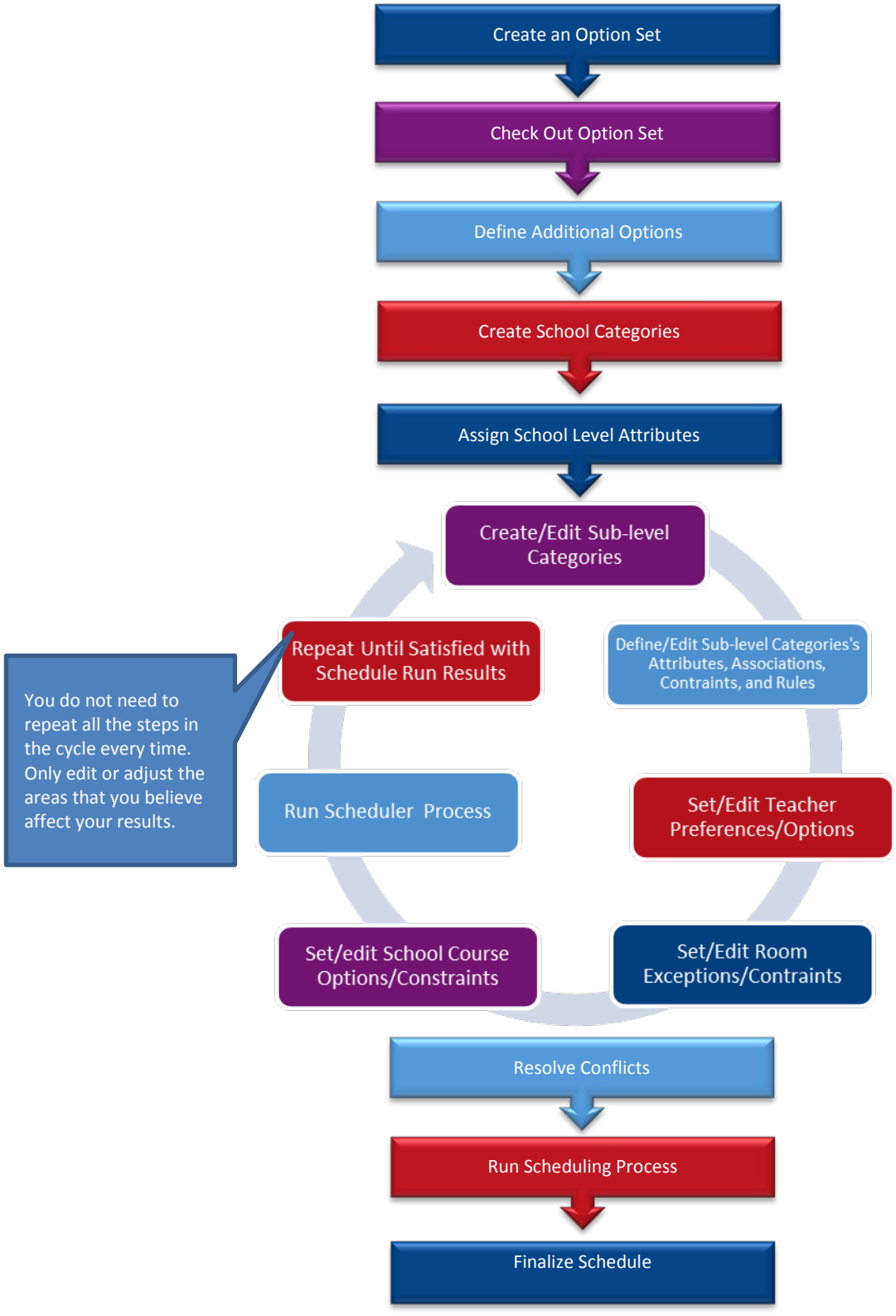


Figure 1.1 - Master Schedule Builder Process

Chapter Two: SETTING MSB SCHEDULING OPTIONS

In this chapter, the following topics are covered:

►

Option sets are where potential schedules are created and adjusted. Typically, no two option sets are exactly the same. The MSB Scheduling Option screen enables you to set options that will remain consistent across all the Master Schedule Builder Option sets for the current school year.

CREATING COURSE LINK TYPES

Course links create a relationship between two courses. For instance, you can create a link between a lab and a lecture, or between a pre-requisite and another course. The Course Link Types tab enables you to define the types of link relationships for all Master Builder Option sets.

1. Navigate to **Mass Scheduling > Setup > MSB Scheduling Options**.
2. Click **Add**.
   A new row displays in the Course Link Type grid.
3. Enter the **Name** of the link type.
4. Enter the **Description** of the link type.
5. Click **Save**.
   The course link displays in the Course Link Type grid.

Assigning Rules to All Linked Courses by Type

You can define how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes this type of linked course.

Setting the Builder Rules for Linked Course Types

1. Select a course type on the **Course Link Types** grid.
2. Click **Show Detail**.
   The Course Link Rules tab for the selected course link type displays.
3. On the **Course Link Rules** tab, expand the Builder Rules group box.
   The Builder Rules for this course link type displays.
4. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Allow Room Schedule Overlap**
- **Schedule Sections with Different Teachers**
- **Schedule Sections in Different Rooms**
- **Schedule Sections in Different Terms**
- **Schedule Sections After Terms**

- **Schedule Sections on Same Days**
- **Schedule Sections in Same Periods**
- **Schedules Sections in Consecutive Periods**
- **Allow Teacher Schedule Overlap**
- **Schedule Sections with Same Teachers**
- **Schedule Sections in Same Rooms**
- **Schedules Sections in Same Terms**
- **Section Sections Before Terms**
- **Schedule Sections in Consecutive Terms**
- **Schedule Sections on Different Days**
- **Schedule Sections in Different Periods**
- **Schedule Sections with No Time Overlaps**

5. Click **Save**.

Setting the Loader Rules for Linked Course Types

1. On the **Course Link Rules** tab, expand the Loader Rules group box.
   The Loader Rules for this course link type displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students In Mapped Sections**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**

- **Schedule Students in Different Terms**
- **Schedule Student After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**

3. Click **Save**.

Setting the Balancer Rules for Linked Course Types

1. On the **Course Link Rules** tab, expand the Balancer Rules group box.
   The Balancer Rules for this course link type displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Schedule Students in Same Term**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Ignore Rules From Higher Levels**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Terms**
- **Schedule Students After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Mapped Sections**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**

3. Click **Save**.

Setting the Analyzer Rules for Linked Course Types

1. On the **Course Link Rules** tab, expand the Analyzer Rules group box.
   The Analyzer Rules for this course link type displays.

2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

3. Click **Save**.

Setting the Resolver Rules for Linked Course Type

1. On the **Course Link Rules** tab, expand the Resolver Rules group box.
   The Resolver Rules for this course link type displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the system ignores rules set at the higher levels.
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**
- **Schedule Students Before Terms –**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Mapped Sections**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**

3. Click **Save**.

Chapter Three: CREATE AN OPTION SET

In this chapter, the following topics are covered:

Option sets are where potential schedules are created and adjusted. As the name implies, you can set different options in each option set and see how they affect the potential schedule. You can run a simulation of the schedule, changing student's requests, or school courses, in each option set. Moreover, you can work with as many different option sets as you need until you create your school's ideal schedule.

Keep in mind you cannot combine option sets. So only one option set can contain the final schedule results.

There are several different options available to you when creating a Master Schedule Builder option set.

CREATING A BLANK OPTION SET

When creating a blank option set, you are creating an option set from scratch.

4. Navigate to **Mass Scheduling > Schedule Control**.
5. Click **Create/Copy Option Set**.
   The Add New Option Set screen opens.

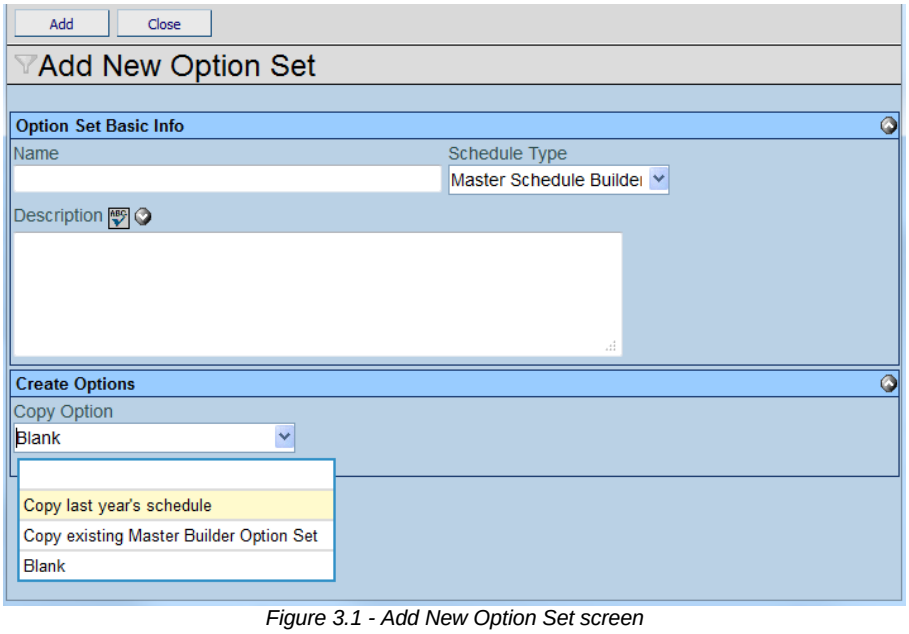


Figure 3.1 - Add New Option Set screen

6. Enter the **Name** of the option set.
7. Select **Master Schedule Builder** from the **Schedule Type** field.

Note - If the Schedule Type field does not display, either you do not have a license key that includes Master Schedule Builder or the security rights to use it.

8. Enter a **Description**.

9. In the **Copy Option** field, select **Blank**.
10. Click **Add**.
    The option set appears in the list on the Schedule Control screen.

CREATING AN OPTION SET FROM LAST YEAR'S SCHEDULE

You can create a new option set based on a previous year's finalized schedule.

1. Navigate to **Mass Scheduling > Schedule Control**.
2. Click **Create/Copy Option Set**.
   The Add New Option Set screen opens.
3. Enter the **Name** of the option set.
4. Select **Master Schedule Builder** from the **Schedule Type** field.

Note – If the Schedule Type field does not display, either you do not have a license key that includes Master Schedule Builder or the security rights to use it.

5. Enter a **Description**.
6. In the **Copy Option** field, select **Copy last year's schedule**.
   The Year field and related checkboxes display.
7. Select the **Year**.
8. Select **Copy Options**.
   - **Create Schedule Category Groups** – copies the subject categories defined in the previous year's option set.
   - **Do NOT Create Staff Linking** – does not copy any links between a staff member and a subject category. (This option is usually not selected.)
   - **Do NOT Create Room Linking** – does not copy any links between a room and a particular subject category. (This option is usually not selected.)
9. Click **Add**.
   The option set appears in the list on the Schedule Control screen.

CREATING AN OPTION SET FROM EXISTING MASTER SCHEDULE BUILDER OPTION SET

You can create an option set based on any existing Master Schedule Builder option set for any year.

10. Navigate to **Mass Scheduling > Schedule Control**.
11. Click **Create/Copy Option Set**.
    The Add New Option Set screen opens.
12. Enter the **Name** of the option set.
13. Select **Master Schedule Builder** from the **Schedule Type** field.

Note – If the Schedule Type field does not display, either you do not have a license key that includes Master Schedule Builder or the security rights to use it.

14. Enter a **Description**.
15. In the **Copy Option** field, select **Copy existing Master Builder Option Set**.
    The Year and Scheduling Option fields and related checkboxes display.
16. Select the **Year**.
17. Select the **Scheduling Option Set**.
18. Select **Copy Options**.

- **Include Sections without Teachers and/or Rooms** – copies sections from the selected Master Schedule Builder option set even if they do not have teachers and/or rooms assigned to them.
- **Copy Student Results** – copies student schedule results from the selected Master Schedule Builder option set.
- **Create Schedule Category Groups** – copies the subject categories defined in the previous year's option set.
- **Do NOT Create Staff Linking** – does not copy any links between a staff member and a subject category. (This option is usually not selected.)
- **Do NOT Create Room Linking** – does not copy any links between a room and a particular subject category. (This option is usually not selected.)

19. Click **Add**.
    A Copy Option Set Log is created and the option set appears in the list on the Schedule Control screen.
20. Open and review the **Copy Option Set** log.
    Confirm that the data selected was created. The only data copied is Course, Teacher, and Room.

Note – 0 (zero) sections added is acceptable because the process does not copy sections.

COPYING A MASTER BUILDER OPTION SET FROM ANOTHER SCHOOL

You can create an option set based on an existing Master Schedule Builder option set from another school in your district.

1. Navigate to **Mass Scheduling > Copy Master Builder Option Set**.
2. Select the **School** from which to copy.
   Only schools with Master Builder option sets display.
3. Select the **Year**.
4. Select the **Option Set**.
5. Select the type of data to copy from the selected option set:

- **Copy categories (recommended)** – copies the subject categories defined in the selected school's option set.
- **Copy course information (recommended)** – copies the courses information from the selected school's option set.
- **Copy course sections** – copies the any existing course sections from the selected school's option set.
- **Copy house and teams** – copy house and team information from the selected school's option set.
- Select the action to take if you do not have houses and teams defined for your school
    - **Copy (will add house or team to school)**
    - **Do not copy**

6. Click **Copy Option Set**.
   A Copy Option Set Log is created and the option set appears in the list on the Schedule Control screen.
7. Open and review the **Copy Option Set** log.
   Confirm that the data selected was created.

Note – 0 (zero) sections added is acceptable because the process does not copy sections.

Chapter Four:
CHECK OUT THE OPTION SET

In this chapter, the following topics are covered:

Each option set can only be edited by one user at a time. This prevents multiple users working in the same option set and potentially overwriting each other's changes. Each option set must be checked out in order to use it. Others can view the information in the option set, but cannot edit or run the scheduler. After you check it out, you can allow other users to make changes to sections without checking it out. However, they will not be able to modify any other setting in the option set.

Edupoint recommends that you keep the option set that you are working on checked out until you are completely done with it. This prevents others from checking out the option set and potentially locking you out of it while you are working on it.

CHECKING OUT THE OPTION SET

Once you check out an option set, you are the only user who can access it. You can have multiple option sets checked out at the same time.

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.

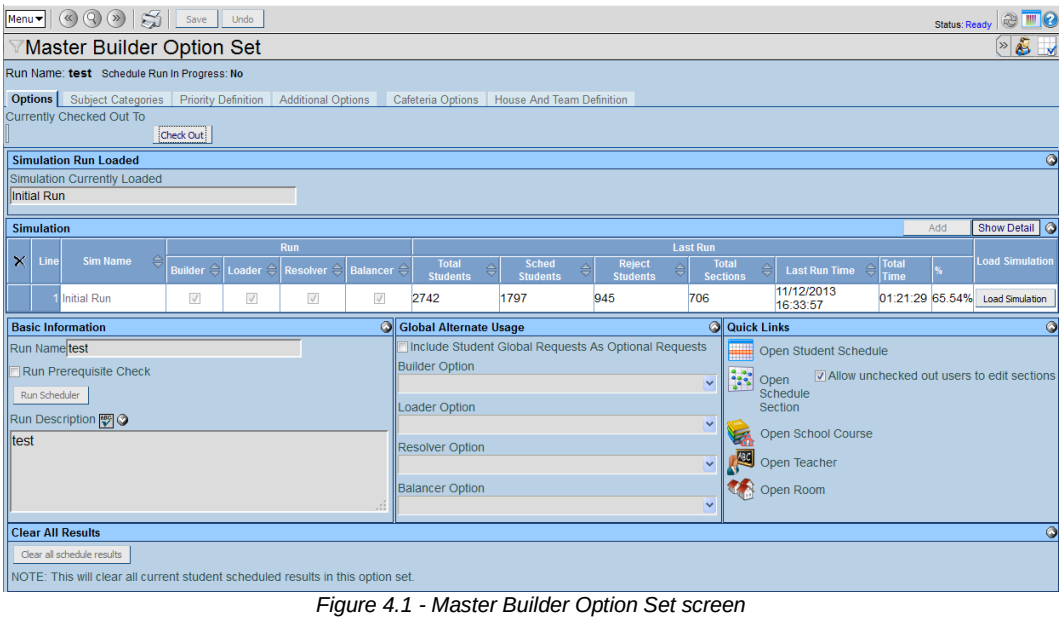


Figure 4.1 - Master Builder Option Set screen

3. Click **Check Out**.
   Your user name displays in the Currently Checked Out To field.

ALLOWING USERS TO EDIT SECTIONS WITHOUT CHECKING OUT THE OPTION SET

You can allow other users to modify the option set's sections using the Sched Section screen, even if the option set is checked out.

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.

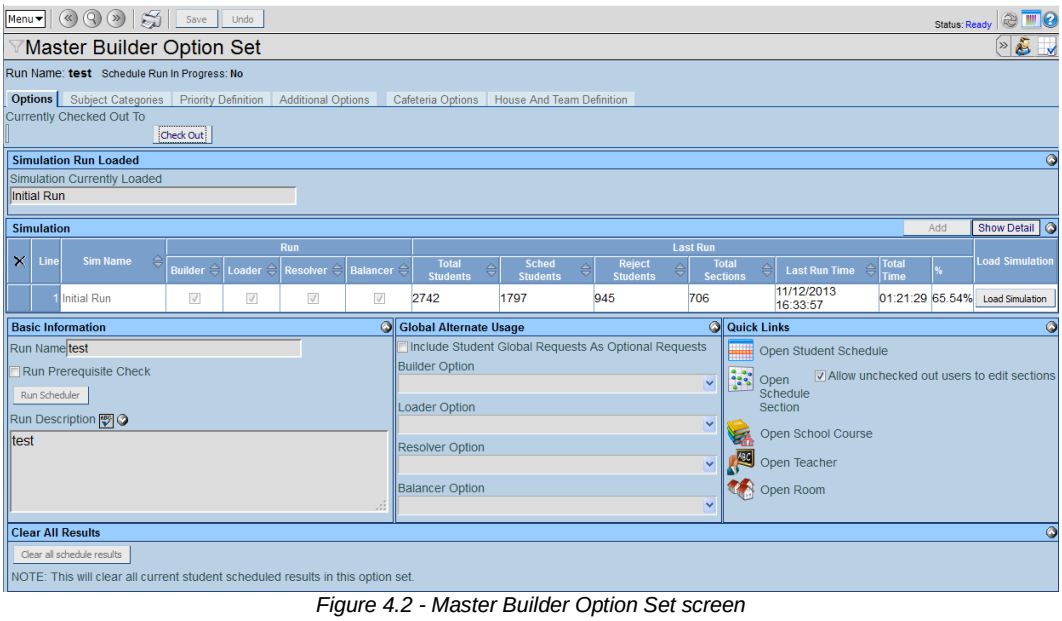


Figure 4.2 - Master Builder Option Set screen

3. Click **Check Out**.
   Your user name displays in the Currently Checked Out To field.
4. Select the **Allow unchecked out users to edit sections** option.
5. Click **Save**.

CHECKING IN THE OPTION SET

You can only check in option sets that you have personally checked out. When you check in an option set, you allow other users to check out the option set and make their own changes.

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
3. Click **Check In**.
   A user's name no longer appears in the '**Currently Checked Out To**' field.

Chapter Five: DEFINE OPTIONS

In this chapter, the following topics are covered:

There are varieties of options that you can define for each option set. Unlike the options selected when creating Subject Categories, the options you set here have the potential to affect the entire schedule rather than just a course or set of courses.

CREATING STUDENT, STAFF, OR ROOM PROPERTY CONSTRAINTS

You can designate properties that the system uses as constraints when it builds a schedule. You can create constraints using student, staff, or room properties. They are applied to the entire option set.

For instance, you can designate that the system only schedule teachers who are Full Time Employees (FTE.) You add a constraint to the Staff grid, select Staff from the BO Name field, and FTE from the Property Name field. The system builds a schedule and only assigns sections to full time teachers.

1. On the Master Builder Option Set screen, select the **Additional Options** tab.

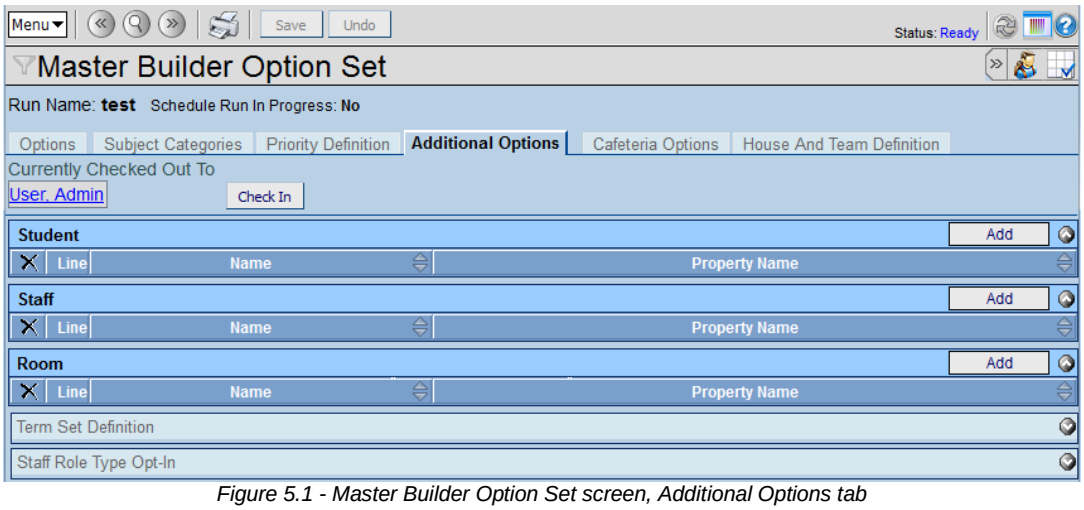


Figure 5.1 - Master Builder Option Set screen, Additional Options tab

2. In the **Student, Staff, or Room** grid, click **Add**.
   The Add <Student, Staff, or Room> BOs screen displays.

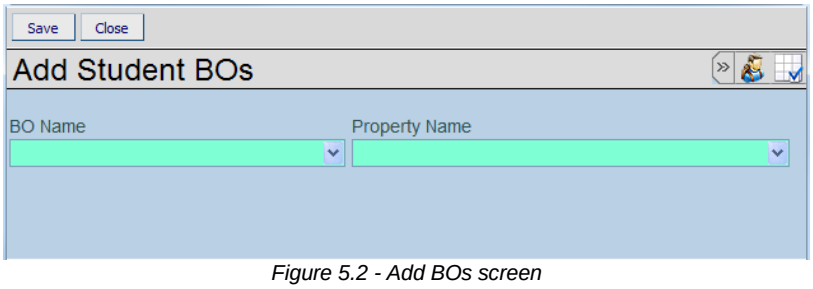


Figure 5.2 - Add BOs screen

3. Select the business object BO in the **BO Name** field.
4. Select the property in the **Property Name** field.

5. Click **Save**.
   The system returns you to the Additional Options tab.

DEFINING TERM SET

Using the Term Set Definition, you define the terms in which courses are taught. These settings override the value in the Course Duration field on the School Course screen. When the grid is blank, it defaults to the District Course Term Duration.

Edupoint recommends that you use the Term Set Definition to define all of the term codes used at your school during the regular school year. They should match the terms defined in School Setup.

Before you begin entering the Term Set Definitions, it is a good idea to have a complete list of the term codes your school uses and how many terms each code uses.

Some typical school term codes include:

Semester Schedule			
Term Code	**Total Terms**	**Start Term**	**End Term**
S1	1	1	1
S2	1	2	2
SX	1		
YR	2	1	2

Trimester Schedule			
Term Code	**Total Terms**	**Start Term**	**End Term**
T1	1	1	1
T2	1	2	2
T3	1	3	3
TX	1		
TA (first 2)	2	1	2
TB (second 2)	2	2	3
TC (Any 2 trimesters)	2		
YR	3	1	3

Quarter Schedule			
Term Code	**Total Terms**	**Start Term**	**End Term**
Q1	1	1	1
Q2	1	2	2
Q3	1	3	3

Q4	1	4	4
QX	1		
YR	4	1	4

Quarter Schedule w/Semesters			
Term Code	**Total Terms**	**Start Term**	**End Term**
Q1	1	1	1
Q2	1	2	2
Q3	1	3	3
Q4	1	4	4
QX	1		
S1	2	1	2
S2	2	3	4
SX	2		
YR	4	1	4

1. On the Master Builder Option Set screen, select the **Additional Options** tab.

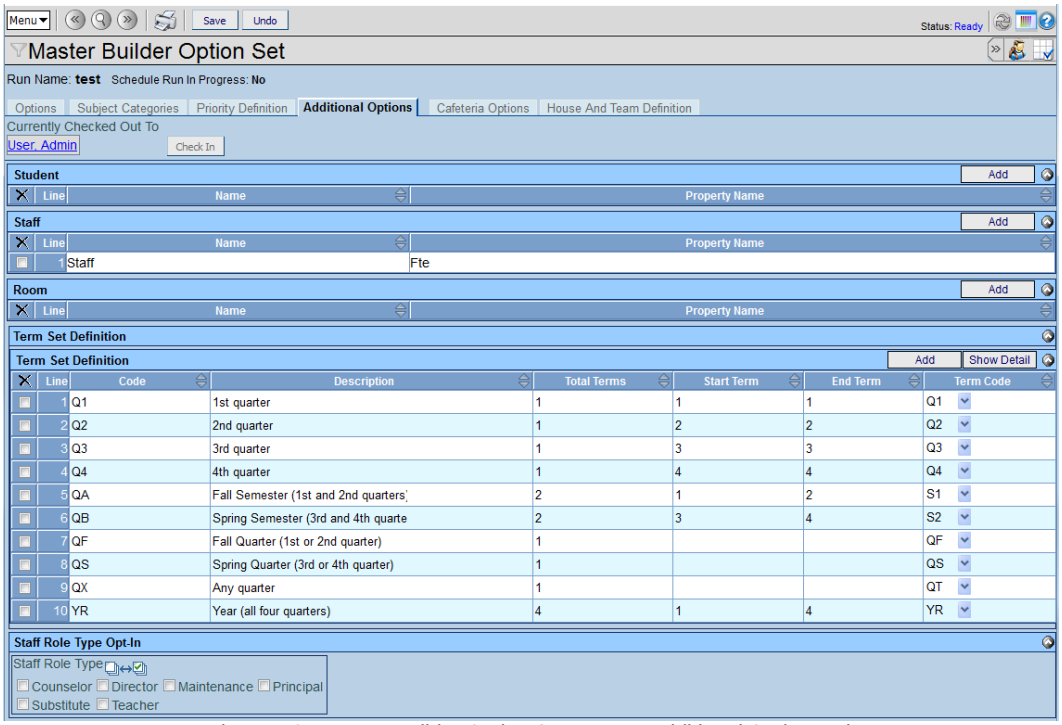


Figure 5.3 - Master Builder Option Set screen, Additional Options tab

2. In the **Term Set Definition** grid, click **Add**.
   A new row appears in the grid.
3. Enter the **Code**. This can be the same as the term code, or you can enter a new code for this particular code definition.

4. Enter the **Description** of the term, such as Semester 1, or First and Second Trimesters.
5. Enter the **Total Terms** for this code. (See examples mentioned earlier.)
6. Enter the **Start Term** for this code. (Not every code requires a start term. See examples mentioned earlier.)
7. Enter the **End Term** for this code. (Not every code requires an end term. See examples mentioned earlier.)
8. Select the **Term Code** that this new code overwrites.
9. Click **Save**.

Using Term Substitution

If your school uses special term codes, such as SX, TA, TB, TC, or QS, use term substitution to ensure that the term code is defined correctly.

1. Select the term code from the Term Set Definition grid.
2. Click **Show Detail**.
   The Term Substitution tab displays.

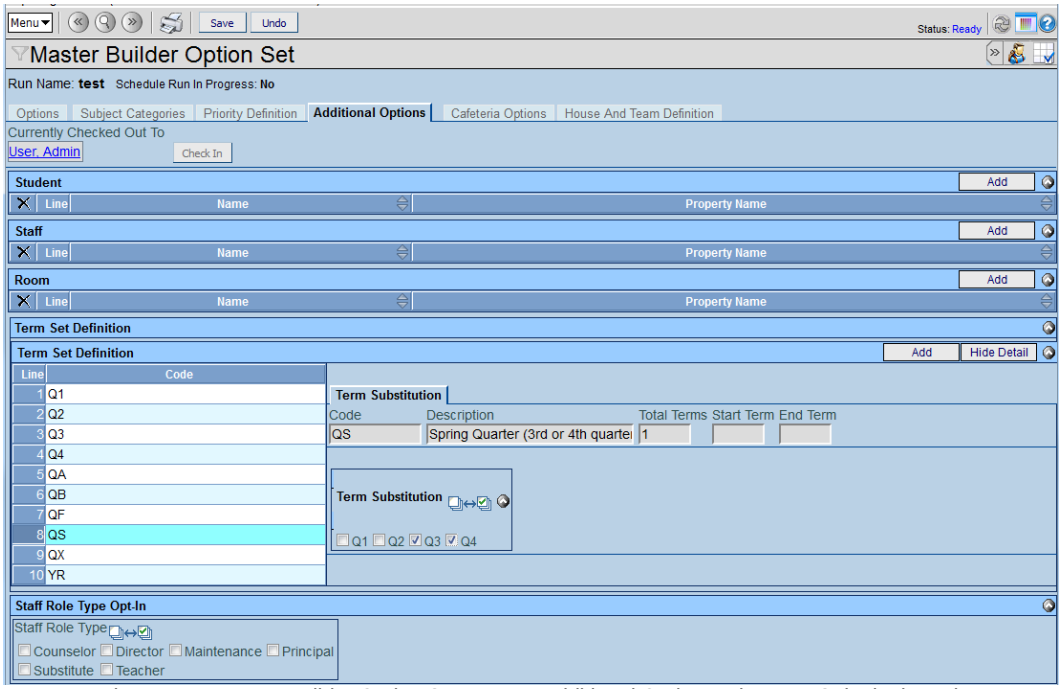


Figure 5.4 - Master Builder Option Set screen, Additional Options tab, Term Substitution tab

3. Select the correct terms in the **Term Substitution** group box.
4. Click **Save**.

SELECTING STAFF TO BE INCLUDED AS RESOURCES

You can select the type of staff roles that the system assigns as teachers to courses.

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
3. Select the **Additional Options** tab.

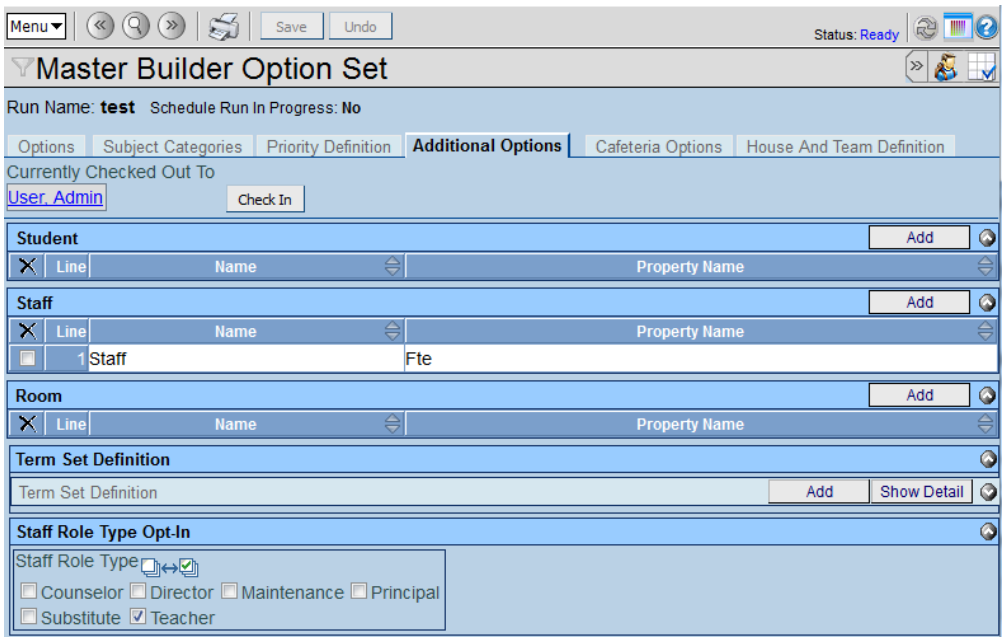


Figure 5.5 - Master Builder Option Set screen, Additional Options tab

4. Select the type of staff roles the system can assign to courses as teachers.
5. Click **Save**.

SETTING UP AUTOMATIC LUNCH SCHEDULING

You also have the ability to schedule students into lunch periods automatically without a lunch course request. In order to do this, your district must create a district course for Lunch. Your school opts into the district lunch course.

Then you can enter the parameters for the lunch period within the option set. The system automatically schedules a lunch period for all students, even if they have not requested one. This is especially useful for school on a block schedule, where all students are required to have a lunch period. The system takes into account the maximum number of students that can be in the cafeteria at the same time, and schedules accordingly.

Entering Option Set Parameters

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
3. Select the **Cafeteria Options** tab.

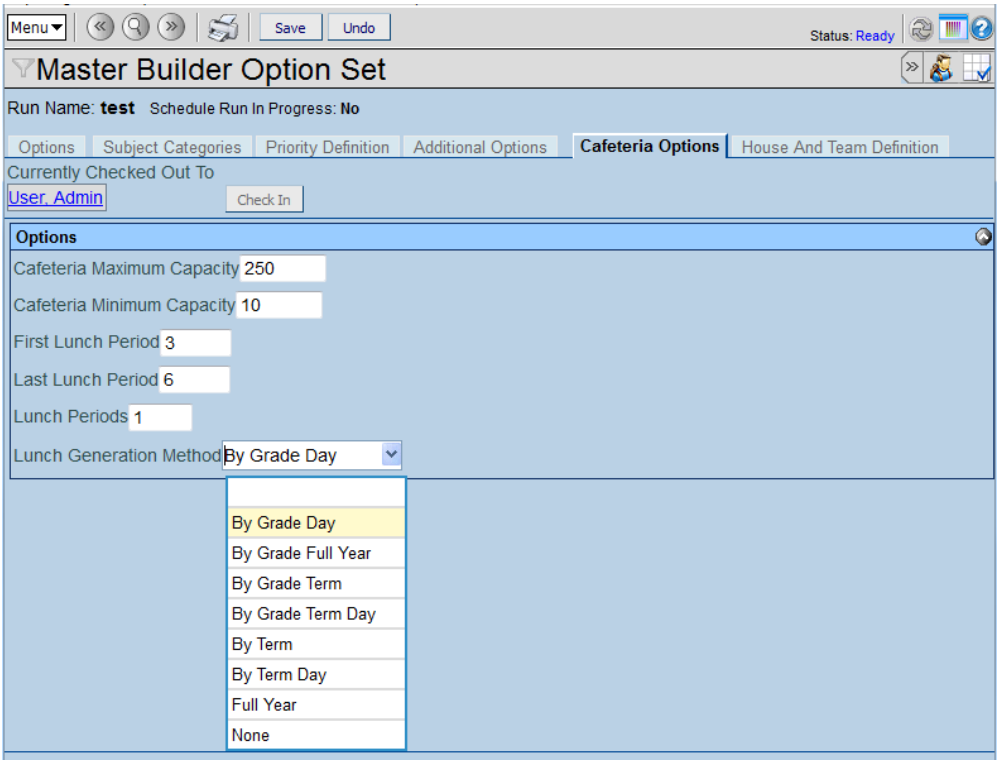


Figure 5.6 - Master Builder Option Set screen, Cafeteria Options

4. Enter the information in the Options group box.
   - **Cafeteria Maximum Capacity** - the maximum number of students the cafeteria accommodates.
   - **Cafeteria Minimum Capacity** - the minimum number of students the cafeteria accommodates.

- **First Lunch Period** - the first period of the day that lunch can be scheduled.
- **Last Lunch Period** - the last period of the day that lunch can be scheduled.
- **Lunch Periods** – the number of meeting periods for each lunch.
- **Lunch Generation Method** – the way that the system assigns lunch periods.
    - **By Grade Day** – Requires each grade level to have a lunch course created for each meeting day.
    - **By Grade Full Year** – Requires each grade level to have a lunch course created for the year.
    - **By Grade Term** – Requires each grade level to have a lunch course created for each term.
    - **By Grade Term Day** – Requires each grade level to have a lunch course created for each term and meeting day.
    - **By Term** – Requires an individual lunch course created for each term.
    - **By Term Day** – Requires an individual lunch course created for each term and meeting day.
    - **Full Year** – Requires one lunch course created for the entire year.
    - **None** – Not using cafeteria options OR No course request will be added.

5. Click **Save**.

Associating the Lunch Subject Type to the Lunch Course

1. On the Master Builder Option Set screen, select the Options tab.
2. Click the **Open School Course icon**.
   The School Course screen displays.

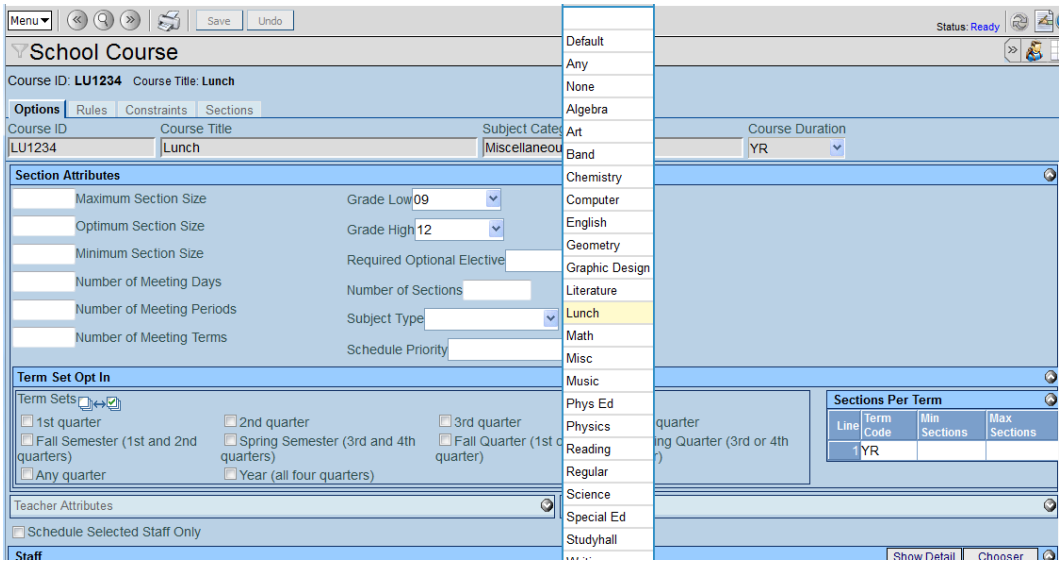


Figure 5.7 - MSB School Course screen

3. Find or scroll to the Lunch course.

4. In the **Subject Type** field, select Lunch.
5. Click **Save**.

Enabling Automatic Lunch Assignments

1. On the Master Builder Option Set screen, select the **Options** tab.
2. Click **Show Detail** on the **Simulation** grid.
   The simulation's Detail tab displays.

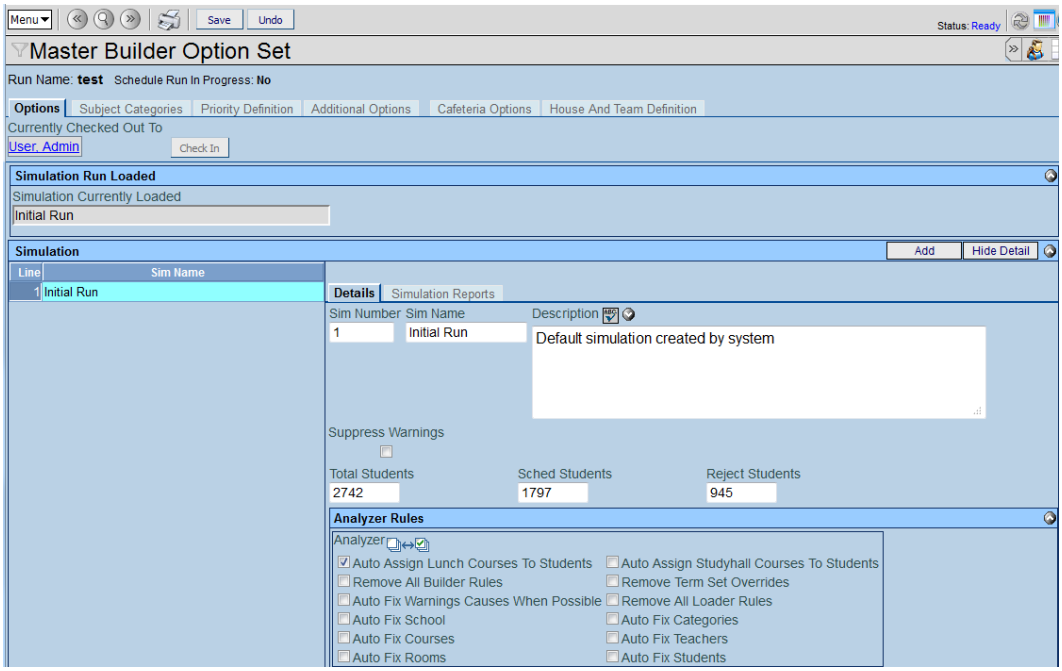


Figure 5.8 - Master Builder Option Set screen, Simulation Details tab, Analyzer Rules

3. Expand the **Analyzer Rules** section.
4. Select the **Auto Assign Lunch Courses To Students** option.
5. Click **Save**.
   When running the scheduler, the system assigns students a lunch period.

SETTING UP HOUSE AND TEAM RULES

Teams and Houses are used in scheduling to keep a group of students and/or teachers together. Defining Houses and Teams is covered in detail in the **Scheduling and Course Guide**.

Note – Houses and teams are not assigned to students during the scheduling run. Houses and teams are defined within the School Scheduling Options described in the Scheduling and Course Guide. Only previously defined options are used in the Master Schedule Builder option set.

In Master Schedule Builder, the system places students into their assigned houses and teams or the system can dynamically assign students to a house and team during the scheduling process.

Setting Up Scheduling Options for Houses and Teams

1. Open the Master Schedule Builder option set.
2. Select the **House and Team Definition** tab.

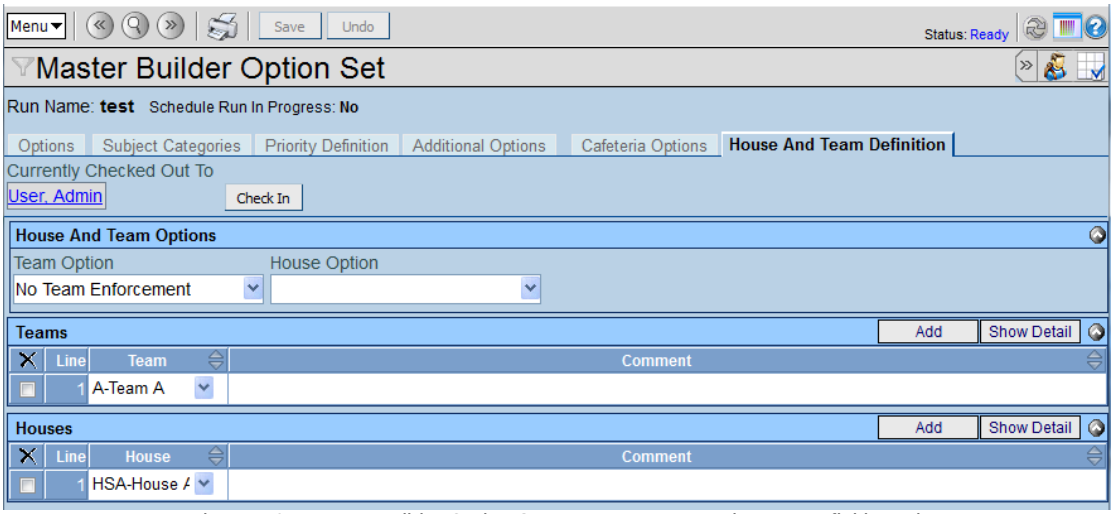


Figure 5.9 - Master Builder Option Set screen, House And Team Definition tab

3. Select a **Team Option**.

- **Automatic Team Enforcement** – Once a student is assigned to a team by the scheduler, the student remains with the team. Any of the student's course requests that matches a section within the team are scheduled within the team or not at all.

  Students may or may not be assigned a team. If students are manually assigned to a team the scheduler tries different assignments until a positive 100% schedule is reached for the student to a section defined team.

- **Match Sections with Teams** – If a section has been designated as a team section, then only students that have already been assigned to that team are placed in the section. If the section has not been designated as part of a team, then anyone can be scheduled into the section.

  Students who are manually assigned to a team are scheduled in that team. Students who are not assigned to a team are scheduled into the first team available for their schedule

- **No Team Enforcement** – the system ignores all team assignments.

4. Select a **House Option**.

- **Automatic House Enforcement** - If the student is assigned to a house, the system schedules them only in sections assigned to their house. If the student has no house assignment, the system schedules them in any available section, even if that section has a house assigned to it as well.

  If a section does not have a house assignment then the student can be placed in that section.

- **Match Sections with House** – the system assigns only students in a specific house to sections with that house. No non-house member students are assigned to the specified section.

- **No House Enforcement** – the system ignores all house assignments.

5. Click **Save**.

Designating Houses and Teams to Use in Scheduling

Note – Houses and teams are not assigned to students during the scheduling run. Houses and teams are defined within the School Scheduling Options described in the Scheduling and Course Guide. Only previously defined options are used in the Master Schedule Builder option set.

1. Open the Master Schedule Builder option set.
2. Select the **House and Team Definition** tab.
3. On the Teams or Houses grid, click **Add**.
   A new row appears in the grid.
4. Select the **Team** or **House**.
5. Add a comment or description of the team (optional.)
6. Click **Save**.

Defining Team Options, Rules, Constraints and Links

1. Open the Master Schedule Builder option set.
2. Select the **House and Team Definition** tab.

3. Select the desired team from the Team grid.
4. Click **Show Detail**.
   The Team Detail tabs display, including Team Definition, Link Rules, Constraints, and Linked Houses.

Setting Section and Teacher Schedule Priority (Optional)

1. Select the **Team Definition** tab.
2. Select the **Section Schedule Priority**.
   This field indicates if the scheduler considers the section schedule before or after other rules or factors.
3. Select the **Teacher Schedule** Priority.
4. Click **Save**.

Associating Courses with a Team (Optional)

1. Select the **Team Definition** tab.
2. Click **Chooser** on the Courses grid.
   The Chooser screen displays.
3. Find and select the appropriate course.
   The course displays in the Courses grid.
4. Enter the number of sections required for this team.
5. Click **Save**.

Associating Teachers with a Team (Optional)

1. Select the **Team Definition** tab.
2. Click **Chooser** on the Teachers grid.
   The Chooser screen displays.
3. Find and select the appropriate teacher.
   The teacher displays in the Teachers grid.
4. Click **Save**.

Setting Link Rules (Optional)

Note – While it is possible to create link rules, Edupoint does not recommend using them unless absolute required. By default, the system generates the only link rule necessary to get the teams and houses to build and load students per the house and team behavior described previously.

The system applies any selected link rules to all sections of the team and house. For instance, if you select the builder link rule "Schedule Sections in Same Periods," the builder tries to build all team sections in the same period.

1. Select the **Link Rules** tab.
2. Expand the **Builder Rules** group box.
   The Builder Rules for the team display.
3. Select the appropriate rules.
   - **Ignore Rules From Higher Levels**
   - **Schedule Sections on Different Days**
   - **Schedule Sections in Different Periods**
   - **Schedule Sections in Consecutive Terms**
   - **Schedule Sections After Terms**
   - **Allow Room Schedule Overlap**
   - **Schedule Sections with Different Teachers**
   - **Schedule Sections in Different Rooms**
   - **Schedule Sections in Different Terms**
   - **Allow Teacher Schedule Overlap**
   - **Schedule Sections in Same Periods**
   - **Schedules Sections in Consecutive Periods**
   - **Section Sections Before Terms**
   - **Schedule Sections with NO Time Overlaps**
   - **Schedule Sections with Same Teachers**
   - **Schedule Sections in Same Rooms**
   - **Schedules Sections in Same Terms**
   - **Schedule Sections On Same Days**
4. Expand the **Loader Rules** group box.
   The Loader Rules for the team display.
5. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students In Mapped Sections**
- **Schedule Student After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**

6. Expand the **Resolver Rules** group box.
   The Resolver Rules for the team display.
7. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**

- **Schedule Students in Different Terms**
- **Schedule Students in Mapped Sections**
- **Schedule Students After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**

8. Expand the **Balancer Rules** group box.
   The Balancer Rules for the team display.
9. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students In Mapped Sections**
- **Schedule Student After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Period**
- **Schedule Students in Same Sections**
- **Schedule Students with Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**

10. Click **Save**.

Configuring Time Constraints (Optional)

You can also limit the periods, terms, and/or meeting days that the team meets using Time Constraints. You have the ability to select the times to schedule the team, or the times to exclude from the teams schedule.

1. Select the **Constraints** tab.
2. Click **Add** on the Time Constraints grid.
   A new row displays in the grid.
3. Select the **Period Range**, if applicable.
4. Select the **Term Range**, if applicable
5. Select the **Meeting Days**.
6. Select the **Exclude Pattern** option, if appropriate.
7. Click **Save**.

Setting Linked Houses Rules (Optional)

You can link the team to a house and apply a set of rules to that house.

1. Select the **Linked Houses** tab.
2. Select the **Houses To Link**.
3. Expand the **Builder Rules** group box.
   The Builder Rules for the house display.
4. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Allow Room Schedule Overlap**
- **Ignore Rules From Higher Levels**
- **Schedule Sections Before Terms**
- **Schedule Sections in Consecutive Terms**
- **Schedule Sections in Different Rooms**
- **Schedule Sections in Same Periods**
- **Schedules Sections in Same Terms**
- **Schedule Sections On Same Days**
- **Schedule Sections with No Time Overlaps**
- **Allow Teacher Schedule Overlap**
- **Schedule Sections After Terms**

- **Schedules Sections in Consecutive Periods**
- **Schedule Sections in Different Periods**
- **Schedule Sections in Different Terms**
- **Schedule Sections in Same Rooms**
- **Schedule Sections on Different Days**
- **Schedule Sections with Different Teachers**
- **Schedule Sections with Same Teachers**

5. Expand the **Loader Rules** group box.
   The Loader Rules for the house display.
6. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students In Mapped Sections**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**
- **Schedule Students on Same Days**
- **Schedule Students With Same Teacher**
- **Schedule Student After Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students in Same Periods**
- **Schedule Students in Same Sections**
- **Schedule Students on Different Days**
- **Schedule Students with Different Teachers**

7. Expand the **Resolver Rules** group box.
   The Resolver Rules for the house display.
8. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students in Mapped Sections**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**
- **Schedule Students on Same Days**
- **Schedule Students With Same Teacher**
- **Schedule Students After Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students in Same Periods**
- **Schedule Students in Same Sections**
- **Schedule Students on Different Days**
- **Schedule Students with Different Teachers**

9. Expand the **Balancer Rules** group box.
   The Balancer Rules for the house display.
10. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students In Mapped Sections**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**
- **Schedule Students on Same Days**

- **Schedule Students with Same Teacher**
- **Schedule Student After Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students in Same Period**
- **Schedule Students in Same Sections**
- **Schedule Students on Different Days**
- **Schedule Students with Different Teachers**

11. Click **Save**.

Defining House Options, Rules, Constraints and Links

1. Open the Master Schedule Builder option set.
2. Select the **House and Team Definition** tab.
3. Select the desired house from the House grid.
4. Click **Show Detail**.
   The House Detail tabs display, including House Definition, Link Rules, Constraints, and Linked Teams.

Setting Section and Teacher Schedule Priority (Optional)

1. Select the **House Definition** tab.
2. Select the **Section Schedule Priority**.
   This field indicates if the scheduler considers the section schedule before or after other rules or factors.
3. Select the **Teacher Schedule Priority**.
4. Click **Save**.

Associating Courses with a House (Optional)

1. Select the **House Definition** tab.
2. Click **Chooser** on the Courses grid.
   The Chooser screen displays.
3. Find and select the appropriate course.
   The course displays in the Courses grid.
4. Enter the number of sections required for this house (optional).
5. Click **Save**.

Associating Teachers with a House (Optional)

1. Select the **House Definition** tab.
2. Click **Chooser** on the Teachers grid.
   The Chooser screen displays.
3. Find and select the appropriate teacher.
   The teacher displays in the Teachers grid.
4. Click **Save**.

Setting Link Rules (Optional)

1. Select the **Link Rules** tab.
2. Expand the **Builder Rules** group box.
   The Builder Rules for the house display.
3. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Sections on Different Days**
- **Schedule Sections in Different Periods**
- **Schedule Sections in Consecutive Terms**
- **Schedule Sections After Terms**
- **Allow Room Schedule Overlap**
- **Schedule Sections with Different Teachers**
- **Schedule Sections in Different Rooms**
- **Schedule Sections in Different Terms**
- **Allow Teacher Schedule Overlap**
- **Schedule Sections in Same Periods**
- **Schedules Sections in Consecutive Periods**
- **Section Sections Before Terms**
- **Schedule Sections with No Time Overlaps**
- **Schedule Sections with Same Teachers**
- **Schedule Sections in Same Rooms**
- **Schedules Sections in Same Terms**
- **Schedule Sections On Same Days**

4. Expand the **Loader Rules** group box.
   The Loader Rules for the house display.
5. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students In Mapped Sections**
- **Schedule Student After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**

6. Expand the **Resolver Rules** group box.
   The Resolver Rules for the house display.
7. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**

- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students in Mapped Sections**
- **Schedule Students After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**

8. Expand the **Balancer Rules** group box.
   The Balancer Rules for the house display.
9. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students In Mapped Sections**
- **Schedule Student After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Period**
- **Schedule Students in Same Sections**
- **Schedule Students with Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**

10. Click **Save**.

Configuring Time Constraints (Optional)

You can also limit the periods, terms, and/or meeting days that the house meets using Time Constraints. You have the ability to select the times to schedule the house, or the times to exclude from the house schedule.

1. Select the **Constraints** tab.
2. Click **Add** on the Time Constraints grid.
   A new row displays in the grid.
3. Select the **Period Range**, if applicable.
4. Select the **Term Range**, if applicable
5. Select the **Meeting Days**.
6. Select the **Exclude Pattern** option, if appropriate.
7. Click **Save**.

Setting Linked Team Rules (Optional)

You can link the house to a team and apply a set of rules to that team.

1. Select the **Linked Teams** tab.
2. Select the **Teams To Link**.
3. Expand the **Builder Rules** group box.
   The Builder Rules for the team display.
4. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Sections on Different Days**
- **Schedule Sections in Different Periods**
- **Schedule Sections in Consecutive Terms**
- **Schedule Sections After Terms**
- **Allow Room Schedule Overlap**
- **Schedule Sections with Different Teachers**
- **Schedule Sections in Different Rooms**
- **Schedule Sections in Different Terms**
- **Allow Teacher Schedule Overlap**

- **Schedule Sections in Same Periods**
- **Schedules Sections in Consecutive Periods**
- **Schedule Sections Before Terms**
- **Schedule Sections with No Time Overlaps**
- **Schedule Sections with Same Teachers**
- **Schedule Sections in Same Rooms**
- **Schedules Sections in Same Terms**
- **Schedule Sections On Same Days**

5. Expand the **Loader Rules** group box.
   The Loader Rules for the team display.
6. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students In Mapped Sections**
- **Schedule Student After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**

7. Expand the **Resolver Rules** group box.
   The Resolver Rules for the team display.
8. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students In Mapped Sections**
- **Schedule Student After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**

9. Expand the **Balancer Rules** group box.
   The Balancer Rules for the team display.
10. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**

- **Schedule Students in Different Terms**
- **Schedule Students In Mapped Sections**
- **Schedule Student After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**

11. Click **Save**.

SELECTING SCHEDULING PRIORITIES

You use Priority Definitions to dictate the order in which the system schedules different courses during the run. By adjusting the priorities, you influence the sequence in which system creates sections and loads students. You can designate a priority level or set the order in which the system processes the items. A numeric priority of 100 would take the highest priority. Zero would take the lowest priority.

Setting the Subject Type Priority Weighting

1. Open the Master Schedule Builder option set.
2. Select the **Priority Definition** tab.

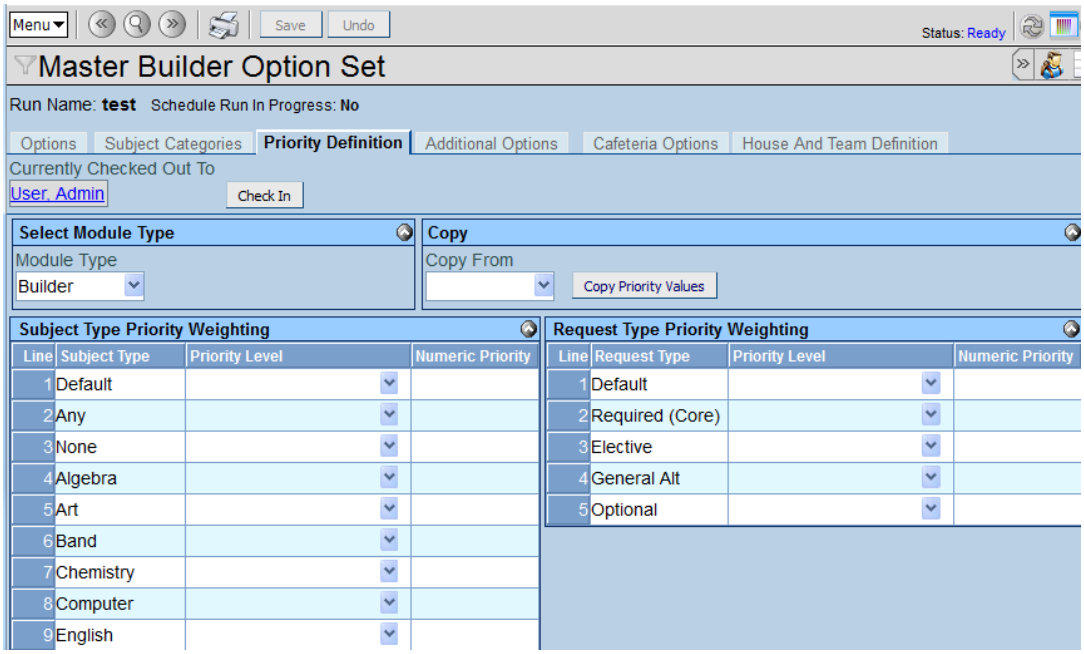


Figure 5.10 - Master Builder Option Set screen, Priority Definition tab

3. Select the **Module Type**.
4. In the **Subject Type Priority Weighting** grid, select the **Priority Level** for the subjects.

   OR

   Enter a number in the **Numeric Priority** column to set the order in which the system processes the subject for this subject.

> **Note** – If you enter a numeric priority and select a priority level, the number value takes precedence.

5. Click **Save**.

Setting the Request Type Priority Weighting

1. Open the Master Schedule Builder option set.
2. Select the **Priority Definition** tab.
3. Select the **Module Type**.
4. In the **Request Type Priority Weighting** grid, select the **Priority Level** for the request type.

   OR

   Enter a number in the **Numeric Priority** column to set the order in which the system processes the request type.
5. Click **Save**.

Copying the Priority Values

You can copy the priority weighting values from one module to another.

1. Open the Master Schedule Builder option set.
2. Select the **Priority Definition** tab.
3. Select the **Module Type**.
4. Select the module to copy in the **Copy From** field.
5. Click **Copy Priority Values**.
   The values are populated for the selected module type.
6. Click **Save**.

CREATING PRIMARY COURSE LINKS

You use course links to associate sections of two different courses during the scheduling process. For instance, you may have a chemistry course and a separate chemistry lab class, which follows immediately after. You can link the sections of those separate courses together.

Creating Course Links using Quick Add

If you already know the course IDs for both course you would like to link, use the Quick Add method.

1. Open the Master Schedule Builder option set.
2. Select the **Course Links** tab.
3. Enter the **Primary Course ID**.
4. Enter the **Linked Course ID**.
5. Select the **Link Method**. The link method defines how the system applies the course link rules and to which courses. The options include :

- **Minimum Section** – the minimum number of sections of either course the system creates links between.
- **Maximum Section** – the maximum number of sections of either course the system creates links between.
- **Custom** – the number of sections of either course the system creates links between.

6. In **Primary Sections** field, enter the minimum, maximum, or custom number of sections of the main course for which the system creates links.
7. In **Linked Sections** field, enter the minimum, maximum, or custom number of sections of the secondary course for which the system creates links.
8. Select the **Link Type**. See Creating Course Link Types.
9. Click **Add Link**.
   The linked courses display in the Course Links grid.

Linking Courses using the Course Link grid

1. Open the Master Schedule Builder option set.
2. Select the **Course Links** tab.
3. Click **Add**.
   A new row displays.
4. Click the grey arrow in the **Primary Course** column.
   The Find screen displays.
5. Find and select the primary course.
   The selected course displays in the Primary Course column

6. Click the grey arrow in the **Linked Course** column.
   The Find screen displays.
7. Find and select the course to link.
   The selected course displays in the Linked Course column.
8. Select the **Link Method**. The link method defines how the system applies the course link rules and to which courses. The options include :

- **Minimum Section** – the minimum number of sections of either course the system creates links between.
- **Maximum Section** – the maximum number of sections of either course the system creates links between.
- **Custom** – the number of sections of either course the system creates links between.

9. In **Course 1 Sections** column, enter the minimum, maximum, or custom number of sections of the main course for which the system creates links.
10. In **Course 2 Sections** column, enter the minimum, maximum, or custom number of sections of the secondary course for which the system creates links.
11. Select the **Link Type**. See Creating Course Link Types.
12. Click **Save**.

Assigning Rules to a Linked Course

You can define how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes this linked course.

Setting the Builder Rules for Linked Courses

1. Select a course on the **Course Links** grid.
2. Click **Show Detail**.
   The Rules tab for the selected course displays.
3. On the **Rules** tab, expand the Builder Rules group box.
   The Builder Rules for this course displays.
4. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Allow Room Schedule Overlap**
- **Schedule Sections with Different Teachers**
- **Schedule Sections in Different Rooms**
- **Schedule Sections in Different Terms**
- **Schedule Sections After Terms**

- **Schedule Sections on Same Days**
- **Schedule Sections in Same Periods**
- **Schedules Sections in Consecutive Periods**
- **Allow Teacher Schedule Overlap**
- **Schedule Sections with Same Teachers**
- **Schedule Sections in Same Rooms**
- **Schedules Sections in Same Terms**
- **Section Sections Before Terms**
- **Schedule Sections in Consecutive Terms**
- **Schedule Sections on Different Days**
- **Schedule Sections in Different Periods**
- **Schedule Sections with No Time Overlaps**

5. Click **Save**.

Setting the Loader Rules for Linked Courses

1. On the **Rules** tab, expand the Loader Rules group box.
   The Loader Rules for this course displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students In Mapped Sections**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**

- **Schedule Students in Different Terms**
- **Schedule Student After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**

3. Click **Save**.

Setting the Balancer Rules for Linked Courses

1. On the **Rules** tab, expand the Balancer Rules group box.
   The Balancer Rules for this course displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Schedule Students in Same Term**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Ignore Rules From Higher Levels**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Terms**
- **Schedule Students After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Mapped Sections**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**

3. Click **Save**.

Setting the Analyzer Rules for Linked Courses

1. On the **Rules** tab, expand the Analyzer Rules group box.
   The Analyzer Rules for this course displays.

2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

3. Click **Save**.

Setting the Resolver Rules for Linked Courses

1. On the **Rules** tab, expand the Resolver Rules group box.
   The Resolver Rules for this course displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the system ignores rules set at the higher levels.
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**
- **Schedule Students Before Terms –**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Mapped Sections**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**

3. Click **Save**.

Synchronizing Linked Rules from the Option Set

After you create course links, you can edit them and change the link type. When you change the link type, you can synchronize the course links so the system applies the properties and rules associated with the new link type to the edited course links.

Also, you synchronize anytime you make changes to the rules associated with a course link type on the MSB School Scheduling Options screen, in order to apply the new changes to all of the course links with that link type designated within the selected option set.

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
3. Click **Menu**.
   The Menu options display.

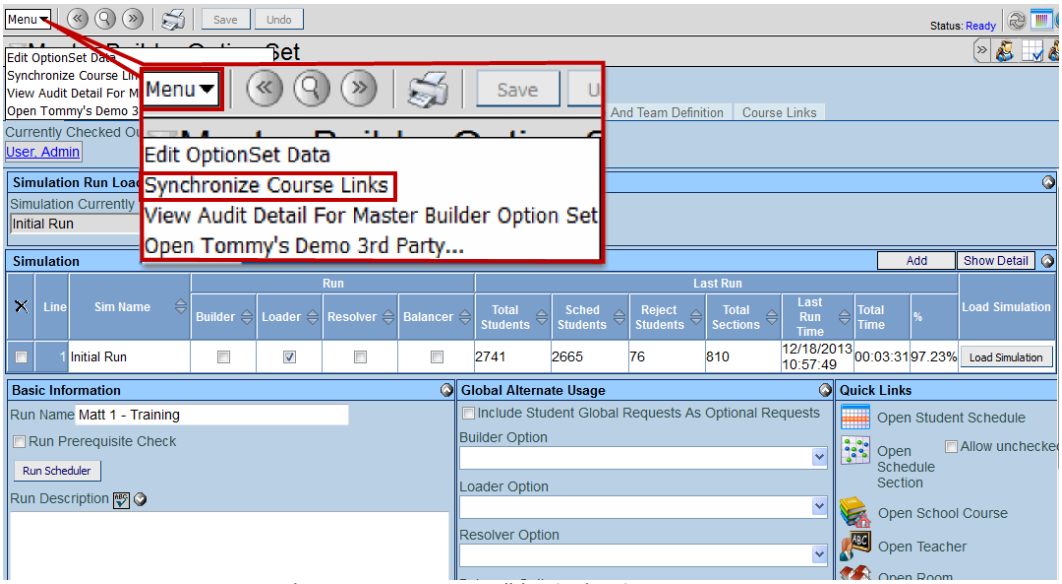


Figure 5.11 - Master Builder Option Set screen, Menu

4. Select **Synchronize Course Links**.
   The Synchronize Course Links screen displays.

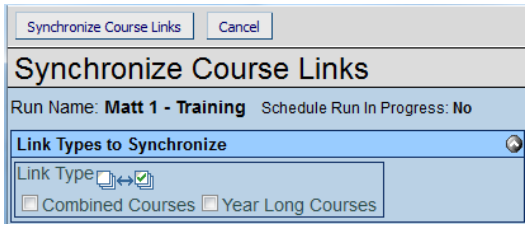


Figure 5.12 - Synchronize Course Links screen

5. Select the **Link Type** to synchronize.
6. Click **Synchronize Course Links**.
   The system updates all the selected course link types within the current option set.

Chapter Six:
CREATING SUBJECT CATEGORIES

This chapter covers these topics:

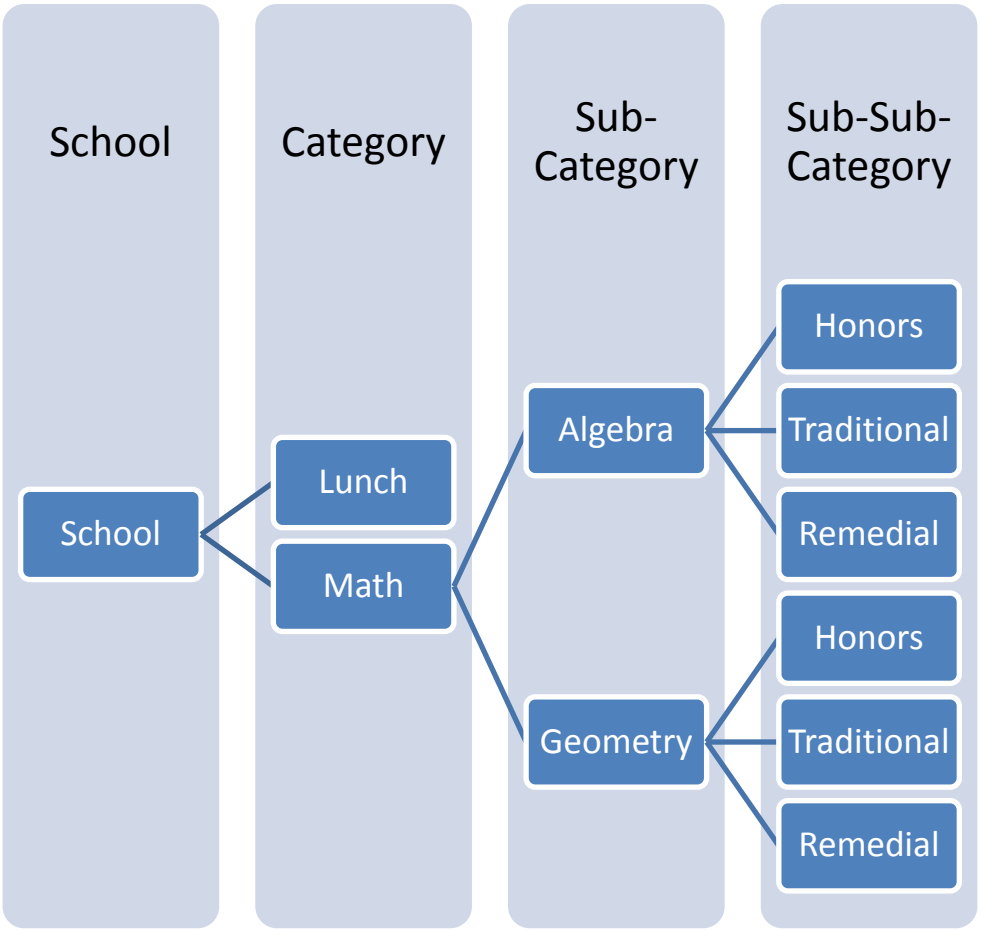
UNDERSTAND SUBJECT CATEGORIES

Subject Categories group courses, teachers, and rooms that have different attributes and constraints. The system uses this information and the student course requests to determine how many sections each course requires. Subject Categories assist the system in balancing courses across the master schedule.

The Subject Category Tree is a hierarchy in which specific, lower level attributes and constraints override higher level, general attributes, and constraints. There are three main category levels within the hierarchy, the School level, Category level, and the Sub-Category level. However, you can add as many levels as works for your school.

Note – The School level is always listed and cannot be removed.

You can set up as many or as few subject categories as your school needs. Keep in mind when creating subject categories, each course can only be assigned to one category. However, teachers and rooms can be assigned to multiple categories. We recommend that you include every course, teacher, and room your school uses in the tree.

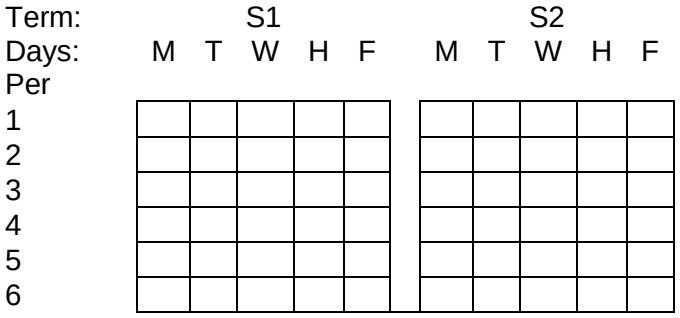


UNDERSTANDING THE SCHEDULING GRID

In the School level subject category, you define the number of days in your school week, the number of periods in your school day, and the number of terms in your school year. The Master Schedule Builder uses that information to create a 3-dimensional scheduling grid.

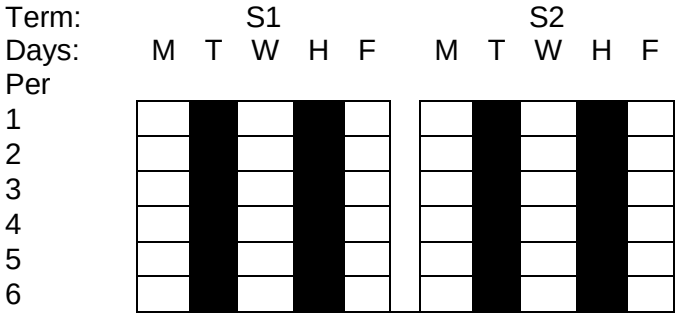
Within this grid, the Master Schedule Builder fits sections, and assigns teachers and rooms to the sections.

For example, a school that has five school days a week, six periods a day, and two terms a year would have the following scheduling grid.



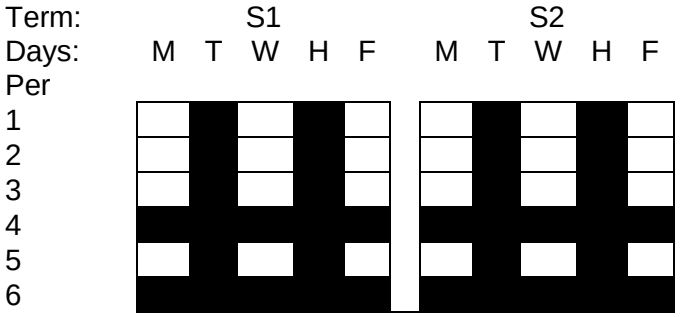
In both School level and sub-level subject categories, you have the ability to define the number of days a week, the number of periods during a day, and the number of terms a course or group of courses meets.

For example, a course that meets three days a week, one period a day, for one term would have the following scheduling grid.



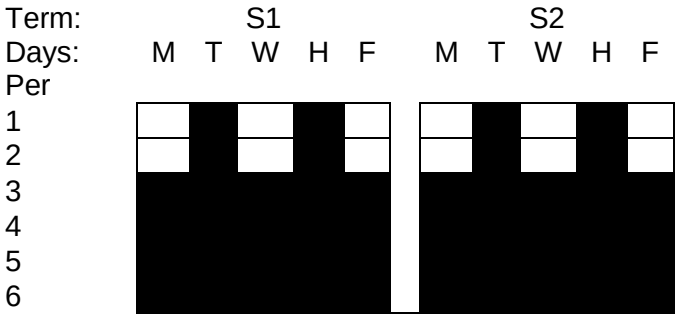
In both School level and sub-level subject categories, you also have the ability to limit the number of periods during the day, as well as the number of periods in a row that the Master Schedule Builder assigns to a single teacher to a specific course or set of courses.

So, teachers that require periods available for class preparation and for lunch would further limit the course's scheduling grid as follows.



You also have the ability in both School level and sub-level subject categories to limit which rooms are available for a course or set of courses.

In this example, if the available rooms are already assigned courses for 3rd and 5th period. This would leave the following available period blocks in the scheduling grid.



So, please keep in mind that when you create Subject Category Tree and assign attributes, rules, and constraints, you may be limiting the scheduling grid and the Master Schedule Builder's ability to create a final schedule successfully.

Chapter Seven: ASSIGN SCHOOL LEVEL ATTRIBUTES

In this chapter, the following topics are covered:

SETTING SCHOOL LEVEL ATTRIBUTES

The School Level attributes are the general settings for the school. This is where you define how many days there are in your school week, how many periods in your school day, and how many terms in your school year. Also, this is where you set other defaults such as the period rotations and the maximum number of students per section.

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
3. Select the **Subject Categories** tab.

Note – Only the School (SCH) category is listed if you have created a blank option set. A list of categories shows if the option set was copied from an existing option set or from a previous year's schedule.

4. Select the School (SCH) node.
   The School Attributes tab displays.

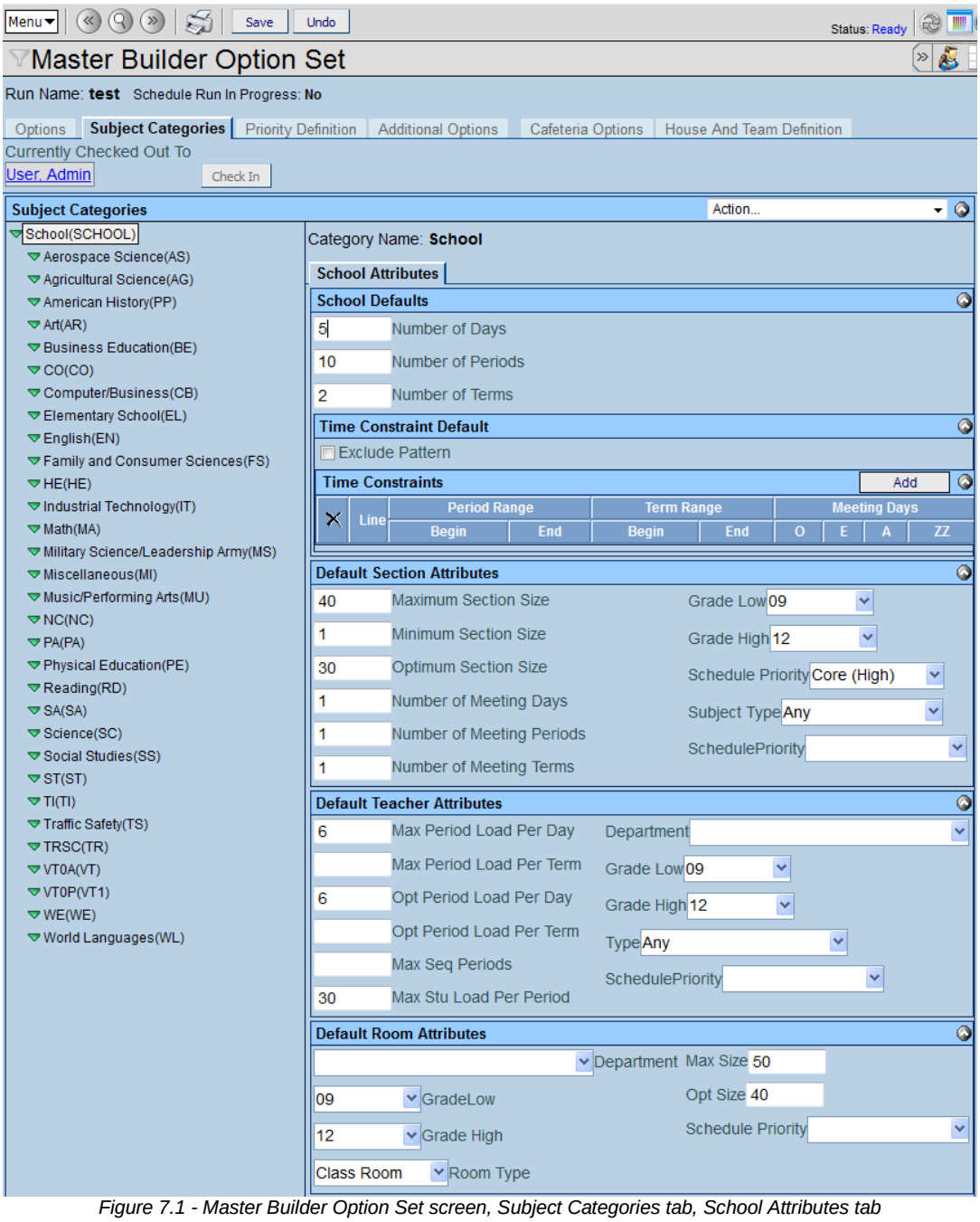


Figure 7.1 - Master Builder Option Set screen, Subject Categories tab, School Attributes tab

5. Enter the defaults for the school:

Defining School Defaults

- **Number of Days –** the number of school days in a week
- **Number of Periods** – the number of class periods in a day
- **Number of Terms** – the number of terms in a school year (4 for quarters, 3 for trimesters, 2 for semesters)

Creating Time Constraints

You use the Time Constraints grid to indicate if certain periods only meet on specific days or terms.

Selecting the Exclude Pattern option restricts the Master Schedule Builder from scheduling course sections during the times, days, or terms indicated in the Time Constraints grid.

1. Click **Add** on the Time Constraints grid.
   A new row displays in the grid.
2. Select the **Period Range**, if applicable.
3. Select the **Term Range**, if applicable
4. Select the **Meeting Days**.
5. Select the **Exclude Pattern** option, if appropriate.
6. Click **Save**.

Setting Default Section Attributes

- **Maximum Section Size** - the maximum number of students that can be scheduled into a section.
- **Minimum Section Size** – the minimum number of students that can be scheduled into a section
- **Optimum Section Size** – the ideal number of students that should be scheduled into a section
- **Number of Meeting Days** – the number of days sections meets during the week
- **Number of Meeting Periods** – the number of periods a section meets during the day.
- **Number of Meeting Terms** – the number of terms a section meets. For instance, if your school typically offers yearlong classes and you are on a semester schedule, you would enter 2.
- **Grade Low** – the lowest grade in your school
- **Grade High** – the highest grade in your school
- **Schedule Priority** – which sections take priority in scheduling, either electives (low) or core (high)
- **Subject Type** – the default subject type applied to the category or course if no subject types defined at a lower level.

Note – Subject types can be used to assign a priority to a section when building and loading sections as set on the Priority Definition tab. See Setting the Subject Type Priority Weighting.

- **Schedule Priority** – the default schedule priority applied to the category or course if no schedule priority is defined at a lower level.

Note – The value selected in the Schedule Priority field is used to establish a scheduling rank for individual sections. The rank determines the order in which the sections are scheduled. Setting a rank here and then adjusting it at the category, course, or section level helps give some courses or sections higher scheduling priority.

Assigning Default Teacher Attributes

- **Max Period Load Per Day** – the maximum number of periods a teacher can be assigned during the day
- **Max Period Load Per Term** – the maximum number of periods a teacher can be assigned during a term
- **Opt Period Load Per Day** – the ideal number of periods a teacher should be assigned
- **Opt Period Load Per Term** – the ideal number of periods a teacher should be assigned during a term
- **Max Seq Periods** – the maximum number of sequential periods that can be assigned to a teacher
- **Max Stu Load Per Period** – the maximum number of students that can be assigned to a teacher during a period.
- **Type** – the default Teacher Type associated with the school.
- **Schedule Priority** – the default schedule priority for all teachers.

Setting Default Room Attributes

- **Department** – only used for reporting information. Not used as a scheduling rule.
- **Grade Low** – the lowest grade of students that can be assigned to this room
- **Grade High** – the highest grade of students that can be assigned to this room
- **Room Type** - **Department** – the system only schedules rooms whose type assignments match the selected room type. You designate a room's type assignment on the Room screen.
- **Max Size** – the maximum number of students that can be assigned to a room
- **Opt Size** – the ideal number of students that should be assigned to a room
- **Schedule Priority** – the default scheduling priority for all rooms.

7. Click **Save**.

Chapter Eight: CREATE SUB-LEVEL SUBJECT CATEGORIES

In this chapter, the following topics are covered:

UNDERSTANDING SUB-LEVEL SUBJECT CATEGORIES

Sub- Level Subject Categories are all the levels under the School Level in the Subject Category Tree. Each Sub-Level can have additional levels under it. Each level has its own courses, teachers, rooms, and constraints associated with it.

You can create as many Sub-Level Subject Categories as you find helpful.

CREATING SUB-LEVEL SUBJECT CATEGORIES

The following process outlines how to add a sub-level category to the School level node. However, you create all Sub-Level Subject Categories using the same process. The only thing that changes from sub-level to sub-level is the node you select.

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
3. Select the **Subject Categories** tab.
4. Select the **School (SCH)** node.

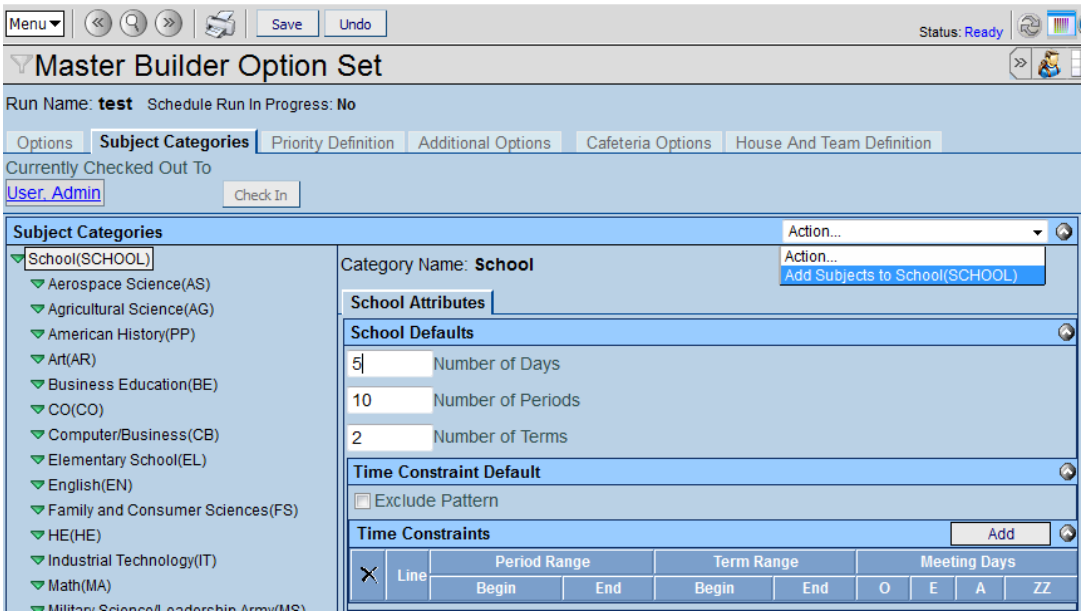


Figure 8.1 - Master Builder Option Set screen, Action menu

5. From the Action menu, select **Add Subject to School (SCH)**.
   The Add Subject screen opens.

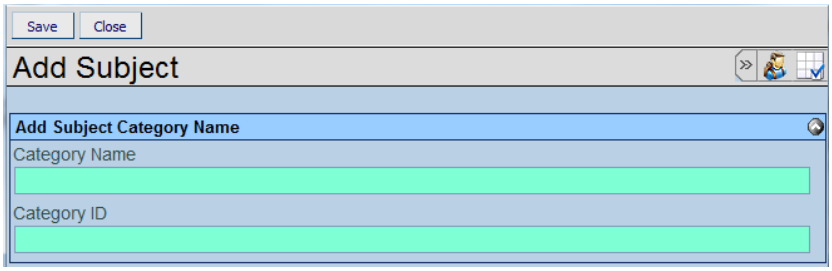


Figure 8.2 - Add Subject screen

6. Enter the **Category Name.**
   The Category Name is the academic subject or group, such as Physical Education, Mathematics, Science, or English.

Note – You also can define the category by the group of courses, such as Core Grade 9 or Electives Grade 9.

7. Enter the **Category ID**.
   The Category ID is the abbreviation or number that distinguishes the category, such as PE for Physical Education or MA for Mathematics.
8. Click **Save**.
   The new subject category displays under the School node.

Chapter Nine: DEFINING SUB-LEVEL SUBJECT CATEGORIES

In this chapter, the following topics are covered:

Each subject category can have its own courses, teachers, constraints, and rooms.

Keep in mind that each course can only be assigned to one subject category. However, teachers and rooms can be assigned to multiple subject categories.

Any rules, restrictions, or attributes you set at a sub-level override the rules, restrictions, or attributes set at all higher levels including the School level.

Select any sub-level node in the Subject Category Tree to display its definition tabs.

SETTING ATTRIBUTES ON COURSES TAB

1. Select the **Courses** tab.

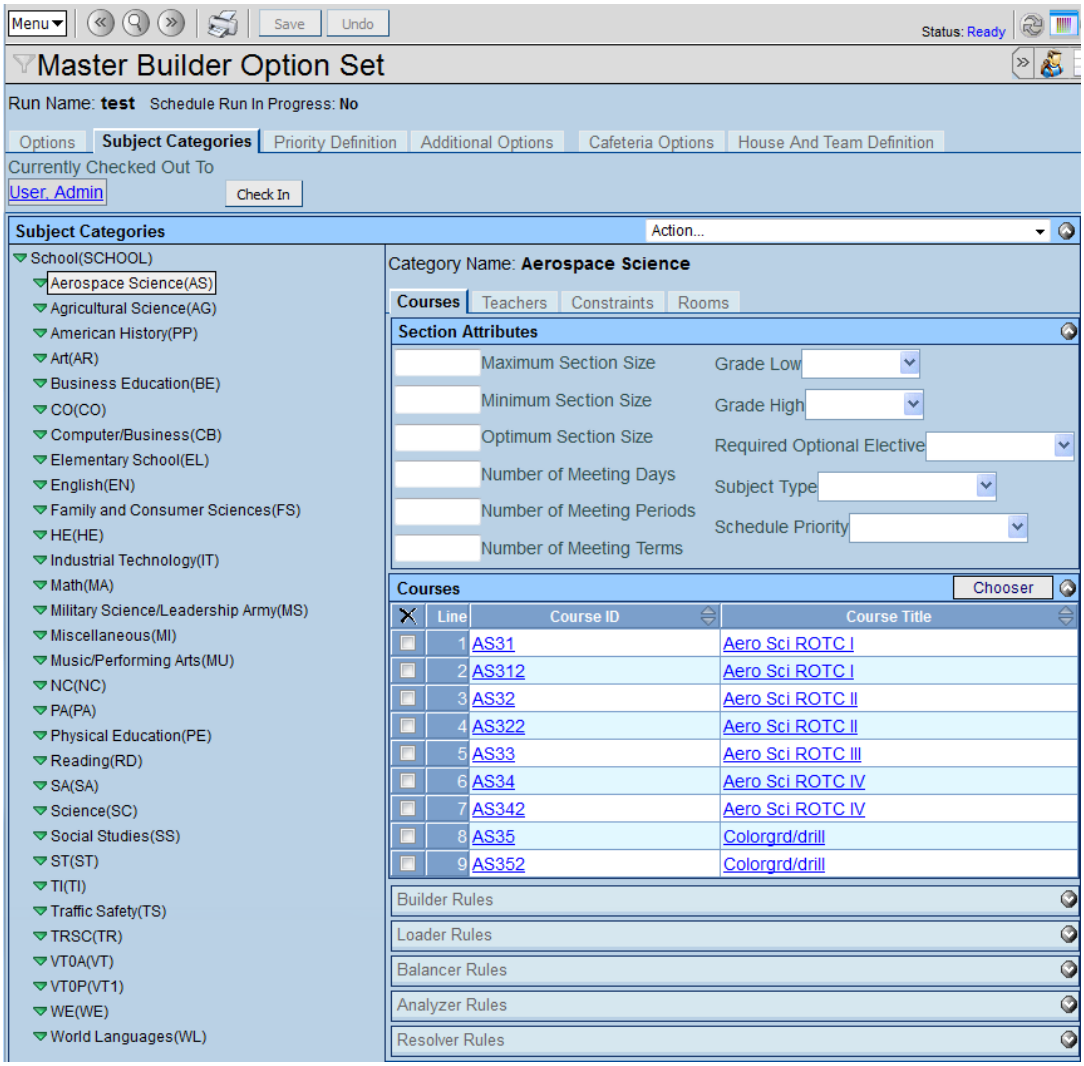


Figure 9.1 - Master Builder Option Set screen, Subject Categories tab, Sub-Level Subject Category, Courses tab

2. Enter the defaults for the sub- level subject category courses:

- **Maximum Section Size** - the maximum number of students that can be scheduled into a section for this course or group of courses.
- **Minimum Section Size** – the minimum number of students that can be scheduled into a section for this course or group of courses.
- **Optimum Section Size** – the ideal number of students that should be scheduled into a section for this subject
- **Number of Meeting Days** – the number of days sections for this course or group of courses meets during the week
- **Number of Meeting Periods** – the number of periods a section for this course or group of courses meets during the day.
- **Number of Meeting Terms** – the number of terms a section for this course or group of courses meets.

  For instance, if your this subject typically has yearlong course and your school is on a semester schedule, you would enter 2.
- **Grade Low** – the lowest grade that can take this course or group of courses.
- **Grade High** – the highest grade that can take this course or group of courses.
- **Required Optional Elective** – which request type take priority in scheduling, either electives (low) or core (high)

Note – If the default value in the Required Optional Electives field is set to Core, Master Schedule Builder considers all courses to be elective courses. Each course receives the same request priority in the build and load.

- **Subject Type -** the default subject type that courses in this group are assigned unless the subject type is overridden at a lower level.

Note – There is special logic on lunch and study hall subject types. Lunch is given a very high scheduling priority while study hall is given a very low scheduling priority.

- **Schedule Priority -** allows you to put a specific scheduling priority on the category. This value helps to determine the course rank in the building and loading processes.

3. Click **Save**.

ASSOCIATING COURSES

1. On the Courses tab, click **Chooser**.
   The Chooser screen opens.
2. Find and select the course.
   The selected course displays in the Courses grid.
3. Click **Save**.

SETTING RULES ON THE COURSES TAB

You can define how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes the courses associated with this subject category.

Setting the Builder Rules on the Courses tab

1. On the **Courses** tab, expand the **Builder Rules** group box.
   The Builder Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the builder ignores rules set at higher levels.
- **Do Not Schedule Sections** – do not schedule sections for this course or group of courses.
- **Do Not Use School Default Section Attrib** – the category does not inherit attributes from the School level.
- **Ignore Time Constraints** – ignores any time constraints for periods, terms, and meeting days set for individual courses.

  For example, a gym class could be limited to the last period of the day. Check this box to ignore these constraints.
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. Check this box to ignore course links.
- **Ignore Max Sections Per Term** – the builder ignores the min/max sections per term constraint set on the course level.
- **Do Not Schedule Teachers** – Do not assign teachers to sections of this course or group of courses.

  This can be helpful to establish if there are enough rooms and sections to accommodate student requests.
- **Do Not Schedule Rooms** – the system does not assign sections to rooms
- **Generate All Day Patterns -** generates a list of all potential scheduling days for a course. If this is not selected, and the school has a 5 day rotation, it will only schedule classes MWF (if meets 3 days) or TTh (if meets 2 days).

- **Ignore Teachers Pref Room -** the builder does not give special preference to the "Preferred room" associated with the teacher.
  - **Ignore Min Sections Per Term -** Min/Max sections per term is implemented on the course level. When selected, the builder ignores the min/max sections per term constraint for the course.

- **Ignore Course Teacher Constraints Max Sec** - if a maximum number of courses a teacher can teach has been defined, the builder ignores these settings when building sections for this course.
    - **Ignore Course Teacher Time Constraints** – if a course teacher time constraint has been specified on the detail of teachers grid on the Course screen, the builder ignores the time constraint when building sections for this course.

3. Click **Save**.

Setting the Loader Rules on the Courses tab

1. On the **Courses** tab, expand the **Loader Rules** group box.
   The Loader Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Loader ignores rules set at higher levels.
- **Ignore Maximum Section Size** – allow the Loader to schedule more students than is set in max class size for courses in this category
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. This option ignores these links.
- **Ignore Student Property Constraints** – the Loader disregards any student property constraints set on the Constraints tab.

3. Click **Save**.

Setting the Balancer Rules on the Courses tab

1. On the **Courses** tab, expand the **Balancer Rules** group box.
   The Balancer Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Balancer ignores rules set at higher levels.
- **Ignore Maximum Section Size** – allow the Balancer to schedule more students than is set in max class size for courses in this category.
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. This option ignores these links.
- **Ignore Student Property Constraints** – the Balancer disregards any student property constraints set on the Constraints tab.

3. Click **Save**.

Setting the Analyzer Rules on the Courses tab

1. On the **Courses** tab, expand the **Analyzer Rules** group box.
   The Analyzer Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **None** – there are currently no analyzer rules for the category.

3. Click **Save**.

Setting the Resolver Rules on the Courses tab

1. On the **Courses** tab, expand the **Resolver Rules** group box.
   The Resolver Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Resolver ignores rules set at higher levels.
- **Ignore Maximum Section Size** – allow the Resolver to schedule more students than is set in max class size for courses in this category.
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. This option ignores these links.
- **Ignore Student Property Constraints** – the Resolver disregards any student property constraints set on the Constraints tab.

3. Click **Save**.

SETTING ATTRIBUTES ON TEACHERS TAB

1. Select the **Teachers** tab.

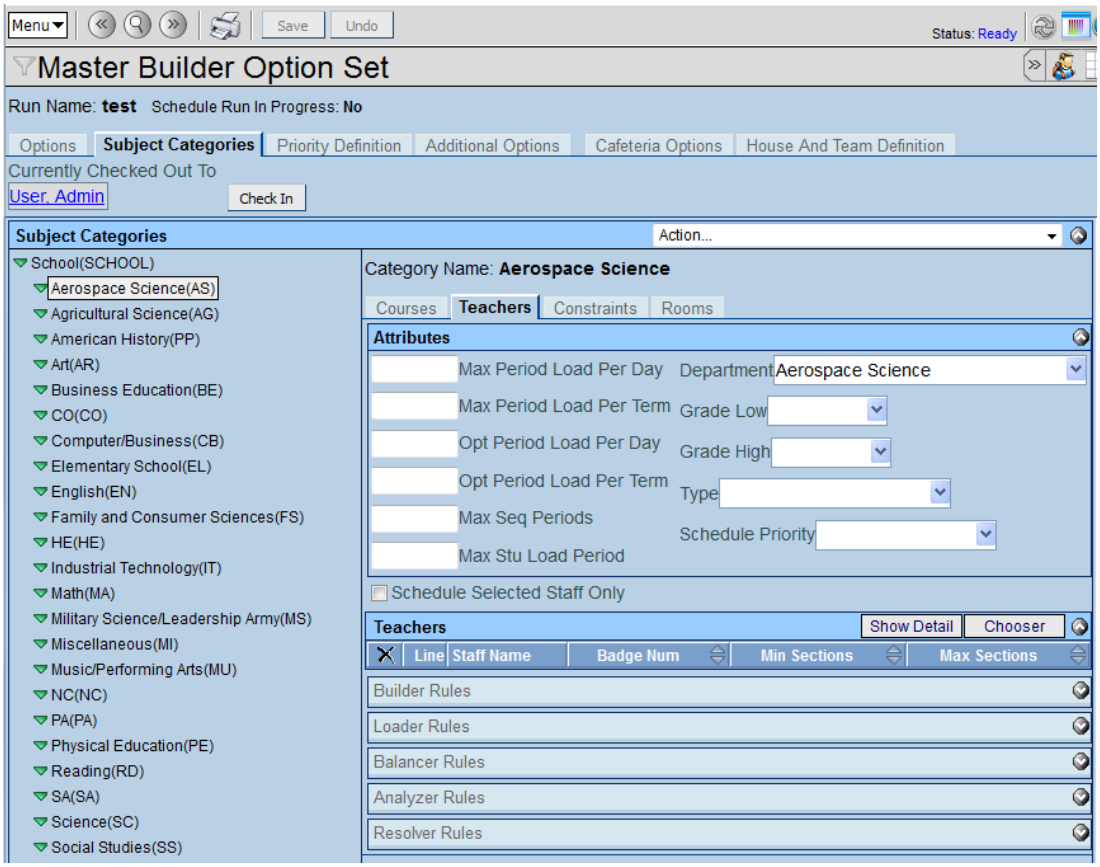


Figure 9.2 - Master Builder Option Set screen, Subject Categories tab, Sub-Level Subject Category, Teachers tab

2. Enter the defaults for the subject level teachers:
   - **Max Period Load Per Day** – the maximum number of periods a teacher can be assigned during the day.
   - **Max Period Load Per Term** – the maximum number of periods a teacher can be assigned during a term.
   - **Opt Period Load Per Day** – the ideal number of periods a teacher should be assigned.
   - **Opt Period Load Per Term** – the ideal number of periods a teacher should be assigned during a term.
   - **Max Seq Periods** – the maximum number of sequential periods that can be assigned to a teacher
   - **Max Stu Load Per Period** – the maximum number of students that can be assigned to a teacher during a period.
   - **Type** - if the Teacher Type attribute on a section matches the teacher type of a specific teacher it increases slightly the teacher's scheduling priority for that section.
- **Schedule Priority –** the default schedule priority for the category teachers. This helps determine the teacher's schedule rank.

3. Click **Save**.

ASSOCIATING TEACHERS

1. On the Teacher tab, click **Chooser**.
   The Chooser screen opens.
2. Find and select the teacher.
   The selected teacher displays in the Teachers grid.
3. Select the **Schedule Selected Staff Only** option to have the system only schedule teachers you added to the Teacher grid.
4. Click **Save**.

Adding Load Constraints to a Teacher

1. Select a teacher on the **Teacher** grid.
2. Click **Show Detail**.
   The Detail tab for the selected teacher displays.
3. Enter the load constraints for the teacher, if applicable.
   - **Min Sections –** the minimum number of sections this particular teacher can teach in this category
   - **Max Sections -** the maximum number of section this particular teacher can teach in this category.
   - **Min Period Load –** the minimum number of periods this particular teacher can teach in this category. A section can have multiple periods, especially in a modified block schedule.
   - **Max Period Load –** the maximum number of periods this particular teacher can teach in this category. A section can have multiple periods, especially in a modified block schedule.
4. Click **Save**.

Adding Time Constraints to a Teacher

You use the Time Constraints grid to indicate if a teacher is only available to teach during certain periods, terms, or days.

Selecting the Exclude Pattern option restricts the Master Schedule Builder from scheduling the teacher during the times, days, or terms indicated in the Time Constraints grid.

Note – Time constraints set here cause the time constraint on the Teacher screen to be ignored when scheduling courses in this category only. The teacher's time constraint is still applicable for courses outside the category.

1. Select a teacher on the **Teacher** grid.
2. Click **Show Detail**.
   The Detail tab for the selected teacher displays.

3. Click **Add**.
   A new row displays in the Time Constraints grid.
4. Enter the **Period Range**, **Term Range**, and/or **Meeting Days** constraints.
5. Click **Save**.

SETTING RULES ON THE TEACHER TAB

You can define how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes the teachers associated with this subject category.

Setting Builder Rules on the Teachers tab

1. On the **Teachers** tab, expand the **Builder Rules** group box.
   The Builder Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Allow Schedule Overlap** – allows multiple sections to be scheduled for the same teacher at the same time.

- **Do Not Reserve Lunch -** if lunch periods are defined, the builder tries to not schedule the teacher for a class during at least one lunch period.
  - **Do Not Schedule Teachers**– don't assign the teachers in this category to a section
  - **Ignore Max Period Load Per Day** - ignore the maximum number of teaching periods per day set for a teacher when building the schedule and allow teachers to be scheduled for more than this number of periods in a day
  - **Ignore Max Period Load Per Term** - ignore the maximum number of teaching periods per term set for a teacher when building the schedule and allow teachers to be scheduled for more than this number of periods in a term
  - **Ignore Max Period Load Per Year** - ignore the maximum number of teaching periods per year set for a teacher when building the schedule and allow teachers to be scheduled for more than this number of periods in a year
  - **Ignore Max Sequential Teaching Periods** – allow teachers to be scheduled for more than the maximum number of sequential periods in a day
  - **Ignore Property Constraints** – any teacher constraint added to the teacher is ignored by the builder.
  - **Ignore Preferred Room** - the builder does not give room preference based on the teacher's preferred room when scheduling sections.
  - **Ignore Rules From Higher Levels** – the builder ignores rules set at higher levels.

- **Ignore Time Constraints** – individual teachers can have time constraints set where the teacher is limited to specific periods or terms or meeting days. Check this box to ignore these constraints.

- **Ignore Category Teacher Constraints Min Sections** – if a minimum number of category sections a teacher can teach has been defined, the builder ignores these settings when building sections for this category.

  If this option is not selected and a teacher does have a min sections defined, this boosts the scheduling priority of the teacher within the category until the min sections requirement is met.

  - **Ignore Category Teacher Constraints Max Sections**– if a maximum number of category sections a teacher can teach has been defined, the builder ignores these settings when building sections for this category.

- **Ignore Category Teacher Constraints Min Period Load** – if a minimum period load is specified on in the details of teachers grid, the builder ignores these settings when building sections for this category.

  If this option is not selected and a teacher does have a min period load defined, this boosts the scheduling priority of the teacher within the category.

  - **Ignore Category Teacher Constraints Max Period Load -** – if a maximum period load is specified on in the details of teachers grid, the builder ignores these settings when building sections for this category.

- **Ignore Category Teacher Time Constraints -** if a category's teacher time constraint is specified in the details of teacher's grid, the builder ignores the time constraint when building sections for this category.

- **Ignore Course Teacher Constraints Min Sections –** if a minimum number of course sections a teacher can teach has been defined, the builder ignores these settings when building sections for this course.

  If this option is not selected and a teacher does have a min sections defined, this boosts the scheduling priority of the teacher within the category until the min sections requirement is met.

  - **Ignore Course Teacher Constraints Max Sections –** if a maximum number of course sections a teacher can teach has been defined, the builder ignores these settings when building sections for this course.

- **Ignore Course Teacher Constraints Max Period Load -** if a maximum period load for the teacher has been specified on the course (in the details of the course teachers grid), the builder ignores these settings when building sections for this category.

  - **Ignore Course Teacher Time Constraints –** if a course teacher time constraint is specified in the details of teachers grid on the Course screen, the builder ignores the time constraint when building sections for this course.

3. Click **Save**.

Setting the Loader Rules on the Teachers tab

1. On the **Teachers** tab, expand the **Loader Rules** group box.
   The Loader Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Max Student Load Per Period** – allow the teacher to be assigned more than the maximum number of students per period.
- **Ignore Rules From Higher Levels** – the Loader ignores rules set at higher levels.

3. Click **Save**.

Setting the Balancer Rules on the Teachers tab

1. On the **Teachers** tab, expand the **Balancer Rules** group box.
   The Balancer Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Max Student Load Per Period** – allow the teacher to be assigned more than the maximum number of students per period
- **Ignore Rules From Higher Levels** – the Balancer ignore rules set at higher levels.

3. Click **Save**.

Setting the Analyzer Rules on the Teachers tab

1. On the **Teachers** tab, expand the **Analyzer Rules** group box.
   The Analyzer Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Analyzer ignore rules set at higher levels.

3. Click **Save**.

Setting the Resolver Rules on the Teacher tab

1. On the **Teachers** tab, expand the **Resolver Rules** group box.
   The Resolver Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Max Student Load Per Period** – allow the teacher to be assigned more than the maximum number of students per period
- **Ignore Rules From Higher Levels** – the Resolver ignore rules set at higher levels.

3. Click **Save**.

SETTING CONSTRAINTS

Constraints limit the students, teachers, or rooms that Master Schedule Builder assigns to this course or group of courses. Constraint settings also limit the periods, terms, or meeting days that the system assigns to this subject category.

Setting constraints on this level is an advanced option. Edupoint recommends contacting the Customer Service Center (CRC) to verify the constraints will perform the way you expect them to before implementing them.

Caution - Any constraints placed on the resources, such as teachers and rooms, restricts the Master Schedule Builder. It has less flexibility to create sections and schedule students. Edupoint recommends using constraints very judiciously.

Creating Time Constraints

You use the Time Constraints grid to indicate if this subject category only meet on specific days or terms.

Selecting the Exclude Pattern option restricts the Master Schedule Builder from scheduling course sections during the times, days, or terms indicated in the Time Constraints grid.

1. Click the **Constraints** tab.

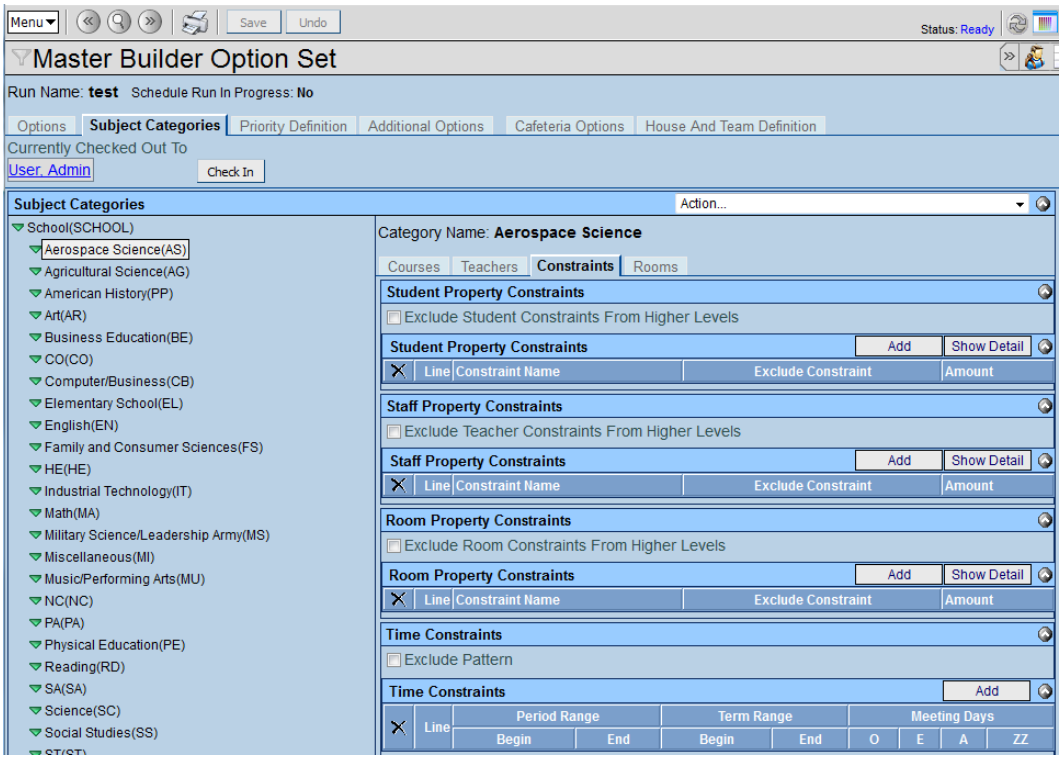


Figure 9.3 - Master Builder Option Set screen, Subject Categories tab, Sub-Level Subject Category, Constraints tab

2. Click **Add** on the Time Constraints grid.
   A new row displays in the grid.
3. Select the **Period Range**, if applicable.
4. Select the **Term Range**, if applicable
5. Select the **Meeting Days**.
6. Select the **Exclude Pattern** option, if appropriate.
7. Click **Save**.

SETTING ATTRIBUTES ON ROOMS TAB

1. Select the **Rooms** tab.

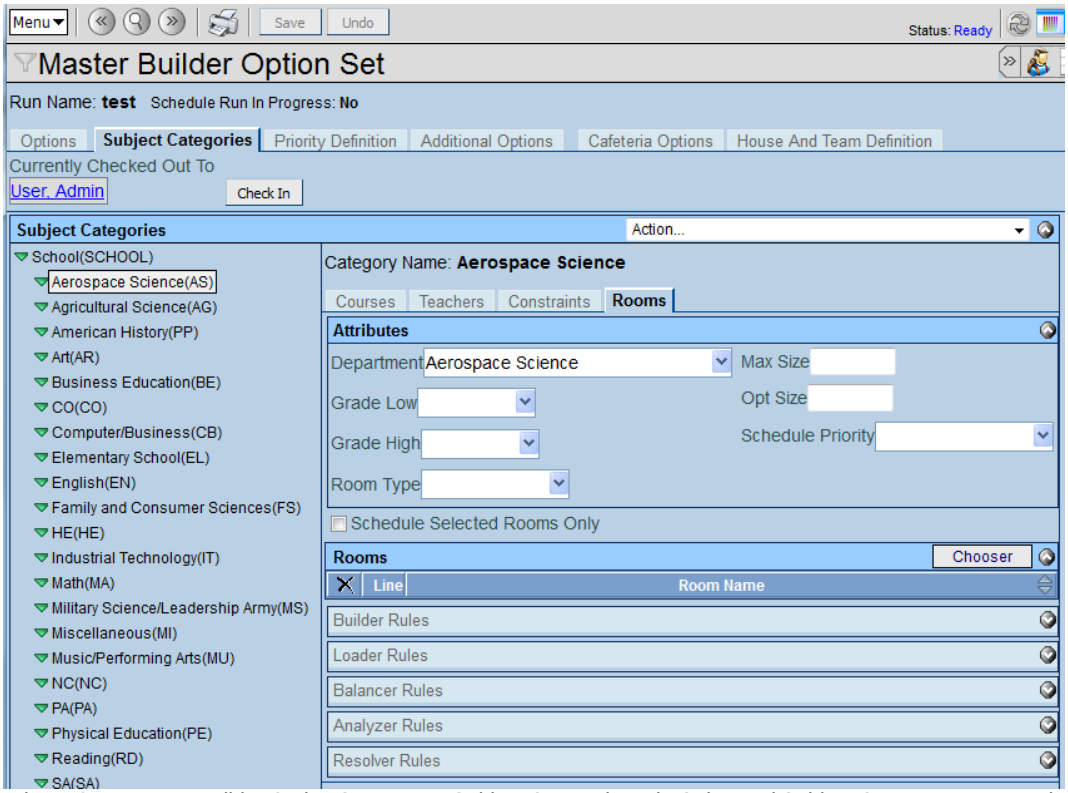


Figure 9.4 - Master Builder Option Set screen, Subject Categories tab, Sub-Level Subject Category, Rooms tab

2. Enter the defaults for the subject category courses:
   - **Room Type** - If the room type of the section matches the room type of a potential room, the builder boosts the scheduling priority of the room for the current section.
   - **Max Size** – the maximum number of students that can be assigned to a room
   - **Opt Size** – the ideal number of students that should be assigned to a room
3. Click **Save**.

ASSOCIATING ROOMS

1. On the Rooms tab, click **Chooser**.
   The Chooser screen opens.
2. Find and select the room.
   The selected room displays in the Rooms grid.
3. Select the **Schedule Selected Rooms Only** option to restrict the Master Schedule Builder to use only rooms that appear in the Rooms grid.
4. Click **Save**.

SETTING RULES ON THE ROOMS TAB

You can define how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes the rooms associated with this subject category.

Setting Builder Rules on the Rooms tab

1. On the **Rooms** tab, expand the **Builder Rules** group box.
   The Builder Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Allow Schedule Overlap** - allows multiple sections to be scheduled in the same room at the same time.
- **Do Not Schedule Rooms**– do not assign sections to rooms in this category.
- **Ignore Rules From Higher Levels** – the Builder ignore rules set at higher levels.
- **Ignore Time Constraint** – individual rooms can have time constraints set where the room is limited to specific periods or terms or meeting days. Check this box to ignore these constraints.
- **None** – no builder rules apply to the room.

3. Click **Save**.

Setting the Loader Rules on the Rooms tab

1. On the **Rooms** tab, expand the **Loader Rules** group box.
   The Loader Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Maximum Capacity** – allow more students to be scheduled in the room than set in the Max Size box
- **Ignore Rules From Higher Levels** – the Loader ignore rules set at higher levels.

3. Click **Save**.

Setting the Balancer Rules on the Rooms tab

1. On the **Rooms** tab, expand the **Balancer Rules** group box.
   The Balancer Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- I**gnore Maximum Capacity** – allow more students to be scheduled in the room than set in the Max Size box
- **Ignore Rules From Higher Levels** – the Loader ignore rules set at higher levels.

3. Click **Save**.

Setting the Analyzer Rules on the Rooms tab

1. On the **Rooms** tab, expand the **Analyzer Rules** group box.
   The Analyzer Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

3. Click **Save**.

Setting the Resolver Rules on the Rooms tab

1. On the **Rooms** tab, expand the **Resolver Rules** group box.
   The Resolver Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Maximum Capacity** – allow more students to be scheduled in the room than set in the Max Size box
- **Ignore Rules From Higher Levels** – the Resolver ignore rules set at higher levels.

3. Click **Save**.

Chapter Ten: Set Individual Teacher Preferences, Exceptions, and Constraints

In this chapter, the following topics are covered:

You can set preferences, exceptions, and constraints for individual teachers using the Open Teacher icon in the Quick Links area of the Master Builder Option Set. You can also edit a teacher's settings in order to reconcile scheduling conflicts.

ACCESSING THE TEACHER SCREEN

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.

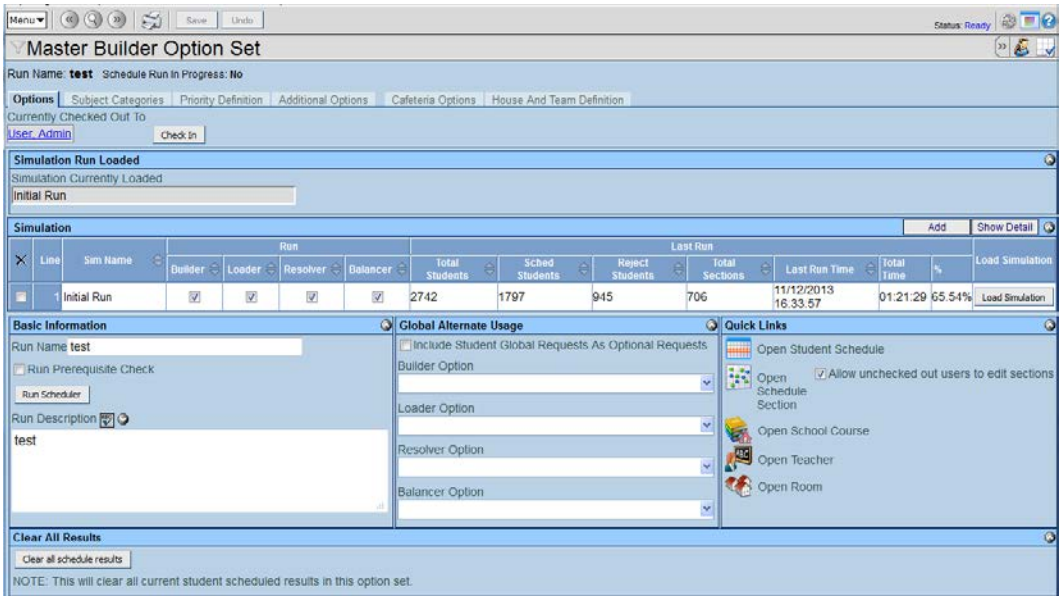


Figure 10.1 - Master Builder Option Set screen

3. Select the **Open Teacher** icon.
   The Teacher screen opens.

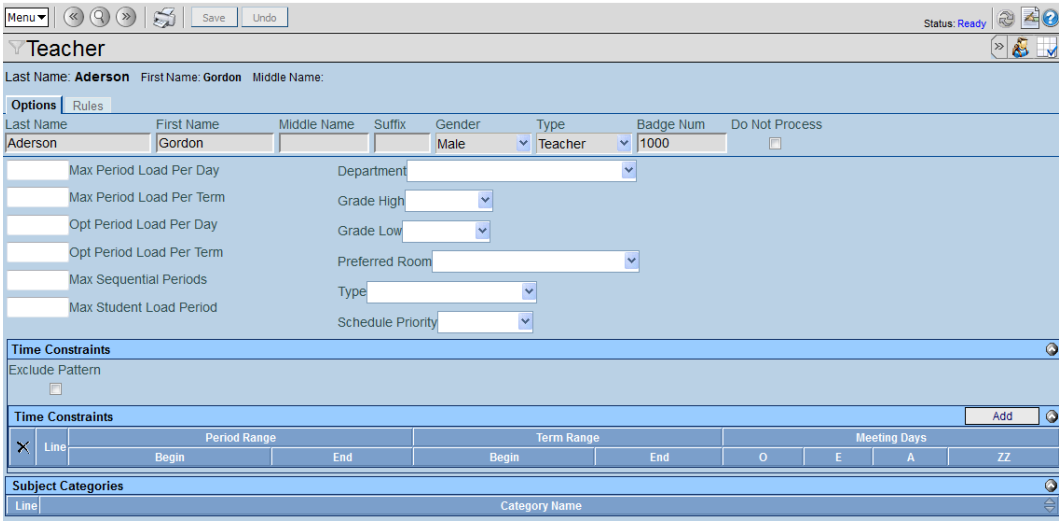


Figure 10.2 - MSB Teacher screen

4. Find or scroll to the appropriate teacher record.

SETTING TEACHER OPTIONS

1. Select the **Options** tab on the Teacher screen.
2. Enter the defaults for this teacher:
    - **Max Period Load Per Day** – the maximum number of periods this teacher can be assigned during the day.
    - **Max Period Load Per Term** – the maximum number of periods this teacher can be assigned during a term.
    - **Opt Period Load Per Day** – the ideal number of periods this teacher should be assigned.
    - **Opt Period Load Per Term** – the ideal number of periods this teacher should be assigned during a term.
    - **Max Seq Periods** – the maximum number of sequential periods that can be assigned to this teacher
    - **Max Stu Load Per Period** – the maximum number of students that can be assigned to a teacher during this period.
    - **Department** – the department this teacher is assigned to, if any.
    - **Grade Low** – the lowest grade level of students that can be assigned to this teacher.
    - **Grade High** – the highest-grade level of students that can be assigned to this teacher.
    - **Preferred Room** – this teacher's preferred classroom.

- **Type -** Type is the Teacher Type associated with the Teacher. If the Teacher Type attribute of a section matches the teacher type of a specific teacher, it increases slightly the teacher's scheduling priority for that section.
- **Schedule Priority** - Schedule priority for the teacher. This helps determine the teachers schedule rank when the builder tries to determine who should teach a section of a class.

3. Click **Save**.

SETTING TEACHER TIME CONSTRAINTS

You use the Time Constraints grid to indicate if a teacher is only available to teach during certain periods, terms, or days.

Selecting the Exclude Pattern option restricts the Master Schedule Builder from scheduling the teacher during the times, days, or terms indicated in the Time Constraints grid.

1. On the **Options** tab of the Teacher screen, Click **Add**.
   A new row displays in the Time Constraints grid.
2. Enter the **Period Range**, **Term Range**, and/or **Meeting Days** constraints.
3. Click **Save**.

VIEWING A TEACHER'S SUBJECT CATEGORY ASSIGNMENTS

On the Options tab of the Teacher screen, the Subject Categories grid displays all of the subject categories to which this teacher is currently assigned.

For more information on accessing and editing subject categories, please see Defining Sub-Level Subject Categories.

ASSIGNING RULES TO A TEACHER

You can define how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes this teacher.

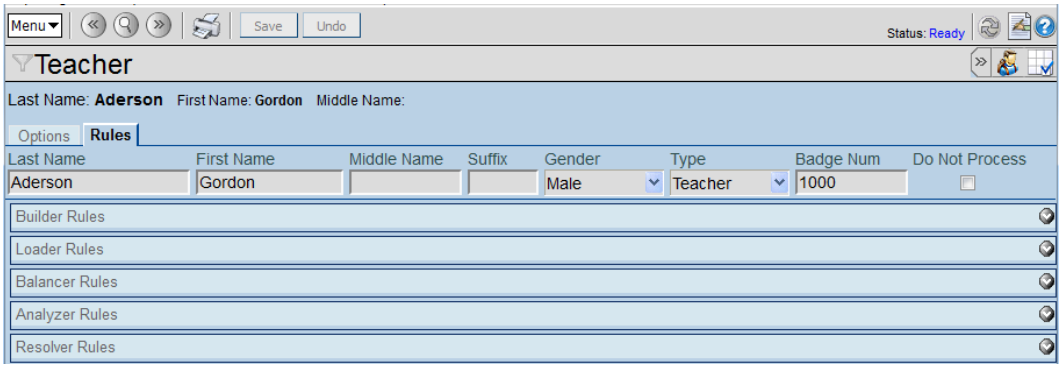


Figure 10.3 - MSB Teacher screen, Rules tab

Setting Builder Rules for Individual Teachers

1. On the **Rules** tab of the Teacher screen, expand the **Builder Rules** group box. The Builder Rules for this teacher displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Allow Schedule Overlap -** allows multiple sections to be scheduled for the same teacher at the same time.

- **Do Not Reserve Lunch** - If lunch periods are defined, the builder tries to not schedule the teacher for a class during at least one lunch period.
  - **Do Not Schedule Teachers** - if the rule is selected at the category, teachers will not be scheduled for that category. But if the rule is selected on the teacher, it will largely be ignored. To exclude a teacher, use the "Do Not Process" flag.
  - **Ignore Max Period Load Per Day** - ignore the maximum number of teaching periods per day set for this teacher when building the schedule.
  - **Ignore Max Period Load Per Term** - ignore the maximum number of teaching periods per term set for this teacher when building the schedule.
  - **Ignore Max Period Load Per Year** - ignore the maximum number of teaching periods per year set for this teacher when building the schedule.
  - **Ignore Max Sequential Teaching Periods** – allow this teacher to be scheduled for more than the maximum number of sequential periods in a day.
- **Ignore Property Constraints -** if there are any property constraints on the teacher, the builder ignores them.
- **Ignore Preferred Room -** indicates to the builder that the preferred room setting for this teacher should be ignored.
  - **Ignore Rules From Higher Levels** – Any rule selected at this level means that rules from higher levels are ignored.
  - **Ignore Time Constraints** – ignores times constraints set for this teacher.
- **Ignore Category Teacher Constraints Min Sections** – if a minimum number of category sections a teacher can teach is defined, the builder ignores these settings when building sections for this category.

  If this option is not selected and a teacher does have a min sections defined, this boost the scheduling priority of the teacher within the category until the min sections requirement is met.
  - **Ignore Category Teacher Constraints Max Sections -** if a maximum number of category sections a teacher can teach is defined, the builder ignores these settings when building sections for this category.

- **Ignore Category Teacher Constraints Min Period Load** – if a minimum period load has been specified in the details of teachers grid, the builder ignores these settings when building sections for this category.

  If this option is not selected and a teacher does have a min period load defined, this boosts the scheduling priority of the teacher within the category until the min period load requirement is met.

  - **Ignore Category Teacher Constraints Max Period Load -** if a maximum period load has been specified in the details of teachers grid, the builder ignores these settings when building sections for this category.
- **Ignore Category Teacher Time Constraints –** if a category teacher time constraint has been specified in the details of teachers grid, the builder ignores the time constraint when building sections for this category.
- **Ignore Course Teacher Constraints Min Sections -** if a minimum number of course sections a teacher can teach has been defined, the builder ignores these settings when building sections for this course.

  If this option is not selected and a teacher does have a min sections defined, this will also boost the scheduling priority of the teacher within the category until the min sections requirement is met.
- **Ignore Course Teacher Constraints Max Sections-** if a maximum number of course sections a teacher can teach has been defined, the builder ignores these settings when building sections for this course.
- **Ignore Course Teacher Constraints Max Period Load** - if a max period load for the teacher on the course has been specified in details of the course teachers grid, the builder ignores these settings when building sections for this category
  - **Ignore Course Teacher Time Constraints –** if a course teacher time constraint has been specified in the details of teachers grid on the Course screen), the builder ignores the time constraint when building sections for this course.

3. Click **Save**.

Setting the Loader Rules for Individual Teachers

1. On the **Rules** tab, expand the **Loader Rules** group box.
   The Loader Rules for this teacher displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

   - **Ignore Max Student Load Per Period** – allow this teacher to be assigned more than the maximum number of students per period.
   - **Ignore Rules From Higher Levels** – the Loader ignore rules set at higher levels.
3. Click **Save**.

Setting the Balancer Rules for Individual Teachers

1. On the **Rules** tab, expand the **Balancer Rules** group box.
   The Balancer Rules for this teacher displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Max Student Load Per Period** – allow this teacher to be assigned more than the maximum number of students per period.
- **Ignore Rules From Higher Levels** – the Balancer ignore rules set at higher levels.

3. Click **Save**.

Setting the Analyzer Rules for Individual Teachers

1. On the **Rules** tab, expand the **Analyzer Rules** group box.
   The Analyzer Rules for this teacher displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Analyzer ignore rules set at higher levels.

3. Click **Save**.

Setting the Resolver Rules on the Teacher tab

1. On the **Rules** tab, expand the **Resolver Rules** group box.
   The Resolver Rules for this teacher displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Max Student Load Per Period** – allow this teacher to be assigned more than the maximum number of students per period
- **Ignore Rules From Higher Levels** – the Resolver ignore rules set at higher levels.

3. Click **Save**.

Chapter Eleven: SET INDIVIDUAL ROOM ATTRIBUTES AND CONSTRAINTS

In this chapter, the following topics are covered:

You can set preferences, exceptions, and constraints for individual teachers using the Open Teacher icon in the Quick Links area of the Master Builder Option Set. You can also edit a teacher's settings in order to reconcile scheduling conflicts.

ACCESSING THE ROOM ATTRIB SCREEN

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.

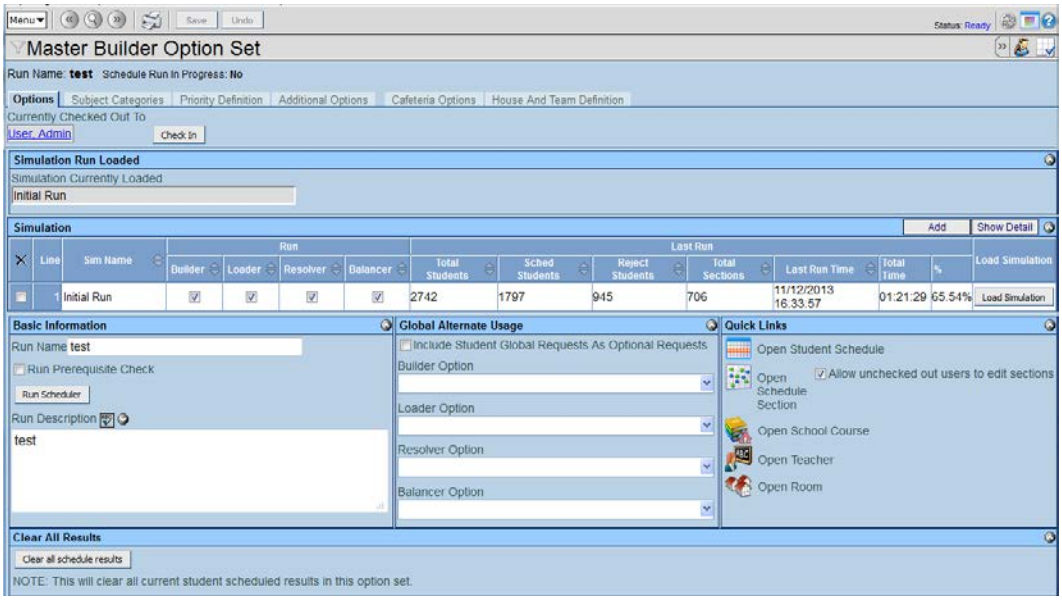


Figure 11.1 - Master Builder Option Set screen

3. Select the **Open Room** icon.
   The Room Attrib screen opens.

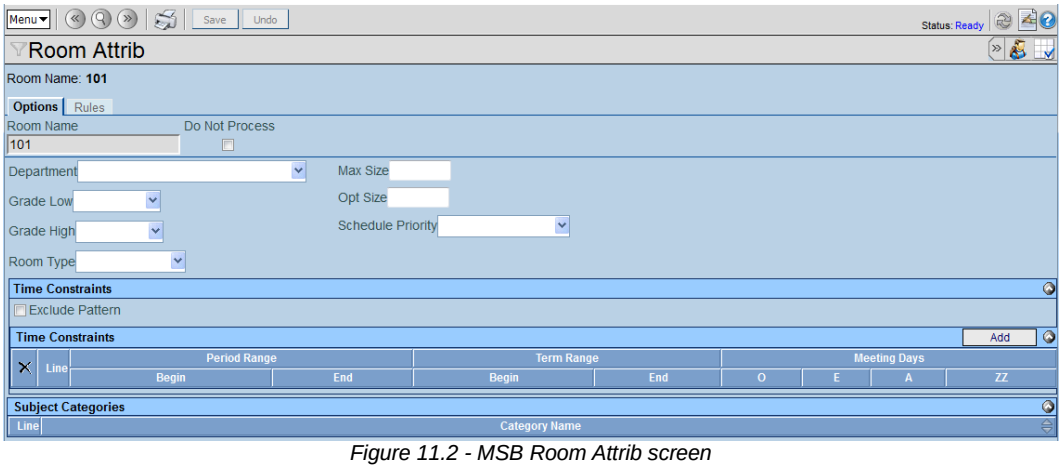


Figure 11.2 - MSB Room Attrib screen

4. Find or scroll to the appropriate room record.

SETTING ROOM OPTIONS

1. Select the **Options** tab on the Room Attrib screen.
2. Enter the defaults for this room:

- **Room Type** - if the room type of the section matches the room type of a potential room, the builder boosts the scheduling priority of the room for the current section.
- **Max Size** – the maximum number of students that can be assigned to a room
- **Opt Size** – the ideal number of students that should be assigned to a room

3. Click **Save**.

SETTING ROOM TIME CONSTRAINTS

You use the Time Constraints grid to indicate if a room is only available during certain periods, terms, or days.

Selecting the Exclude Pattern option restricts the Master Schedule Builder from scheduling the room during the times, days, or terms indicated in the Time Constraints grid.

1. On the **Options** tab of the Room Attrib screen, Click **Add**.
   A new row displays in the Time Constraints grid.
2. Enter the **Period Range**, **Term Range**, and/or **Meeting Days** constraints.
3. Click **Save**.

VIEWING A ROOM'S SUBJECT CATEGORY ASSIGNMENTS

On the Options tab of the Room Attrib screen, the Subject Categories grid displays all of the subject categories to which this room is currently assigned.

For more information on accessing and editing subject categories, please see Defining Sub-Level Subject Categories.

ASSIGNING RULES TO A ROOM

You can define how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes this room.

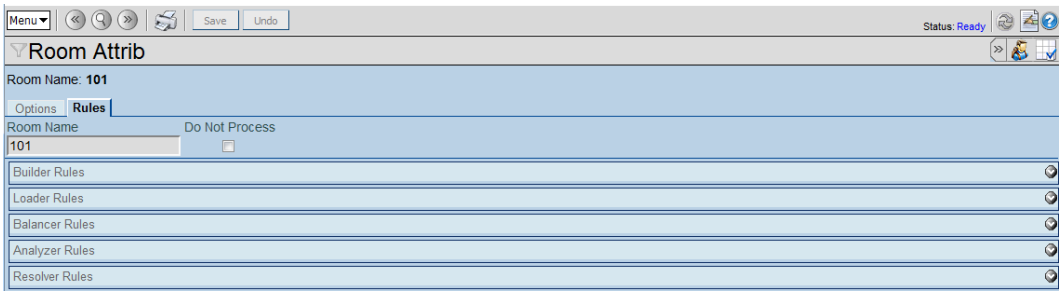


Figure 11.3 - MSB Room Attrib screen, Rules tab

Setting Builder Rules for Individual Rooms

1. On the **Rules** tab of the Room Attrib screen, expand the **Builder Rules** group box. The Builder Rules for this room displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Allow Schedule Overlap -** allows multiple sections to be scheduled in the same room at the same time.
- **Ignore Property Constraints –** the builder ignores any property constrains set on the room.
- **Ignore Rules From Higher Levels** – the Builder ignore rules set at higher levels.
- **Ignore Time Constraint** – individual rooms can have time constraints set where the room is limited to specific periods or terms or meeting days. Check this box to ignore these constraints.

3. Click **Save**.

Setting the Loader Rules for Individual Rooms

1. On the **Rules** tab of the Room Attrib screen, expand the **Loader Rules** group box. The Loader Rules for this room displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Maximum Capacity** – allow more students to be scheduled in the room than set in the Max Size box
- **Ignore Rules From Higher Levels** – the Loader ignore rules set at higher levels.

3. Click **Save**.

Setting the Balancer Rules for Individual Rooms

1. On the **Rules** tab of the Room Attrib screen, expand the **Balancer Rules** group box. The Balancer Rules for this room displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- I**gnore Maximum Capacity** – allow more students to be scheduled in the room than set in the Max Size box
- **Ignore Rules From Higher Levels** – the Loader ignore rules set at higher levels.

3. Click **Save**.

Setting the Analyzer Rules for Individual Rooms

1. On the **Rules** tab of the Room Attrib screen, expand the **Analyzer Rules** group box. The Analyzer Rules for this room displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

3. Click **Save**.

Setting the Resolver Rules for Individual Rooms

1. On the **Rules** tab of the Room Attrib screen, expand the **Resolver Rules** group box. The Resolver Rules for this room displays.

2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Maximum Capacity** – allow more students to be scheduled in the room than set in the Max Size box
- **Ignore Rules From Higher Levels** – the Resolver ignore rules set at higher levels.

3. Click **Save**.

Chapter Twelve: SET INDIVIDUAL SCHOOL COURSE ATTRIBUTES AND CONSTRAINTS

In this chapter, the following topics are covered:

ACCESSING THE SCHOOL COURSE SCREEN

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.

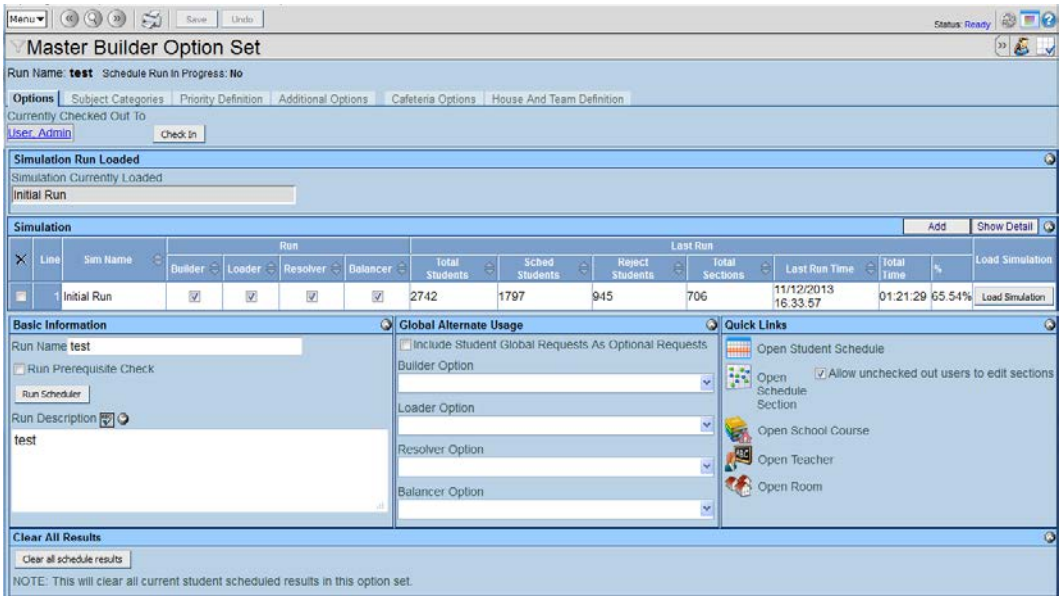


Figure 12.1 - Master Builder Option Set screen

3. Select the **Open School Course** icon.
   The School Course screen opens.

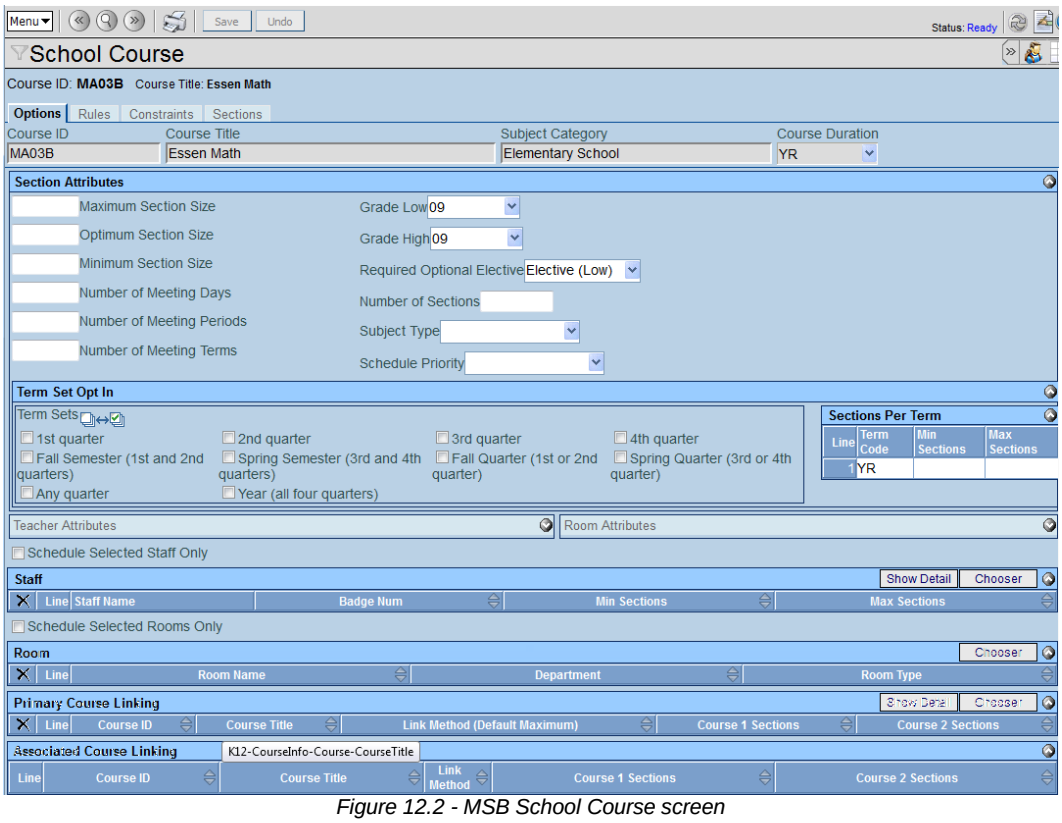


Figure 12.2 - MSB School Course screen

4. Find or scroll to the appropriate school course record.

SETTING SCHOOL COURSE OPTIONS

1. Select the **Options** tab on the School Course screen.
2. Enter the defaults for this course:

- **Maximum Section Size** - the maximum number of students that can be scheduled into a section for this course.
- **Minimum Section Size** – the minimum number of students that can be scheduled into a section for this course.
- **Optimum Section Size** – the ideal number of students that should be scheduled into a section for this course
- **Number of Meeting Days** – the number of days sections for this course meets during the week
- **Number of Meeting Periods** – the number of periods a section for this course meets during the day.
- **Number of Meeting Terms** – the number of terms a section for this course meets.

  For instance, if your this course typically has yearlong classes and your school is on a semester schedule, you would enter 2.

- **Grade Low** – the lowest grade that can take this course.
- **Grade High** – the highest grade that can take this course.
- **Required Optional Elective** - this is the core/elective option used by the builder to determine the importance of a section. A singleton core course should get higher priority in the build order than a singleton elective.
- **Number of Sections** –the number of sections that the system creates for this course. If no number is entered, the builder calculates the number of sections to create.
- **Subject Type -** helps determine a scheduling and building priority if the user has set up the subject type priorities. Also, special logic is done on the Lunch and Study Hall subject types. The system gives a section with a Lunch subject type higher precedence in build and schedule orders, while Study Hall sections have a much lower priority.
- **Schedule Priority -** sets specific scheduling priority on the course. When set, this value helps determine the course building and loading rank.

3. Click **Save**.

Opting Into the Term Set (Optional)

The Term Set Opt In overrides the term currently assigned to this course at the district level. The term you opt into on the School Course screen is the term in which the system schedules a course. See Defining Term Set for instructions on creating Term Sets.

1. On the **Options** tab, select the new terms.
2. Click **Save**.

Setting Teacher Schedule Priority (Optional)

1. On the **Options** tab, expand the **Teacher Attributes** group box.
   The Schedule Priority field displays.
2. Select the teacher **Schedule Priority**.
   This field indicates if the scheduler considers the teacher's schedule before or after other rules or factors.
3. Click **Save**.

Setting Room Schedule Priority (Optional)

1. On the **Options** tab, expand the **Room Attributes** group box.
   The Schedule Priority field displays.
2. Select the Room **Schedule Priority**.
   This field indicates if the scheduler considers the room's schedule before or after other rules or factors.
3. Click **Save**.

Assigning Staff to a Course

1. On the **Staff** grid, click **Chooser**.
   The Chooser screen opens.
2. Find and select the teacher.
   The selected teacher displays in the Staff grid.
3. Select the **Schedule Selected Staff Only** option to have the system only schedule teachers you added to the Staff grid.
4. Click **Save**.

Adding Load Constraints to a Teacher

1. Select a teacher on the **Staff** grid.
2. Click **Show Detail**.
   The Detail tab for the selected teacher displays.
3. Enter the load constraints for the teacher, if applicable.
   - **Min Sections –** the minimum number of sections this particular teacher can teach in this category
   - **Max Sections -** the maximum number of section this particular teacher can teach in this category.
   - **Min Period Load –** the minimum number of periods this particular teacher can teach in this category. A section can have multiple periods, especially in a modified block schedule.
   - **Max Period Load –** the maximum number of periods this particular teacher can teach in this category. A section can have multiple periods, especially in a modified block schedule.
4. Click **Save**.

Adding Time Constraints to a Teacher

You use the Time Constraints grid to indicate if a teacher is only available to teach during certain periods, terms, or days.

Selecting the Exclude Pattern option restricts the Master Schedule Builder from scheduling the teacher during the times, days, or terms indicated in the Time Constraints grid.

1. Select a teacher on the **Staff** grid.
2. Click **Show Detail**.
   The Detail tab for the selected teacher displays.
3. Click **Add**.
   A new row displays in the Time Constraints grid.
4. Enter the **Period Range**, **Term Range**, and/or **Meeting Days** constraints.
5. Click **Save**.

Note – Time constraints set at the course level can be overridden by time constraints set on the Teacher screen.

Assigning a Room to a Course

1. On the **Room** grid, click **Chooser**.
   The Chooser screen opens.
2. Find and select the room.
   The selected room displays in the Rooms grid.
3. Select the **Schedule Selected Rooms Only** option to restrict the Master Schedule Builder to use only rooms that appear in the Room grid.
4. Click **Save**.

CREATING PRIMARY COURSE LINKS

You use course links to associate sections of two different courses during the scheduling process. For instance, you may have a chemistry course and a separate chemistry lab class, which follows immediately after. You can link the sections of those separate courses together.

1. On the **Primary Course Linking** grid, click **Chooser**.
   The Chooser screen opens.
2. Find and select the course to link.
   The selected course displays in the Primary Course Linking grid.

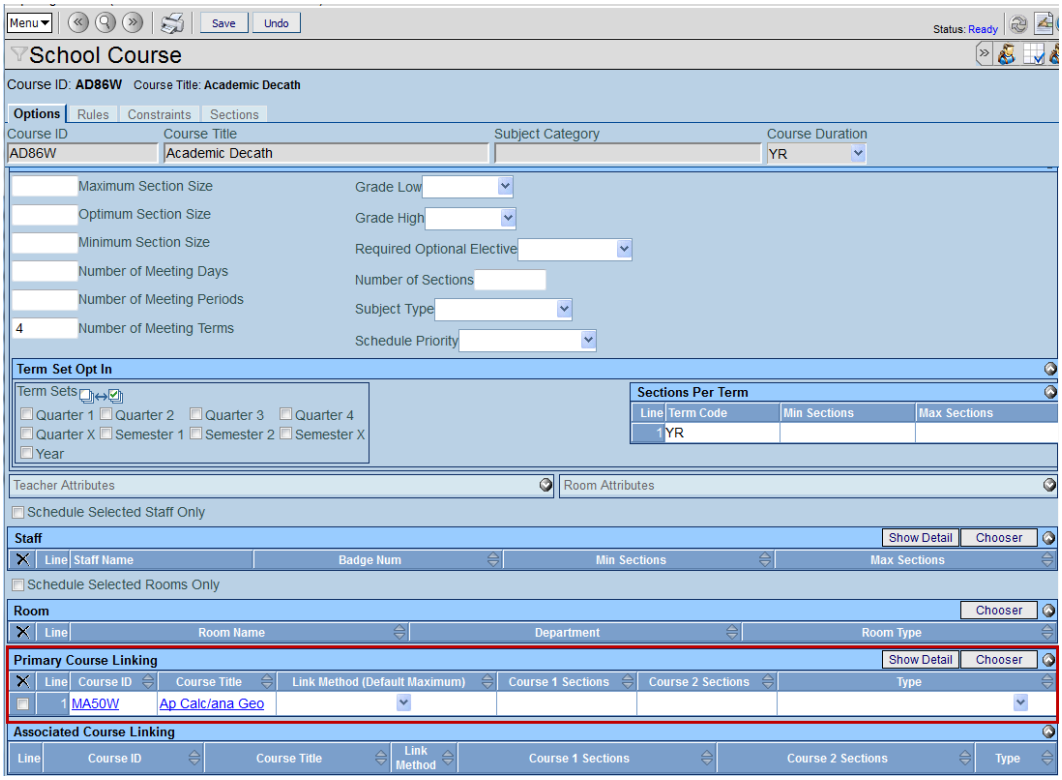


Figure 12.3 - MSB School Course screen, Primary Course Linking grid

3. Select the **Link Method**. The link method defines how the system applies the course link rules and to which courses. The options include :
   - **Minimum Section** – the minimum number of sections of either course the system creates links between.
   - **Maximum Section** – the maximum number of sections of either course the system creates links between.
   - **Custom** – the number of sections of either course the system creates links between.
4. In **Course 1 Sections**, enter the minimum, maximum, or custom number of sections of the main course for which the system creates links.
5. In **Course 2 Sections**, enter the minimum, maximum, or custom number of sections of the secondary course for which the system creates links.
6. Select the link **Type**. You defined the link type on the MSB School Scheduling Options screen.
7. Click **Save**.

Assigning Rules to a Linked Course

Your linked course inherits the rules for the link type as defined on the MSB School Scheduling Options screen. You can redefine the rules for how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes this particular linked course.

Setting the Builder Rules for Linked Courses

1. Select a course on the **Primary Course Linking** grid.
2. Click **Show Detail**.
   The Rules tab for the selected course displays.
3. On the **Rules** tab, expand the Builder Rules group box.
   The Builder Rules for this course displays.
4. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Allow Room Schedule Overlap**
- **Schedule Sections with Different Teachers**
- **Schedule Sections in Different Rooms**
- **Schedule Sections in Different Terms**
- **Schedule Sections After Terms**
- **Schedule Sections on Same Days**
- **Schedule Sections in Same Periods**

- **Schedules Sections in Consecutive Periods**
- **Allow Teacher Schedule Overlap**
- **Schedule Sections with Same Teachers**
- **Schedule Sections in Same Rooms**
- **Schedules Sections in Same Terms**
- **Section Sections Before Terms**
- **Schedule Sections in Consecutive Terms**
- **Schedule Sections on Different Days**
- **Schedule Sections in Different Periods**
- **Schedule Sections with No Time Overlaps**

5. Click **Save**.

Setting the Loader Rules for Linked Courses

6. On the **Rules** tab, expand the Loader Rules group box.
   The Loader Rules for this course displays.
7. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students In Mapped Sections**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Student After Terms**

- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**

8. Click **Save**.

Setting the Balancer Rules for Linked Courses

9. On the **Rules** tab, expand the Balancer Rules group box.
   The Balancer Rules for this course displays.
10. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Schedule Students in Same Term**
- **Schedule Students Before Terms**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Ignore Rules From Higher Levels**
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Different Periods**
- **Schedule Students in Different Terms**
- **Schedule Students After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**
- **Schedule Students in Mapped Sections**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**

11. Click **Save**.

Setting the Analyzer Rules for Linked Courses

12. On the **Rules** tab, expand the Analyzer Rules group box.
    The Analyzer Rules for this course displays.
13. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

14. Click **Save**.

Setting the Resolver Rules for Linked Courses

15. On the **Rules** tab, expand the Resolver Rules group box.
    The Resolver Rules for this course displays.
16. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the system ignores rules set at the higher levels.
- **Schedule Students in Same Sections**
- **Schedule Students With Same Teacher**
- **Schedule Students in Same Room**
- **Schedule Students in Same Term**
- **Schedule Students Before Terms –**
- **Schedule Students in Consecutive Terms**
- **Schedule Students on Different Days**
- **Schedule Students in Different Periods**
- **Schedule Students in Mapped Sections**
- **Schedule Students in Different Sections**
- **Schedule Students with Different Teachers**
- **Schedule Students in Different Rooms**
- **Schedule Students in Different Terms**
- **Schedule Students After Terms**
- **Schedule Students on Same Days**
- **Schedule Students in Same Periods**

17. Click **Save**

Synchronizing Linked Rules from the School Course

After you create course links, you can edit them and change the link type. When you change the link type, you can synchronize the course links so the system applies the properties and rules associated with the new link type.

Also, if you make changes to the rules associated with a course link and you want to return to the original defaults, you can synchronize the course links. The system will restore the course links to the rules and properties associated with the course link type on the MSB School Scheduling Options screen.

1. Click **Menu** on the School Course screen.
   The Menu options display.

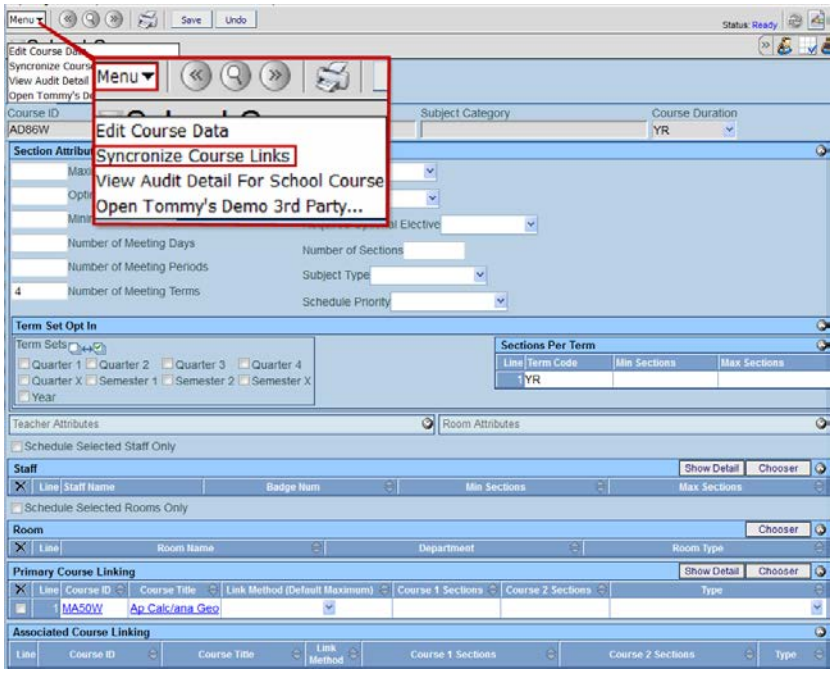


Figure 12.4 – School Course screen, Menu

2. Select **Synchronize Course Links**.
   The Synchronize Course Links screen displays.

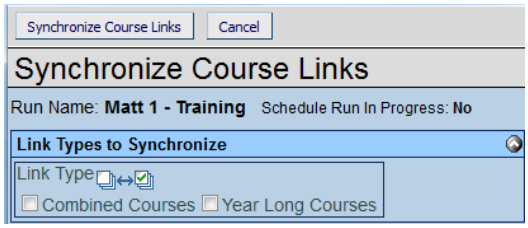


Figure 12.5 - Synchronize Course Links screen

3. Select the **Link Type** to synchronize.
4. Click **Synchronize Course Links**.
   The system updates all the selected course link types for the school course.

VIEWING ASSOCIATED COURSE LINKS

You can view all the other courses for which this course is designated as a Primary Course Link in the Associated Course Linking grid on the Options tab of the School Course screen.

ASSIGNING RULES TO A SCHOOL COURSE

You can define how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes this school course.

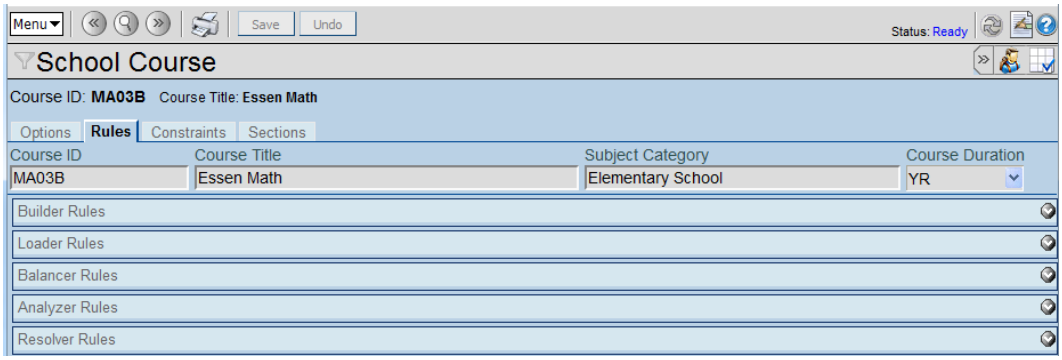


Figure 12.6 - MSB School Course screen, Rules tab

Setting Builder Rules for Individual Courses

1. On the **Rules** tab, expand the Builder Rules group box.
   The Builder Rules for this course displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Builder ignores rules set at higher levels.
- **Do Not Schedule Sections** – do not schedule sections for this course or group of courses.
- **Ignore Time Constraints** – ignores the time constraints, but all other constraints on the number of periods, term restrictions, or meeting day restrictions are obeyed.

  For example, a gym class could be limited to the last period of the day. Check this box to ignore these constraints.
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. Check this box to ignore course links.
- **Ignore Max Sections Per Term** – if a maximum number of sections per term for a course is defined in the Term Set Opt-In field of the School Course screen, selecting this rule allows the builder to ignore the constraint.
- **Do Not Schedule Teachers** – don't assign teachers to sections of this course or group of courses.

  This can be helpful to establish if there are enough rooms and sections to accommodate student requests.
- **Do Not Schedule Rooms** – the system does not assign sections to rooms

- **Generate All Day Patterns -** generates a list of all potential scheduling days for a course. If this is not selected, and the school has a 5 day rotation, it only schedules classes MWF (if meets 3 days) or TTh (if meets 2 days).
- **Ignore Teachers Pref Room -** the builder does not give special preference to the preferred room associated with the teacher.
- **Ignore Min Sections Per Term -** the builder ignores the minimum sections per term constraint for the course.
- **Ignore Category Teacher Constraints Min Period Load -** if a minimum period load is specified in the details of teachers grid, the builder ignores these settings when building sections for this category.
- **Ignore Category Teacher Constraints Max Period Load -** if a maximum period load is specified in the details of teachers grid, the builder ignores these settings when building sections for this category.
- **Ignore Category Teacher Constraints Min Sec -** if a minimum number of category sections a teacher can teach has been defined, the builder ignores these settings when building sections for this category.
- **Ignore Category Teacher Constraints Max Sec -** if a maximum number of category sections a teacher can teach has been defined, the builder ignores these settings when building sections for this category.
- **Ignore Category Teacher Time Constraints –** if a category teacher time constraint is defined in the details of teachers grid, the builder ignores the time constraint when building sections for this category.
- **Ignore Course Teacher Constraints Min Period Load –** if a minimum period load for the teacher on the course is specified in the details of the course teachers grid), the builder ignores these settings when building sections for this category.
- **Ignore Course Teacher Constraints Max Period Load–** if a maximum period load for the teacher on the course is specified in the details of the course teachers grid), the builder ignores these settings when building sections for this category.
- **Ignore Course Teacher Constraints Min Sec -** if a minimum number of course sections a teacher can teach is specified, the builder ignores these settings when building sections for this course.
- **Ignore Course Teacher Constraints Max Sec -** if a maximum number of course sections a teacher can teach is specified, the builder ignores these settings when building sections for this course.
- **Ignore Course Teacher Time Constraints –** if a course teacher time constraint is specified in the details of teachers grid on the course screen, the builder ignores the time constraint when building sections for this course.

3. Click **Save**.

Setting the Loader Rules for Individual Courses

1. On the **Rules** tab, expand the Loader Rules group box.
   The Loader Rules for this course displays.

2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Loader ignores rules set at higher levels.
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. This option ignores these links.
    - **Ignore Student Property Constraints** – the Loader disregards any student property constraints set on the Constraints tab.

3. Click **Save**.

Setting the Balancer Rules for Individual Courses

1. On the **Rules** tab, expand the Balancer Rules group box.
   The Balancer Rules for this course displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Balancer ignores rules set at higher levels.
  - **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. This option ignores these links.
- **Ignore Student Property Constraints** – the Balancer disregards any student property constraints set on the Constraints tab.

3. Click **Save**.

Setting the Analyzer Rules for Individual Courses

1. On the **Rules** tab, expand the Analyzer Rules group box.
   The Analyzer Rules for this course displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

3. Click **Save**.

Setting the Resolver Rules for Individual Courses

1. On the **Rules** tab, expand the Resolver Rules group box.
   The Resolver Rules for this course displays.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Resolver ignores rules set at higher levels.
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. This option ignores these links.
- **Ignore Student Property Constraints** – the Resolver disregards any student property constraints set on the Constraints tab.

3. Click **Save**.

CREATING SCHOOL COURSE CONSTRAINTS

Constraints limit the students, teachers, or rooms that Master Schedule Builder assigns to this course. Constraint settings also limit the periods, terms, or meeting days that the system assigns to this course.

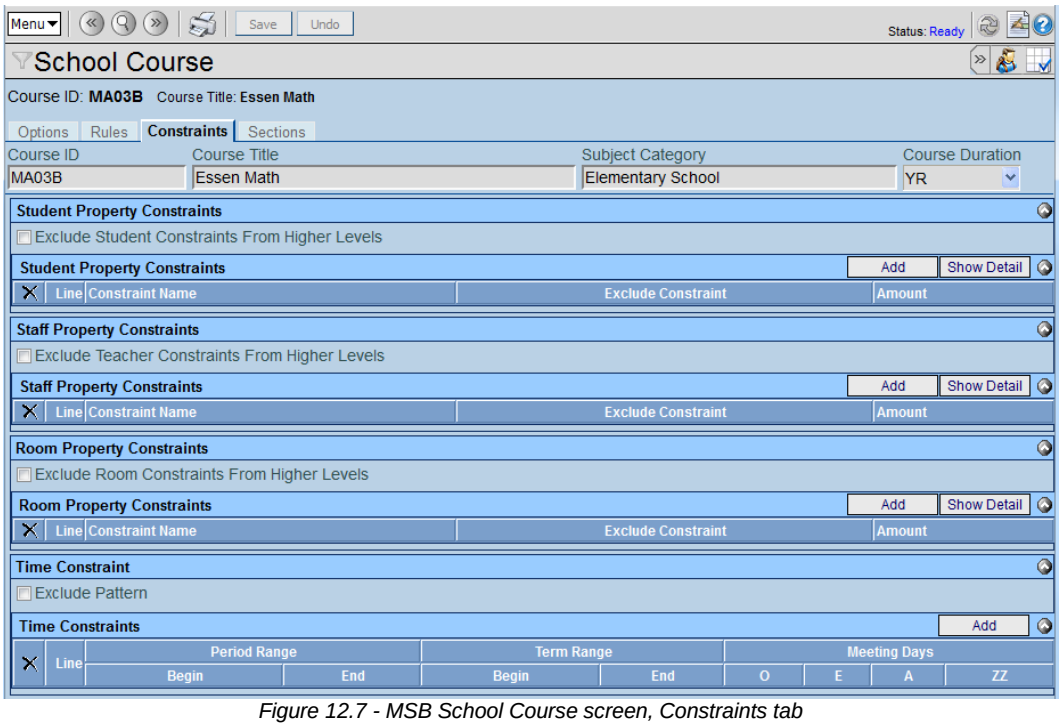


Figure 12.7 - MSB School Course screen, Constraints tab

Setting constraints on this level is an advanced option. Edupoint recommends contacting the Customer Service Center (CRC) to verify the constraints will perform the way you expect them to before implementing them.

Caution - Any constraints placed on the resources, such as teachers and rooms, restricts the Master Schedule Builder. It has less flexibility to create sections and schedule students. Edupoint recommends using constraints very judiciously.

Creating Time Constraints

You use the Time Constraints grid to indicate if this course only meet for specific periods, on specific days or terms.

Selecting the Exclude Pattern option restricts the Master Schedule Builder from scheduling course sections during the times, days, or terms indicated in the Time Constraints grid.

Caution - The system interprets the rows in the Time Contraints grid as "And" statement, not an "Or" statement.

What this means is, if you have one row that sets a time constraint for Period 1 during the First Semester, and another row that sets a time constraint for Period 3 during the First Semester, the system interprets that as meaning that periods 1 "and" 3 in the first semester are available for scheduling sections.

1. Click **Add** on the Time Constraints grid.
   A new row displays in the grid.
2. Select the **Period Range**, if applicable.
3. Select the **Term Range**, if applicable
4. Select the **Meeting Days**.
5. Select the **Exclude Pattern** option, if appropriate.
6. Click **Save**.

PRESCHEDULING SECTIONS

Edupoint recommend pre-scheduling sections if you have course where there are specific restrictions for when the sections should be scheduled. For instance, your school may have a ROTC course that is always scheduled during first period, or a PE for Football course that is held during the last period.

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.
3. Select the **Open School Course** icon.
   The School Course screen opens.
4. Find or scroll to the appropriate school course record.
5. Select the **Sections** tab on the School Course screen.

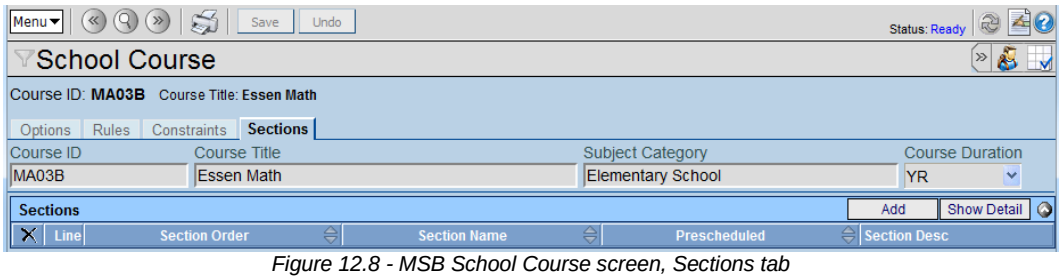


Figure 12.8 - MSB School Course screen, Sections tab

6. Click **Add** on the Sections grid.
   A new row displays in the Sections grid.

7. Enter the **Section Order**.
   This is the order in which the sections are listed and the system creates them. Start with number one.
8. Enter the **Section Name**.
   This is a required field.
9. Select **Prescheduled**, if you want the system to preschedule this section. The system creates and schedules all other sections around prescheduled sections.
10. Enter the **Section Desc**.
    This is the description of the section, and is optional.
11. Click **Save**.

Setting Prescheduled Section Options

1. Select a course on the **Sections** grid.
2. Click **Show Detail**.
   The detail tabs for the selected course displays.

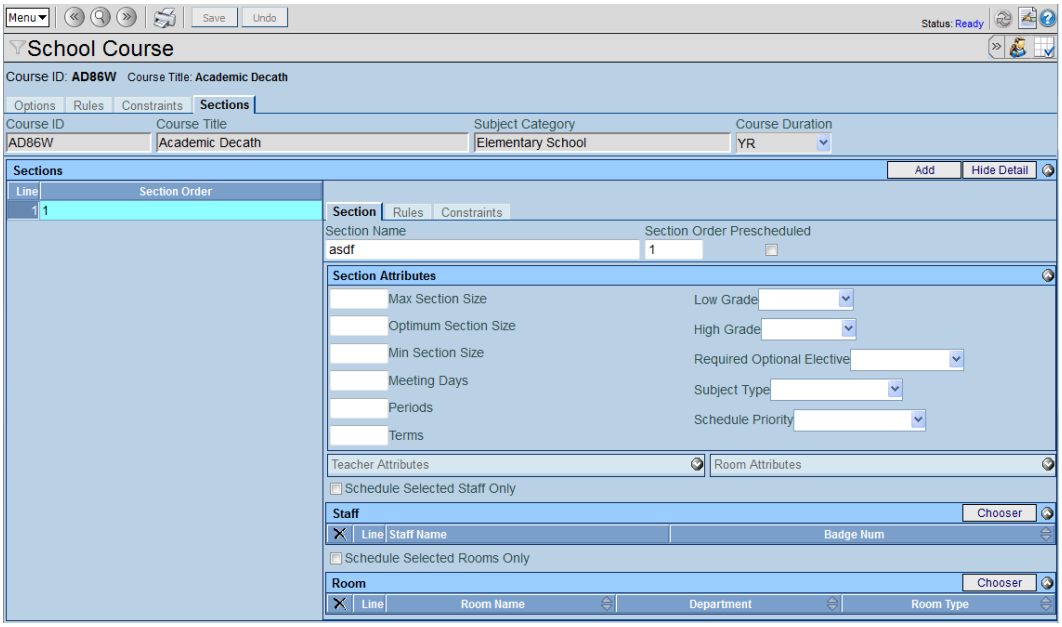


Figure 12.9 - MSB School Course screen, Section tab, Section Detail tab

3. Select the **Section** tab.
4. Enter the defaults for this course:

- **Max Section Size** - the maximum number of students that can be scheduled into a section for this course.
- **Optimum Section Size** – the ideal number of students that should be scheduled into a section for this course
- **Min Section Size** – the minimum number of students that can be scheduled into a section for this course.
- **Meeting Days** – the number of days sections for this course meets during the week

- **Periods** – the number of periods a section for this course meets during the day.
- **Terms** – the number of terms a section for this course meets.

  For instance, if your this course typically has yearlong classes and your school is on a semester schedule, you would enter 2.
- **Low Grade**– the lowest grade that can take this course.
- **High Grade**– the highest grade that can take this course.
- **Required Optional Elective** - this is the core/elective option used by the builder to determine the importance of a section. A singleton core course should get higher priority in the build order than a singleton elective.
- **Subject Type** - helps determine a scheduling and building priority if subject type priorities are specified.

  Note – There is special logic on lunch and study hall subject types. Lunch is given a very high scheduling priority while study hall is given a very low scheduling priority.
- **Schedule Priority** - sets a specific scheduling priority on the course. The system uses this value to help determine the course building/loading rank.

5. Click **Save**.

Setting Teacher Schedule Priority for a Section (Optional)

1. On the **Section** tab, expand the Teacher Attributes group box.
   The Schedule Priority field displays.
2. Select the teacher **Schedule Priority**.
   This field indicates if the scheduler considers the teacher's schedule before or after other rules or factors.
3. Click **Save**.

Setting Room Schedule Priority for a Section(Optional)

1. On the **Section** tab, expand the Room Attributes group box.
   The Schedule Priority field displays.
2. Select the room **Schedule Priority**.
   This field indicates if the scheduler considers the room's schedule before or after other rules or factors.
3. Click **Save**.

Assigning Staff to a Section

1. On the **Staff** grid, click **Chooser**.
   The Chooser screen opens.

2. Find and select the teacher.
   The selected teacher displays in the Staff grid.
3. Select the **Schedule Selected Staff Only** option to have the system only schedule teachers you added to the Staff grid.
4. Click **Save**.

Assigning a Room to a Section

1. On the **Room** grid, click **Chooser**.
   The Chooser screen opens.
2. Find and select the room.
   The selected room displays in the Rooms grid.
3. Select the **Schedule Selected Rooms Only** option to restrict the Master Schedule Builder to use only rooms that appear in the Room grid.
4. Click **Save**.

Setting Rules for a Section

You can define how each component (Builder, Loader, Balancer, Analyzer, and Resolver) processes the courses associated with this subject category.

Setting the Builder Rules for a Section

1. On the **Rules** tab, expand the Builder Rules group box.
   The Builder Rules for the section displays.

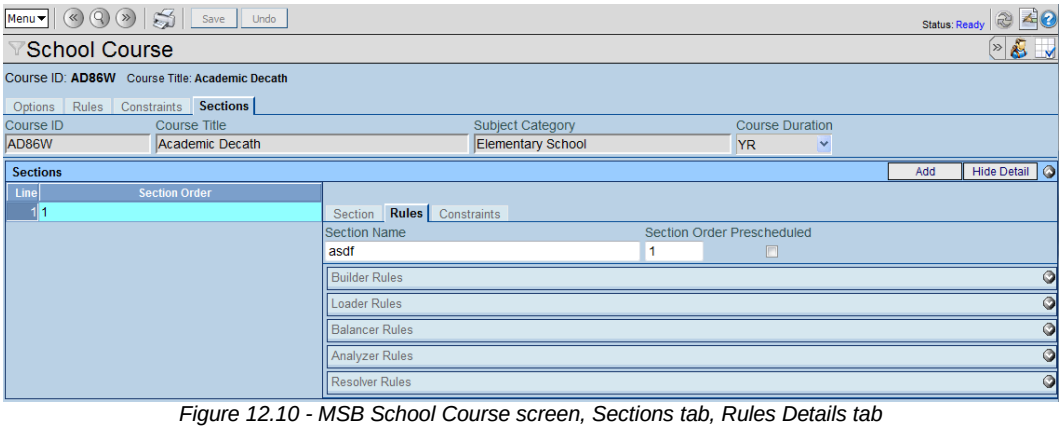


Figure 12.10 - MSB School Course screen, Sections tab, Rules Details tab

2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the builder ignores rules set at higher levels.

- **Do Not Schedule Sections** – do not schedule sections for this course or group of courses.
- **Ignore Time Constraints** – ignores any time constraints for periods, terms, and meeting days set for individual sections.

  For example, a gym class could be limited to the last period of the day. Check this box to ignore these constraints.
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. Check this box to ignore course links.
- **Ignore Max Sections Per Term** – if a min/max sections per term is defined in the Term Set Opt-In field on the School Course screen, this rule allows the builder to ignore the constraint.
- **Do Not Schedule Teachers** – don't assign teachers to sections of this course or group of courses..

  This can be helpful to establish if there are enough rooms and sections to accommodate student requests.
- **Do Not Schedule Rooms** – the system does not assign sections to rooms
- **Generate All Day Patterns** - generates a list of all potential scheduling days for a course. If this is not selected, and the school has a 5 day rotation, it only schedules classes MWF (if meets 3 days) or TTh (if meets 2 days).
- **Ignore Teachers Pref Room -** the builder does not give special preference to the "Preferred room" associated with the teacher.
- **Ignore Min Sections Per Term** - Min sections per term is implemented on the course level (this rule would not apply to a specific section). When selected, the builder to ignores the minimum sections per term constraint for the course.

- **Ignore Category Teacher Constraints Min Period Load -** if a minimum period load is specified in the details of teachers grid, the builder ignores these settings when building sections for this category.
- **Ignore Category Teacher Constraints Max Period Load -** if a maximum period load is specified in the details of teachers grid, the builder ignores these settings when building sections for this category.
- **Ignore Category Teacher Constraints Min Sec -** if a minimum number of category sections a teacher can teach has been defined, the builder ignores these settings when building sections for this category.
- **Ignore Category Teacher Constraints Max Sec -** if a maximum number of category sections a teacher can teach has been defined, the builder ignores these settings when building sections for this category.
- **Ignore Category Teacher Time Constraints –** if a category teacher time constraint is defined in the details of teachers grid, the builder ignores the time constraint when building sections for this category.

- **Ignore Course Teacher Constraints Min Period Load –** if a minimum period load for the teacher on the course is specified in the details of the course teachers grid), the builder ignores these settings when building sections for this category.
- **Ignore Course Teacher Constraints Max Period Load–** if a maximum period load for the teacher on the course is specified in the details of the course teachers grid), the builder ignores these settings when building sections for this category.
- **Ignore Course Teacher Constraints Min Sec -** if a minimum number of course sections a teacher can teach is specified, the builder ignores these settings when building sections for this course.
- **Ignore Course Teacher Constraints Max Sec -** if a maximum number of course sections a teacher can teach is specified, the builder ignores these settings when building sections for this course.
- **Ignore Course Teacher Time Constraints –** if a course teacher time constraint is specified in the details of teachers grid on the course screen, the builder ignores the time constraint when building sections for this course.

3. Click **Save**.

Setting the Loader Rules for a Section

1. On the **Rules** tab, expand the Loader Rules group box.
   The Loader Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Loader ignores rules set at higher levels.
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. This option ignores these links.
- **Ignore Student Property Constraints** – the Loader disregards any student property constraints set on the Constraints tab.

3. Click **Save**.

Setting the Balancer Rules for a Section

1. On the **Rules** tab, expand the Balancer Rules group box.
   The Balancer Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Balancer ignores rules set at higher levels.

- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. This option ignores these links.
- **Ignore Student Property Constraints** – the Balancer disregards any student property constraints set on the Constraints tab.

3. Click **Save**.

Setting the Analyzer Rules for a Section

1. On the **Rules** tab, expand the Analyzer Rules group box.
   The Analyzer Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

3. Click **Save**.

Setting the Resolver Rules for a Section

1. On the **Rules** tab, expand the Resolver Rules group box.
   The Resolver Rules for courses display.
2. Select the appropriate rules.

Note – The more rules you select, the more you constrict the Master Schedule Builder's ability to create sections and schedule students.

- **Ignore Rules From Higher Levels** – the Resolver ignores rules set at higher levels.
- **Ignore All Course Links** – individual courses can be linked, such as a chemistry class could have the lecture and lab courses linked. This option ignores these links.
- **Ignore Student Property Constraints** – the Resolver disregards any student property constraints set on the Constraints tab.

3. Click **Save**.

Creating Section Constraints

Constraints limit the students, teachers, or rooms that Master Schedule Builder assigns to this section. Constraint settings also limit the periods, terms, or meeting days that the system assigns to this section.

Setting constraints on this level is an advanced option. Edupoint recommends contacting the Customer Service Center (CRC) to verify the constraints will perform the way you expect them to before implementing them.

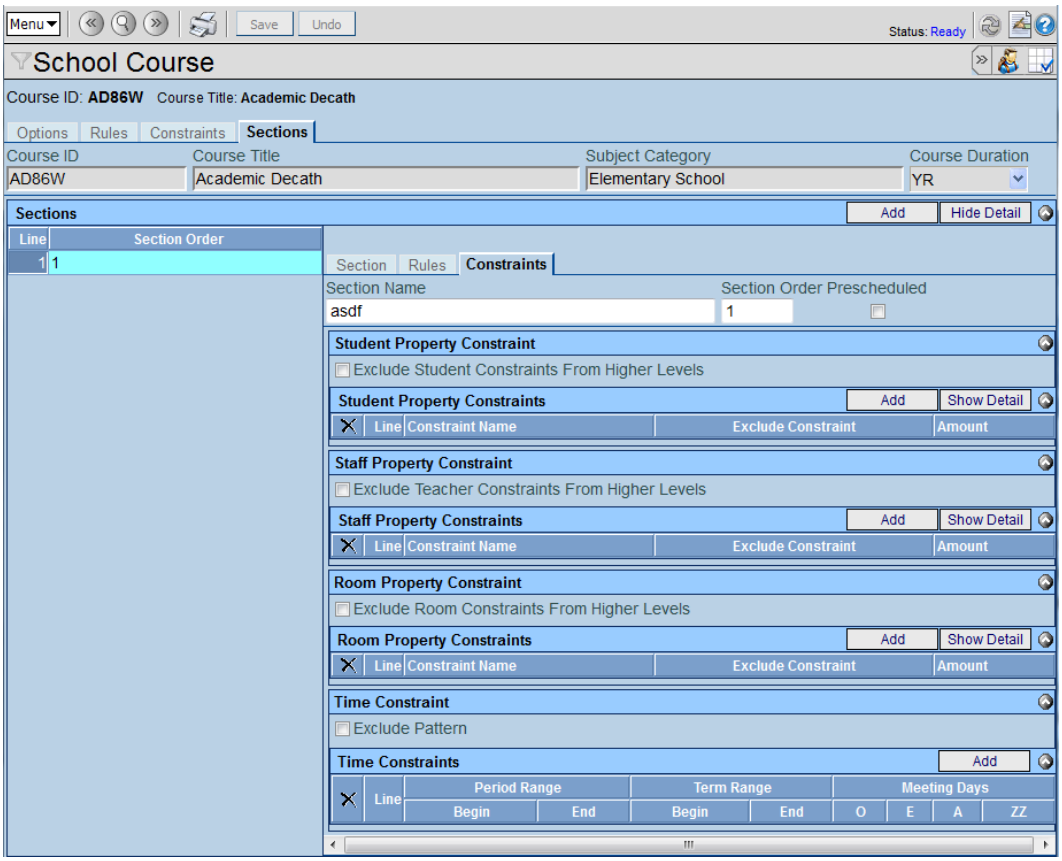


Figure 12.11 - MSB School Course screen - Sections tab, Constraints Details tab

Caution - Any constraints placed on the resources, such as teachers and rooms, restricts the Master Schedule Builder. It has less flexibility to create sections and schedule students. Edupoint recommends using constraints very judiciously.

Creating Time Constraints

You use the Time Constraints grid to indicate if this section only meet for specific periods, on specific days or terms.

Selecting the Exclude Pattern option restricts the Master Schedule Builder from scheduling sections during the times, days, or terms indicated in the Time Constraints grid.

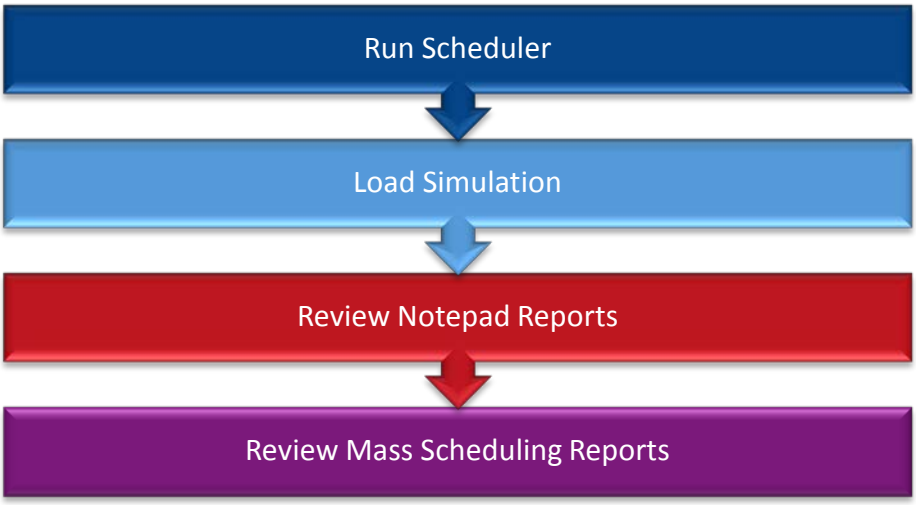
1. Click **Add** on the Time Constraints grid.
   A new row displays in the grid.
2. Select the **Period Range**, if applicable.
3. Select the **Term Range**, if applicable
4. Select the **Meeting Days**.
5. Select the **Exclude Pattern** option, if appropriate.
6. Click **Save**.

Chapter Thirteen:
RUN THE SCHEDULER PROCESS

In this chapter, the following topics are covered:

The Scheduler Process is simply where the system takes all the attributes, rules, and constraints, as well as all of the courses, teachers, room, and student requests, and uses them to try to build a Master Schedule.

There are four basic steps in the Scheduler Process. The steps are detailed in this chapter.



RUNNING THE SCHEDULER

1. Select the **Builder, Loader, Resolver**, and **Balancer** options for the scheduling run.

Note –Edupoint recommends the following setting for the initial scheduling run. This is just a starting point. These options can and should be changed for future scheduling runs. See Repeat Until Satisfied with the Results.

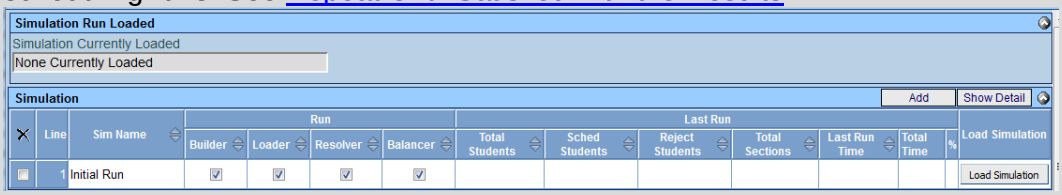


Figure 13.1 - Master Builder Option Set screen, Simulation grid

Run Options	
Builder	yes
Loader	yes
Resolver	optional (may want to decide based on run speeds)
Balancer	no

1. Access the additional Loader, Resolver, and Balancer options by clicking **Show Detail**.
   The Details tab displays.

2. Expand the Loader Rules, Resolver Rules, and Balancer Rules sections to access the additional options.

Additional Loader Options	
Observe Max Loader	no
Observe Opt Loader	no
Set Exhaustive Loader	no
Optimize For Time	yes
Stu Time Limit Loader	1000ms
Total Time Limit Loader	20 minutes

Additional Resolver Options	
Observe Maximums	no
Observe Optimums	no
Optimize For Time	yes
Run Exhaustive	yes
Total Student Time Limit	1000ms
Total Time Limit	20 min

Additional Balancer Options
n/a – not recommended to run balancer

2. On the Master Builder Option Set screen, enter the **Run Name**.
3. Select the **Run Prerequisite Check** to have the system check that students have completed the appropriate course prerequisites for their requests.

   The system generates the STU205 – Student Course Request Profiles report, which lists any student prerequisite violations.
4. Select the **Include Student Global Requests As Optional Requests** to have the system check and schedule any global alternate course requests.
5. Select a **Builder Option, Loader Option, Resolver Option**, and/or **Balancer Option** if applicable. The options for all four components include:

- **Do Not Schedule** – the system does not schedule any global alternates.
- **Schedule As Many Periods As Possible** - The scheduler tries to fill a student's schedule with global alternates.
- **Schedule No More Than The Number of Periods In Electives** - The scheduler only schedules global alternates if an elective request could not be scheduled.

6. Click **Run Scheduler**.
   The Job Status screen displays a message when the Master Schedule Builder process is complete.
7. Click **Ok**.

LOADING THE SIMULATION

If you would like to view the results of the scheduling run using the Student Schedule or Sched Section screens, you need to load the simulation. While it is not necessary to load the simulation in order to complete the Master Schedule Builder process, it does aid in resolving potential conflicts before the schedule is finalized. Keep in mind that the simulation must be re-loaded every time you run the scheduler

1. On the Master Builder Option Set screen, select the simulation from the **Simulation** grid.

Note – The system automatically enters a simulation labeled “Initial Run” when it creates the option set.

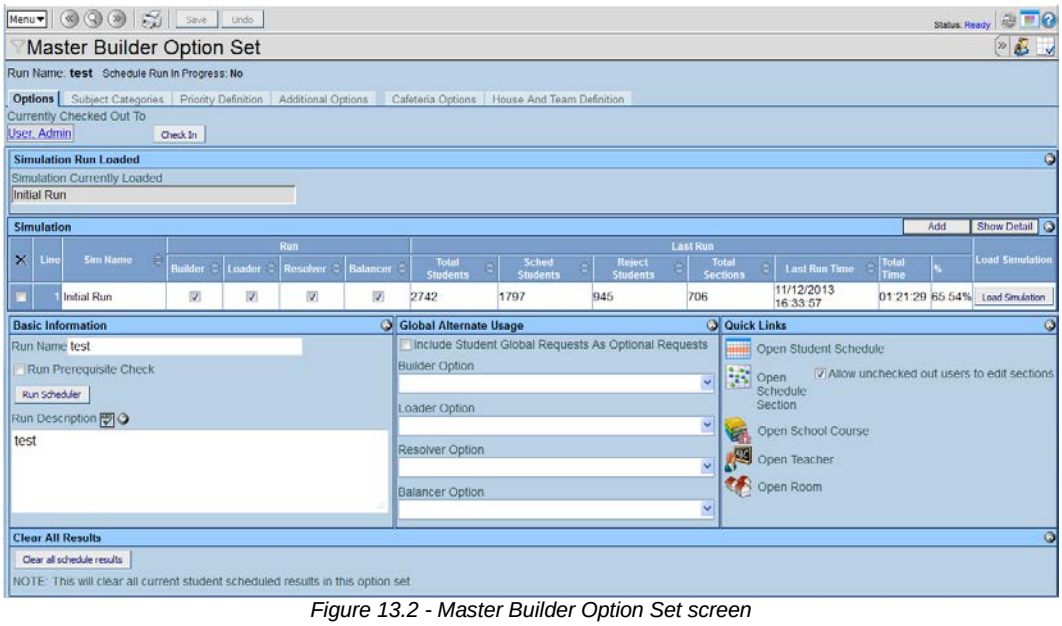


Figure 13.2 - Master Builder Option Set screen

2. Click **Load Simulation**.
   The Job Status screen displays a message indicating the number of sections inserted, students processed, and students added to sections.
3. Click **OK**.

Note – Edupoint recommends only having one simulation per option set. If you require additional simulations, please create another option set.

REVIEWING NOTEPAD REPORTS

When the Simulation is loaded, it creates a library of Notepad reports. These reports can alert you to scheduling conflicts and resource allocation problems. Review the reports to get a better idea of the overall success and potential issues of the scheduling run.

1. On the Master Builder Option Set screen, select the run from the **Simulation** grid.
2. Click **Show Detail**.
   The Detail and Simulation Report tabs for the simulation run display.

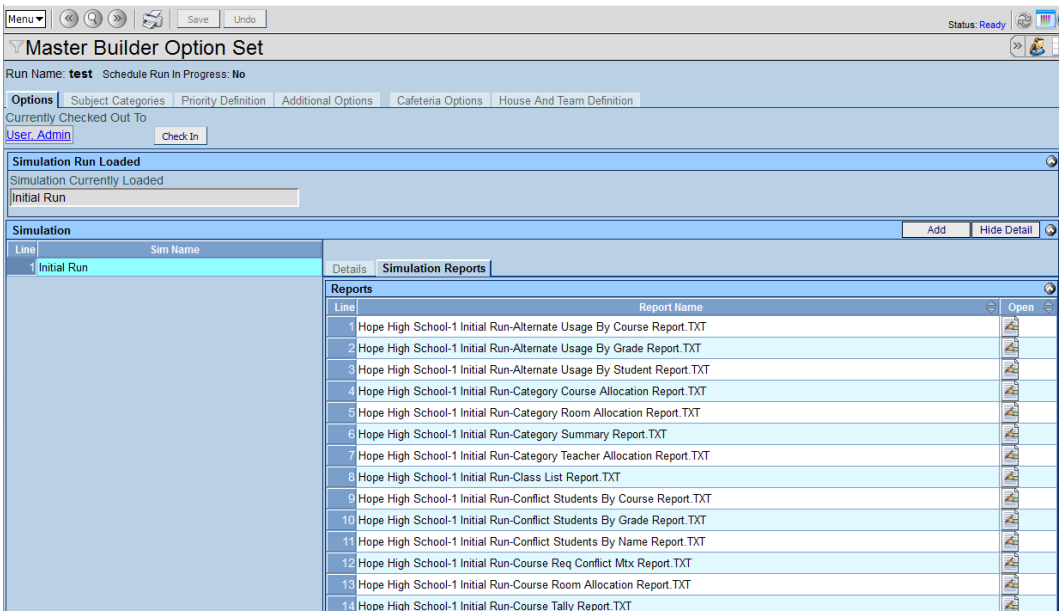


Figure 13.3 - Master Builder Option Set screen, Simulation Reports tab

3. Select the **Simulation Reports** tab.
4. Review the reports, especially:

- **Error Report (line 16)** - shows the errors generated by the system when loading the simulation
- **Master Schedule Sections Report (line 23)** - shows the sections that have conflicting requests.
- **Rules Report (line 29)** - shows which rules were applied to the individual courses.
- **Student Schedule Report (line 34)** - shows the analysis results for each student's schedule.
- **Teacher Schedule Report (line 36)** - shows the analysis results for each teacher's schedule.

Note – All the Notepad reports are listed and described in Notepad and OSM Reports..

5. Make adjustments as necessary to the sections, student schedule, courses, and/or rules.

REVIEWING MASS SCHEDULING REPORTS

The Mass Scheduling Reports also contain valuable information that you can use to help pinpoint potential problems with your scheduling run. You access the Mass Scheduling reports by navigating to Synergy SIS > Mass Scheduling > Reports.

Note – These reports are only available after you have loaded the simulation for the scheduling run with which you are working.

It is a good idea to review all of the reports in this node. However, Edupoint recommends focusing on the following reports:

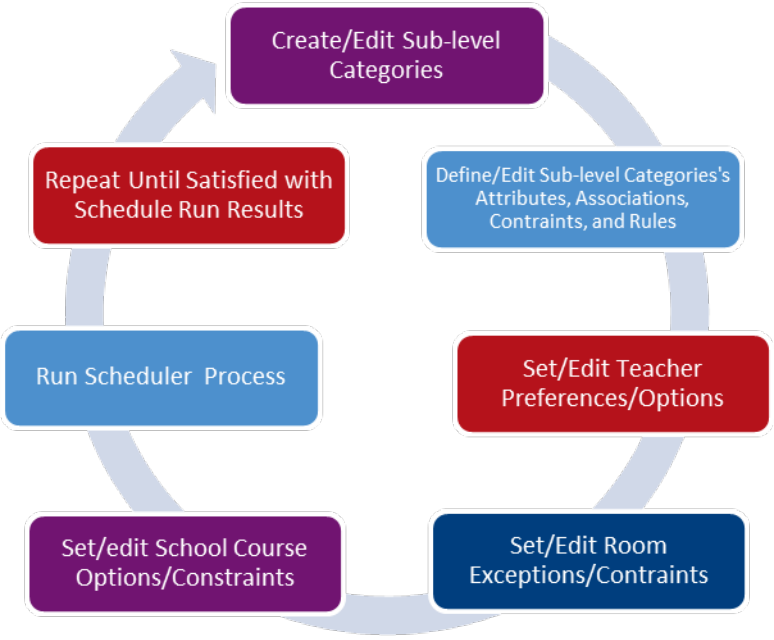
- **OSM201– Student Schedule Analysis** - lists all scheduled and requested classes for the students in the selected option set. The report also shows any schedule conflicts and the alternate periods available for each class
- **OSM406 – Schedule Open Periods** - displays any periods not scheduled for a student in the selected option set by period number.
- **OSM408 – Class Analysis by Course and Section** - lists each course and shows the sections scheduled for the course. For each section and course, the report lists the number of students scheduled both overall and by gender, the total number of spaces available, the number of requests, and the average number of students scheduled in a section.

Chapter Fourteen: REPEAT UNTIL SATISFIED WITH THE RESULTS

In this chapter, the following topics are covered:

REPEATING THE PROCESS

As previously mentioned, In the middle of the Master Schedule Builder process, there is a loop.



This is the point in the process where you make adjustments, do another run, see the impact of those adjustments, and adjust some more until you are satisfied with the results.

Keep in mind, you do not need to repeat every step in the cycle. Only make adjustments to the areas that affect your scheduling results.

- Create additional Sub-Level Categories or remove levels, if necessary.
- Edit the Sub-Category Level's attributes, associations, constraints, and/or rules.
- Edit Teacher preferences and/or options.
- Edit Room exceptions and/or constraints.
- Edit School Course options and/or constraints.

REVIEWING RUN RECOMMENDATIONS

In addition to adjusting the Subject Categories, Teacher, Room, and/or School Course options, Edupoint recommends changing the run settings for the different types of scheduling runs.

The following settings are just starting points. You may alter the settings as necessary to achieve better run results. For instance, if you are seeing large number of students timing out during the loader phase of the scheduling run in the error log, you may want to increase the student time limit.

Run Type	Initial (first few runs to correct errors)
Run Options	
Builder	yes
Loader	yes
Resolver	optional (may want to decide based on run speeds)
Balancer	no
Additional Loader Options	
Observe Max Loader	no
Observe Opt Loader	no
Set Exhaustive Loader	no
Optimize For Time	yes
Stu Time Limit Loader	1000ms
Total Time Limit Loader	20 minutes
Additional Resolver Options	
Observe Maximums	no
Observe Optimums	no
Optimize For Time	yes
Run Exhaustive	yes
Total Student Time Limit	1000ms
Total Time Limit	20 min
Additional Balancer Options	
n/a – not recommended to run balancer	

Note – The Loader and Resolver are unnecessary at this stage, but can be a helpful indicator of a build not going well.

For instance, if the majority of sections are overloaded or if the majority of students are not scheduled, those are indications that the build is not proceeding well.

Run Type	Intermediate (inputs more or less stable; experimenting with rules & settings)
Run Options	
Builder	yes
Loader	yes
Resolver	yes
Balancer	yes
Additional Loader Options	
Observe Max Loader	no
Observe Opt Loader	no
Optimize For Time	yes
Set Exhaustive Loader	no
Stu Time Limit Loader	1000
Total Time Limit Loader	45 minutes
Additional Resolver Options	
Observe Maximums	no
Observe Optimums	no
Optimize For Time	yes
Run Exhaustive	no
Total Student Time Limit	1000ms
Total Time Limit	20 min
Additional Balancer Options	
Observe Maximums	no
Observe Optimums	no
Optimize For Time	yes
Run Exhaustive	no
Total student time limit	1000ms
Number of balancer passes	1
Total Time Limit	20 minutes

Run Type	Final (inputs are correct; rules are stable; refinement mode)
Run Options	
Builder	yes
Loader	yes
Resolver	yes
Balancer	yes
Additional Loader Options	
Observe Max Loader	no
Observe Opt Loader	no
Optimize For Time	no

Set Exhaustive Loader	yes
Stu Time Limit Loader	1500
Total Time Limit Loader	45 minutes
Regression Limit	20000
Additional Resolver Options	
Observe Maximums	no
Observe Optimums	no
Optimize For Time	no
Run Exhaustive	yes
Total Student Time Limit	3000ms
Total Time Limit	45 min
Regression Limit	20000
Additional Balancer Options	
Observe Maximums	yes
Observe Optimums	no
Optimize For Time	no
Run Exhaustive	yes
Total student time limit	3000ms
Number of balancer passes	2
Total Time Limit	45 minutes
Regression Limit	20000

Run Type	**Load Only (Schedule is locked, scheduling all students)**
Run Options	
Builder	no
Loader	yes
Resolver	yes
Balancer	yes
Additional Loader Options	
Observe Max Loader	no
Observe Opt Loader	no
Optimize For Time	no
Set Exhaustive Loader	yes
Stu Time Limit Loader	1500
Total Time Limit Loader	45 minutes
Regression Limit	20000
Additional Resolver Options	
Observe Maximums	no
Observe Optimums	no
Optimize For Time	no
Run Exhaustive	yes
Total Student Time Limit	3000ms
Total Time Limit	45 min

Regression Limit	20000
Additional Balancer Options	
Observe Maximums	yes
Observe Optimums	no
Optimize For Time	no
Run Exhaustive	yes
Total student time limit	3000ms
Number of balancer passes	2
Total Time Limit	45 minutes
Regression Limit	20000

Keep in mind, it is very unlikely, even after repeated runs, that the system can schedule 100% of your students successfully. Once you are satisfied with the percentage of students scheduled, you can proceed with the steps to finalize the schedule, which includes manually resolving scheduling conflicts until all your students are scheduled.

Chapter Fifteen: RESOLVING CONFLICTS

In this chapter, the following topics are covered:

Once you are satisfied with the percentage of students scheduled, you manually resolve scheduling conflicts until all your students are scheduled. Resolving conflicts may require modifying sections, prescheduling students, and editing course requests.

MODIFYING COURSE REQUESTS

If a student doesn't have enough course requests to fill their schedule, or they don't have the appropriate course requests, you can manually add, edit, replace, and delete course requests for a student.

Adding Course Request using Schedule Student

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.

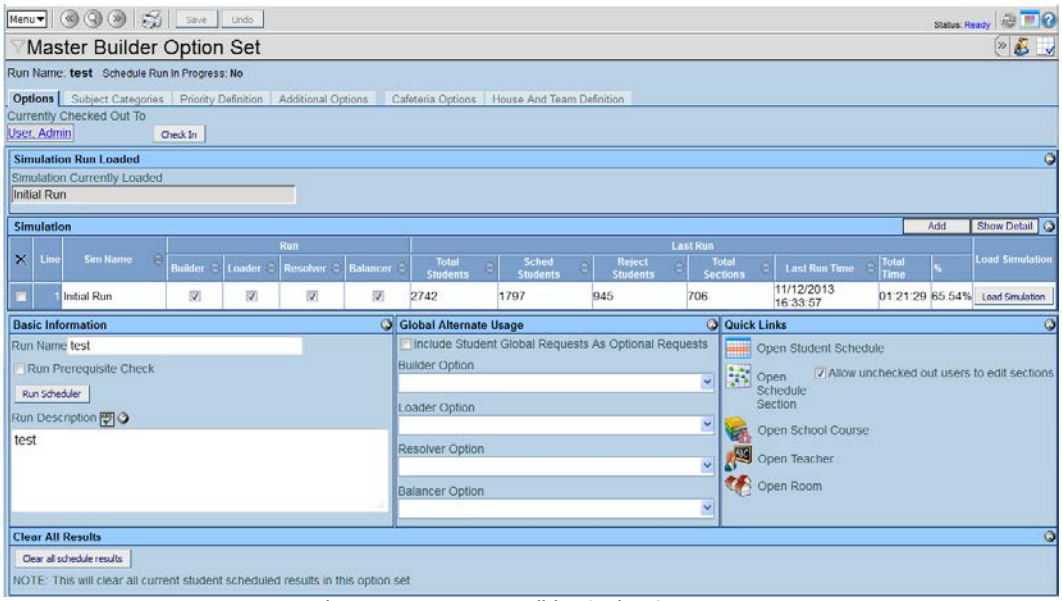


Figure 15.1 - Master Builder Option Set screen

3. Click the **Open Student Schedule** icon.
   The Schedule Student screen opens.

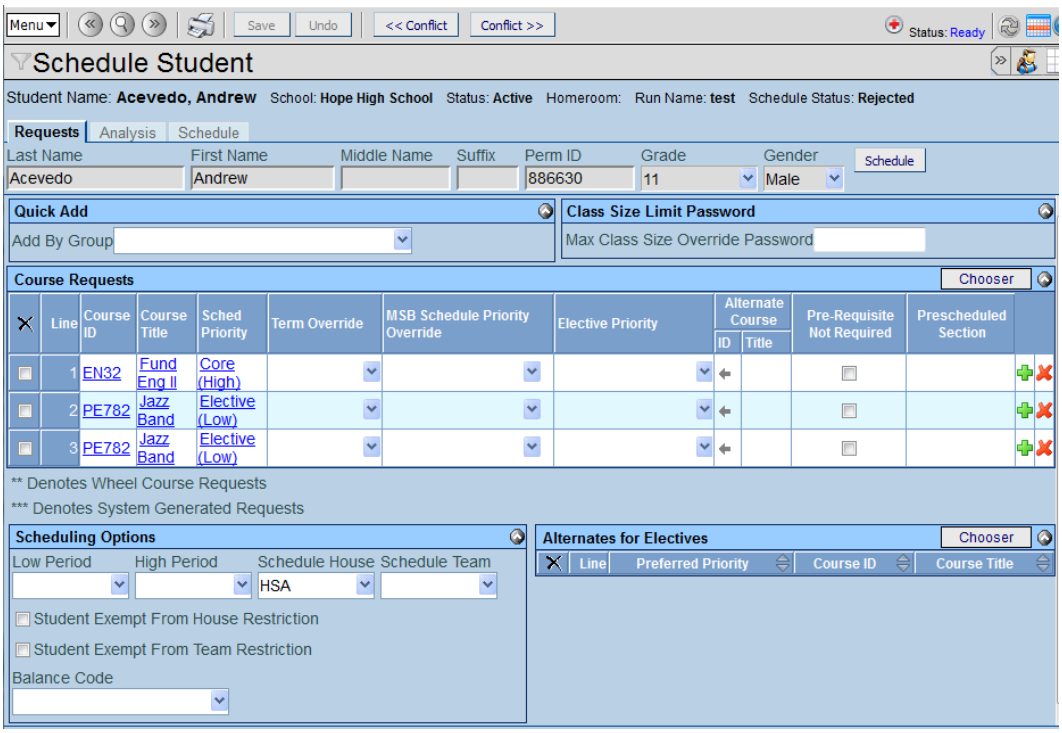


Figure 15.2 - MSB Schedule Student screen

4. Find or scroll to the appropriate student record.

> **Tip** –Quickly identify student schedules by clicking the **Conflicts** buttons. The system displays the next student schedule with a conflict.

5. Click **Chooser** on the **Course Request** grid.
   The Chooser screen opens.
6. Find and select the course.
   The selected course displays in the Course Requests grid.
7. Click **Save**.

Adding Alternates for Electives using Schedule Student

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.
3. Click the **Open Student Schedule** icon.
   The Schedule Student screen opens.
4. Find or scroll to the appropriate student record.

> **Tip** – Quickly identify student schedules by clicking the **Conflicts** buttons. The system displays the next student schedule with a conflict.

5. Click **Chooser** on the **Alternates for Electives** grid.
   The Chooser screen opens.
6. Find and select the course.
   The selected course displays in the Alternates for Electives grid.
7. Click **Save**.

Editing a Course Request

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.
3. Click the **Open Student Schedule** icon.
   The Schedule Student screen opens.
4. Find or scroll to the appropriate student record.

Tip – Quickly identify student schedules by clicking the **Conflicts** buttons. The system displays the next student schedule with a conflict.

6. In the **Course Request** grid, select the course to modify.
7. Select the **Term Override** to allow the student to attend the class for a term other than the one indicated in the master schedule, if applicable.
8. Click on the gray arrow in the **Alternate Course** column and select a course to use as an alternate in the schedule, if applicable.
9. Select the **Pre-Req Not Required** option to ignore the district defined pre-requisite course requirement.
10. Click **Save**.

Note – You can also pre-schedule using the Student Schedule screen. When a student is pre-scheduled, a section is manually assigned to the student course request and the request is exempt from the scheduling process.

Deleting a Course Request

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.
3. Click the **Open Student Schedule** icon.
   The Schedule Student screen opens.
4. Find or scroll to the appropriate student record.
5. In the **Course Request** grid, select the course to delete by clicking the row in the **X** column.
6. Click **Save**.

MODIFYING SECTIONS

If the available sections do not accommodate enough of the students' course requests, you can manually add, edit, replace, or delete sections of a course. .

Adding a Section

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.

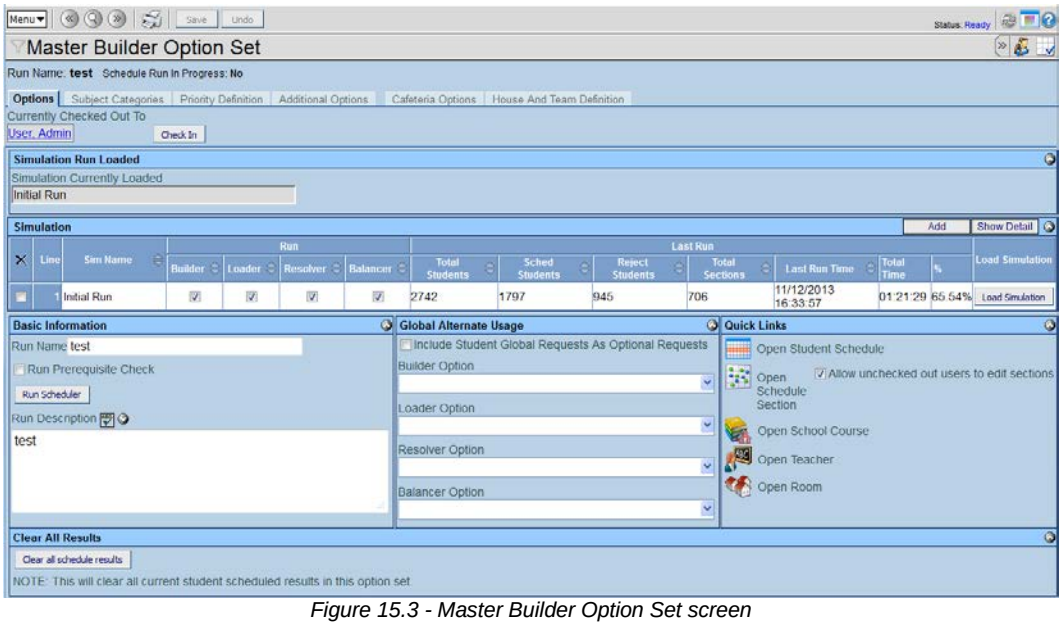


Figure 15.3 - Master Builder Option Set screen

3. Click the **Open Schedule Section** icon.
   The Sched Section screen opens.

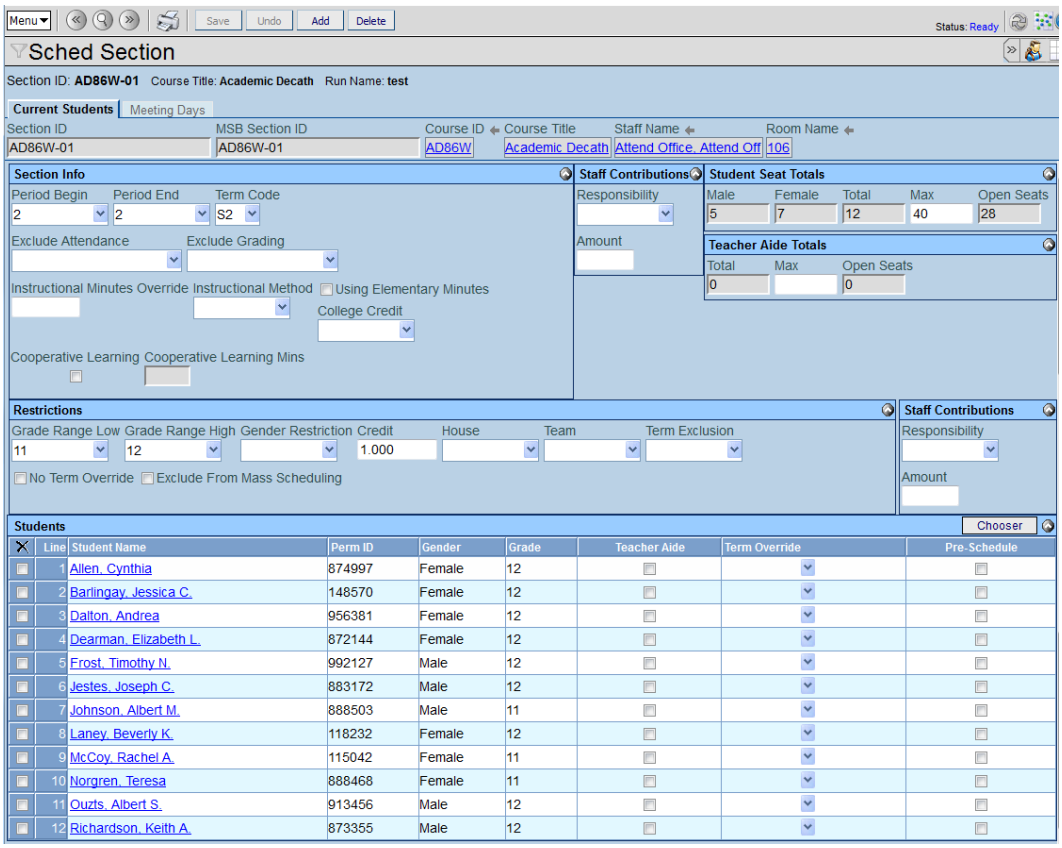


Figure 15.4 - MSB Sched Section screen

4. Click **Add**.
   The Sched Section (Add) screen opens.

> **Note** – Fields in green are mandatory.

5. Enter the **Section ID**.

> **Note** – If the Section ID is set to automatically generate by the option in the School Scheduling Options screen, it automatically populates.

6. Select the **Course ID**.
   a. Click the gray arrow next to Course ID title.
      The Find Course screen displays.
   b. Find and select the course.
      The course information populates in the Course ID and Course Title fields..
7. Select the **Staff Name**.
   a. Click the gray arrow next to Staff Name title.
      The Find Staff screen displays.
   b. Find and select the staff member for this section.
      The Staff Name field populates with the selected staff member.

8. Select the **Room Name.**
    a. Click the gray arrow next to Room Name title.
    The Find Room screen displays.
    b. Find and select the appropriate room.
    The Room Name field populates with the selected room.
9. Enter the **Section Info**:

- **Period Begin**
- **Period End**
- **Term Code**
- **Exclude Attendance**
- **Exclude Grading**
- **Instructional Minutes Override**
- **Instructional Method**
- **Using Elementary Minutes**
- **College Credit**

10. Select the main staff member's contributions in the **Responsibility** field (optional).
11. Enter the **Amount** of the staff member's contribution (optional).
12. Enter the maximum number of students that can enroll in the class in the **Max** field.
13. Indicate the maximum number of teacher aides for the class in the **Max** field in the **Teacher Aide Totals** group box.
14. Set any restrictions for the section.

- **Grade Range Low**
- **Grade Range High**
- **Gender Restriction**
- **Credit**
- **House**
- **Team**
- **Term Exclusion**
- **No Term Override**
- **Exclude From Mass Scheduling**

15. Click **Save**.

Note – The **Meeting Days tab** is used for school with rotating schedules.

Editing a Section

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.
3. Click the **Open Schedule Section** icon.
   The Sched Section screen opens.
4. Find or scroll to the appropriate section.
5. Edit the section information.

Note – You cannot edit grey fields.

6. Click **Save**.

Deleting a Section

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.
3. Click the **Open Schedule Section** icon.
   The Sched Section screen opens.
4. Find or scroll to the appropriate section.
5. Click **Delete**.
   A confirmation message displays.
6. Click **OK**.

PRE-SCHEDULING STUDENTS

When you pre-schedule students, the system reserves a seat for them in a specific section. The system honors pre-scheduled section assignment, and they do not change during the scheduling process. You manually change prescheduled assignments.

Note – Pre-scheduling students can limit the options available to the scheduling process when scheduling the rest of the student's classes.

Students may be pre-scheduled in a section using either the Sched Section screen or Schedule Student screen.

Pre-scheduling Using Student Schedule

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.
3. Click the **Open Student Schedule** icon.
   The Schedule Student screen opens.

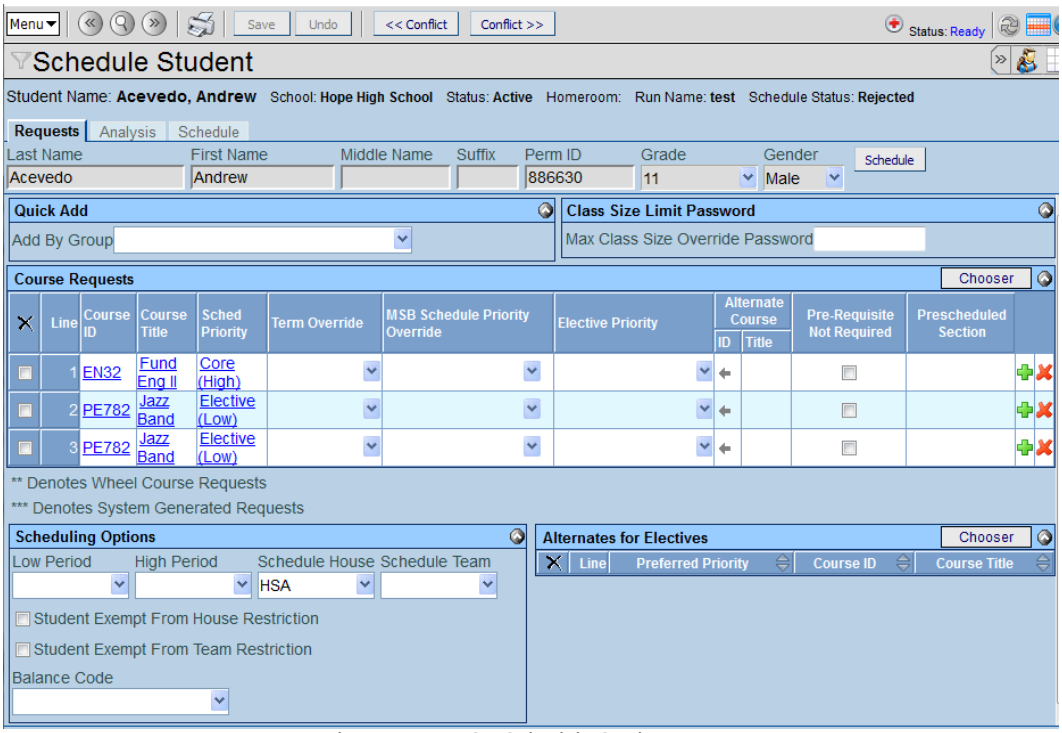


Figure 15.5 - MSB Schedule Student screen

4. Find or scroll to the appropriate student record.
5. Click **Chooser** on the **Course Request** grid.
   The Chooser screen opens.

6. Find and select the course.
   The selected course displays in the Course Requests grid.
7. On the **Course Requests** grid, click the **green plus (+)** sign for the course to pre-schedule.
   The Schedule Section screen opens.
8. Select the section into which you want to pre-schedule this student.
9. Click **Select Section**.
   The section appears in the Preschedule Section column of the Course Requests grid.
10. Click **Save**.

Pre-scheduling Using Schedule Section

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.
2. Open the Master Schedule Builder option set.
   The Master Schedule Builder Option Set screen displays.
3. Click the **Open Schedule Section** icon.
   The Sched Section screen opens.

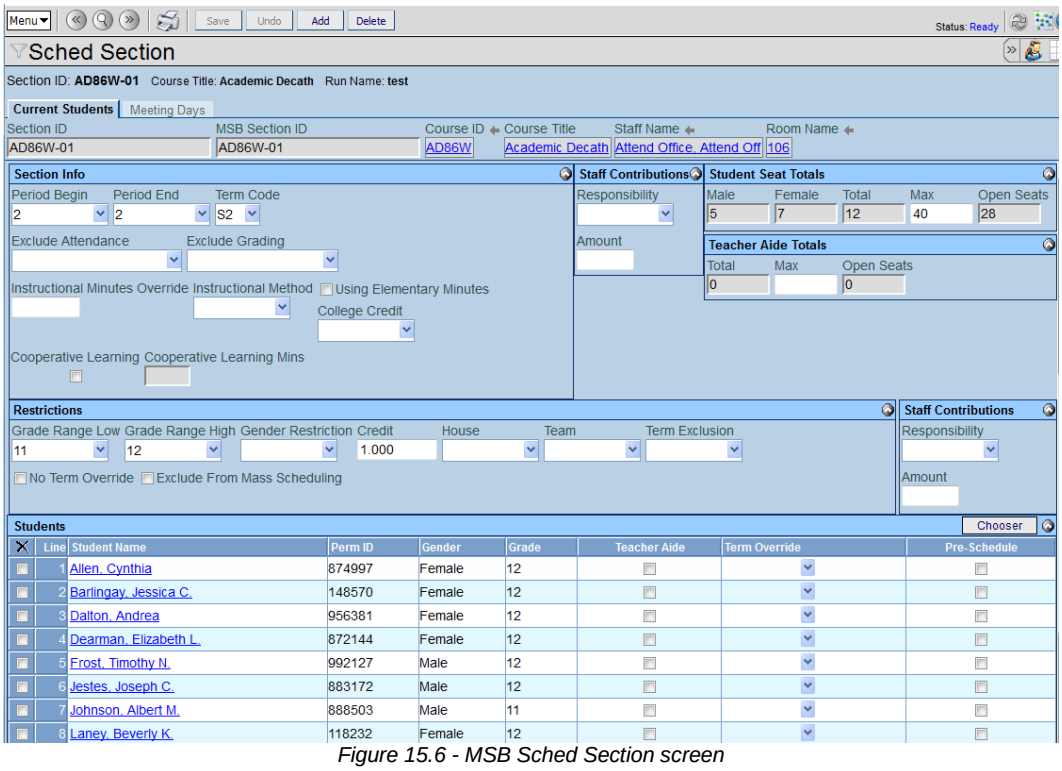


Figure 15.6 - MSB Sched Section screen

4. Find or scroll to the appropriate section.
   Students assigned to this section (in this option set) appear in the Students grid.
5. Check the box in the **Pre-Schedule** column next to the student's name.
6. Click **Save**.

Chapter Sixteen:
RUN THE SCHEDULING PROCESS

In this chapter, the following topics are covered:

Once the best schedule has been identified, you run the schedule from the Schedule Option Set screen on final time. At this point, you are looking for a total scheduled percent as close to 100% as you can achieve after resolving conflicts.

RUNNING THE SCHEDULER

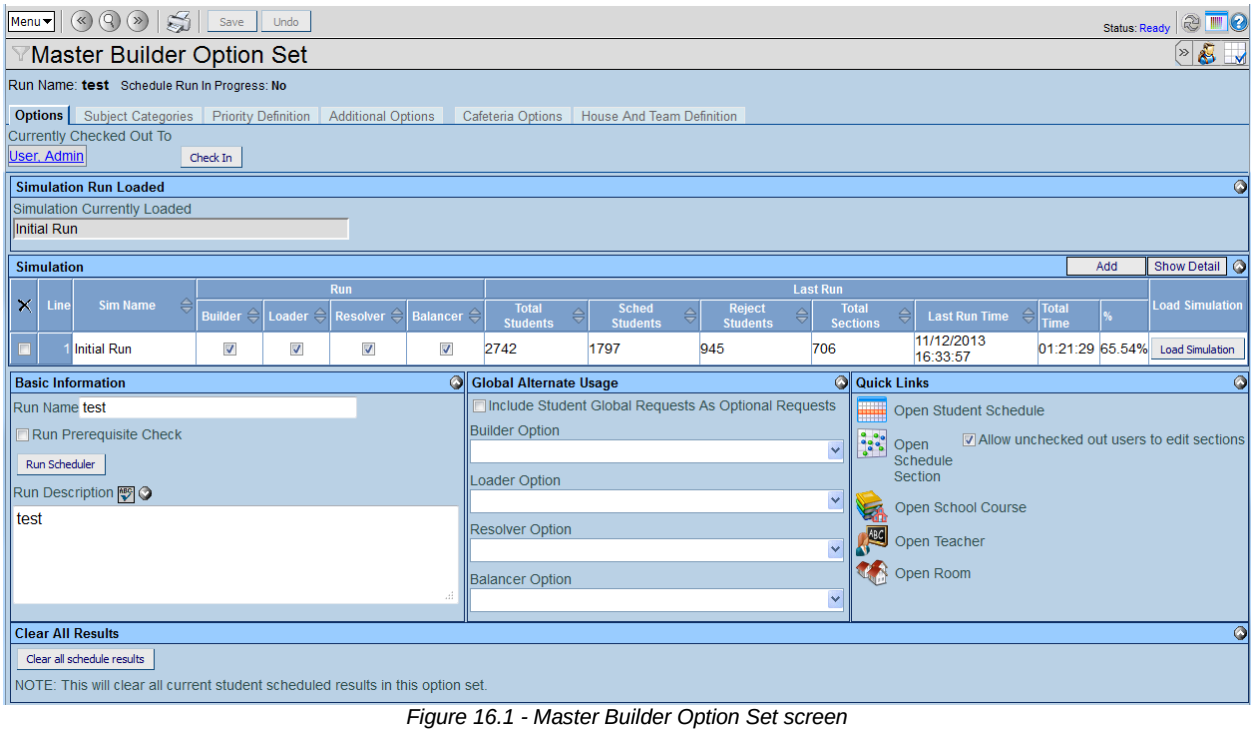


Figure 16.1 - Master Builder Option Set screen

1. Select the **Builder, Loader, Resolver**, and **Balancer** options for the scheduling run.
2. On the Master Builder Option Set screen, enter the **Run Name**.
3. Select the **Run Prerequisite Check** to have the system check that students have completed the appropriate course prerequisites for their requests.

   The system generates the STU205 – Student Course Request Profiles report, which lists any student prerequisite violations.
4. Select the **Include Student Global Requests As Optional Requests** to have the system check and schedule any global alternate course requests.
5. Select a **Builder Option, Loader Option, Resolver Option**, and/or **Balancer Option** if applicable. The options for all four components include:

- Do Not Schedule – the system does not schedule any global alternates.
- Schedule As Many Periods As Possible - The scheduler tries to fill a student's schedule with global alternates.
- Schedule No More Than The Number of Periods In Electives - The scheduler only schedules global alternates if an elective request could not be scheduled.

6. Click **Run Scheduler**.
   The Job Status screen displays a message when the Master Schedule Builder process is complete.
7. Click **Ok**.

LOADING THE SIMULATION

1. On the Master Builder Option Set screen, select the simulation from the **Simulation** grid.

Note – The system automatically enters a simulation labeled “Initial Run” when it creates the option set.

2. Click **Load Simulation**.
   The Job Status screen displays a message indicating the number of sections inserted, students processed, and students added to sections.
3. Click **OK**.

Note – Edupoint recommends only having one simulation per option set. If you require additional simulations, please create another option set.

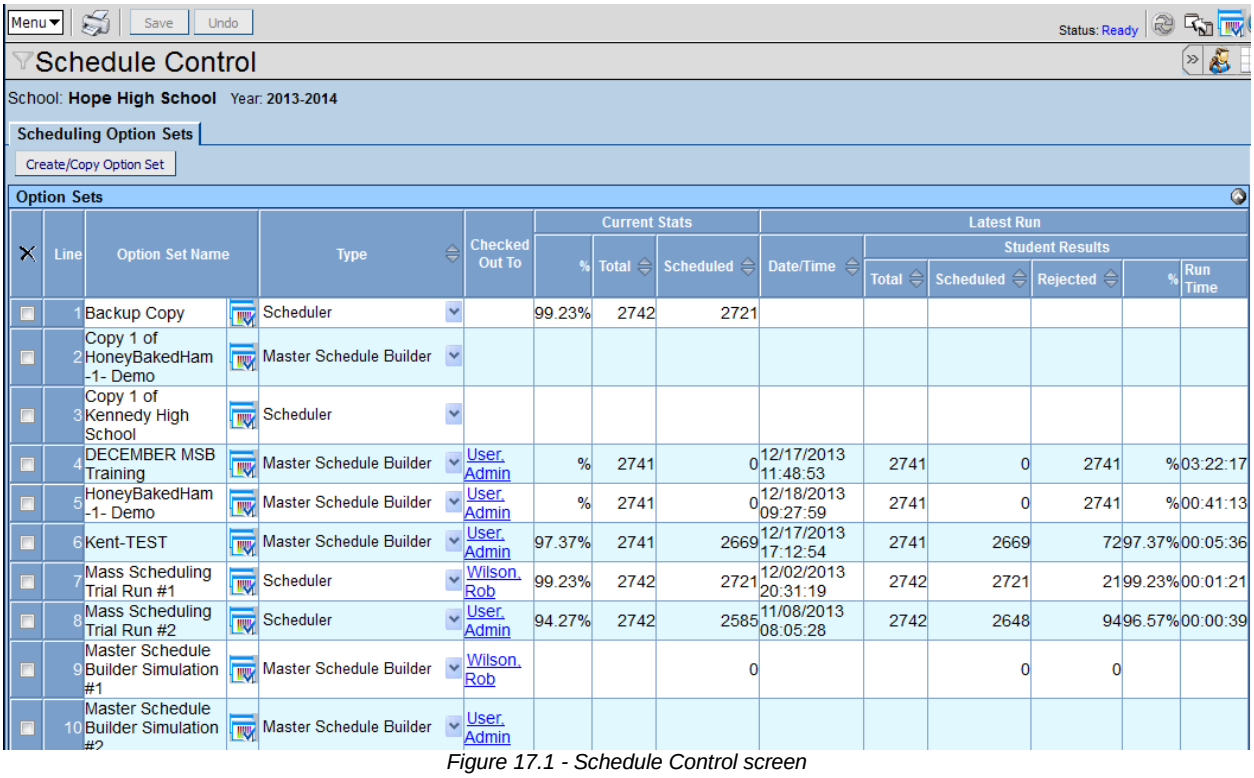
Chapter Seventeen: FINALIZE THE SCHEDULE

In this chapter, the following topics are covered:

CREATING FINAL COPY OF THE OPTION SET

Before finalizing the schedule, make a copy of the selected Option Set and name it something to indicate that it was the option set used to create this year's schedule.

1. Navigate to **Synergy SIS > Mass Scheduling > Schedule Control**.



	Line	Option Set Name	Type	Checked Out To	Current Stats %	Current Stats Total	Current Stats Scheduled	Latest Run Date/Time	Latest Run Student Results Total	Latest Run Student Results Scheduled	Latest Run Student Results Rejected	Latest Run Student Results %	Latest Run Student Results Run Time
	1	Backup Copy	Scheduler		99.23%	2742	2721						
	2	Copy 1 of HoneyBakedHam -1- Demo	Master Schedule Builder										
	3	Copy 1 of Kennedy High School	Scheduler										
	4	DECEMBER MSB Training	Master Schedule Builder	User, Admin	%	2741	0	12/17/2013 11:48:53	2741	0	2741	%	03:22:17
	5	HoneyBakedHam -1- Demo	Master Schedule Builder	User, Admin	%	2741	0	12/18/2013 09:27:59	2741	0	2741	%	00:41:13
	6	Kent-TEST	Master Schedule Builder	User, Admin	97.37%	2741	2669	12/17/2013 17:12:54	2741	2669	72	97.37%	00:05:36
	7	Mass Scheduling Trial Run #1	Scheduler	Wilson, Rob	99.23%	2742	2721	12/02/2013 20:31:19	2742	2721	21	99.23%	00:01:21
	8	Mass Scheduling Trial Run #2	Scheduler	User, Admin	94.27%	2742	2585	11/08/2013 08:05:28	2742	2648	94	96.57%	00:00:39
	9	Master Schedule Builder Simulation #1	Master Schedule Builder	Wilson, Rob			0			0	0		
	10	Master Schedule Builder Simulation #2	Master Schedule Builder	User, Admin									

Figure 17.1 - Schedule Control screen

2. Click **Create/Copy Option Set**.
   The Add New Option Set screen opens.
3. Enter the option set **Name**.

Tip – Include "Final" in the name.

4. In the **Schedule Type** field, select **Master Schedule Builder**.
5. Enter a **Description** indicating this is the final master schedule.
6. In the **Copy Option** field, select **Copy existing Option Set**.
   Additional fields display.
7. In the **Year** field, select the appropriate year.
8. In the **Scheduling Option Set** field, select the appropriate option set.
9. Select the I**nclude Sections without Teachers and/or Rooms** option.
10. Select the **Copy Student Results** option.

11. Click **Add**.
    The final option set displays in the Options Sets grid on the Schedule Control screen.

Tip – To prevent anyone from making changes to the Mass Scheduling views after the schedule has been finalized, it is recommend that Synergy SIS security be modified to remove the entire Mass Scheduling folder from the Navigation (PAD) Tree for most users. For instructions on how to modify PAD security, please see the *Synergy SIS - Security Administrator Guide*.

UPDATING THE SCHEDULE

The Update Schedule Process uses the final option set to create the finalized schedule.

This is the final step in actually creating the master schedule for the new school year. In this step, the system moves all the course, section, and student information from the option set to the Schedule module and are populated throughout the system.

Once the Update Schedule process has been run for a school, all other changes to the student's schedule should be made using the Schedule module.

1. Navigate to **Synergy SIS > Mass Scheduling > Update Schedule**.

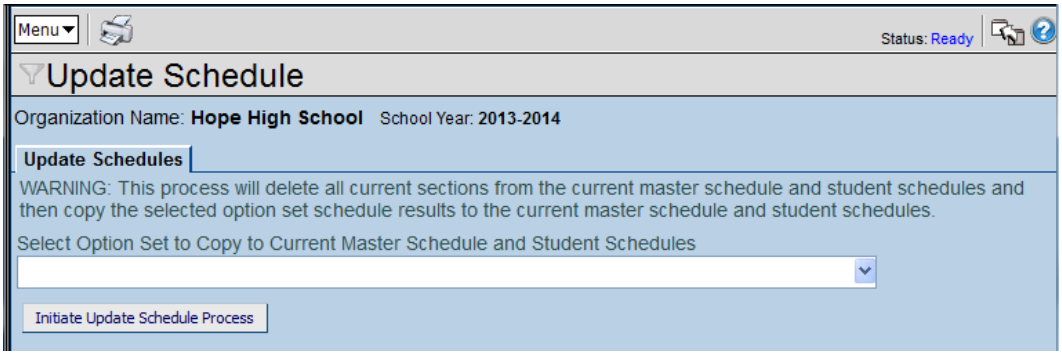


Figure 17.2 - Update Schedule screen

2. In the **Select Option Set** field, select your final option set.
3. Click **Initiate Update Schedule Process**.
   The system creates the final master schedule.

Caution - The Update Schedule process deletes all existing sections and student schedules before it creates the sections for the master schedule and assigns students to the sections.

Note – After the Update Schedule process is complete, make any additional changes using the screens in the Schedule module.

PRINTING THE STU202 REPORT

The Student Schedule shows all classes scheduled for the student, and includes the period, teacher, and room information for each class.

You can filter the report using the following options:

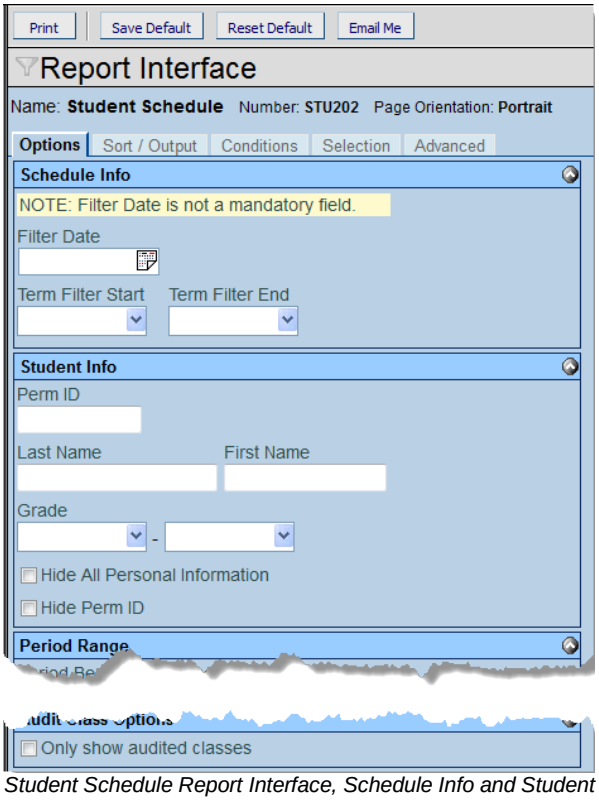


Figure 17.3 - Student Schedule Report Interface, Schedule Info and Student Info sections

- **Filter Date** – displays the student's schedule on a specific date.
- **Term Filter Start** and **Term Filter End** – displays the schedule for a specific range of terms
- **Student Info** – select an individual student or group of students based on the Perm ID, Gender, Last Name, First Name, or Grade. Example - if grade 12 is selected the report prints an individual report for each student in grade 12.
- **Hide All Personal Information** - removes all student demographic information from the report.
- **Hide Perm ID** - removes the student's Perm ID from the report.

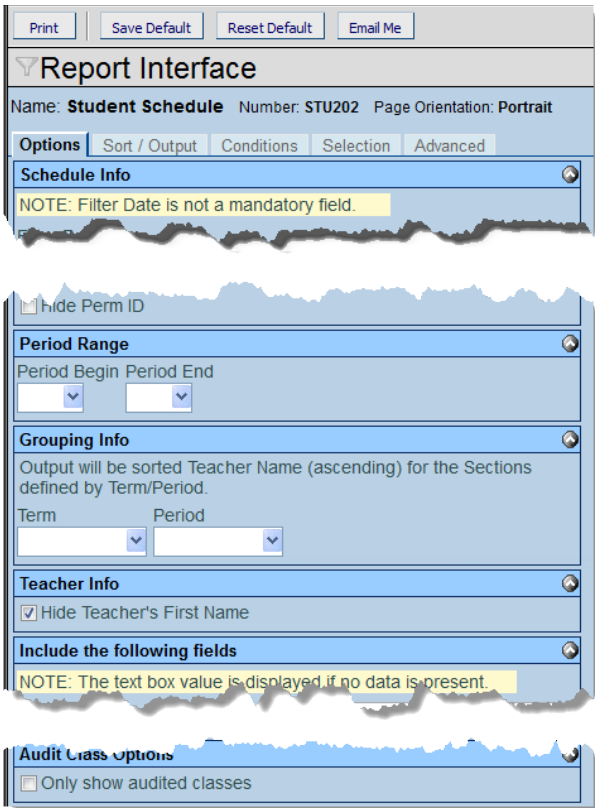


Figure 17.4 - Student Schedule Report Interface, Period Range, Grouping Info and Teacher Info sections

- **Period Begin** and **Period End**- display the schedule for a specific range of periods.
- **Term** & **Period** – displays a specific term and period.
- **Hide Teacher's First Name** - displays the teacher's last name only.

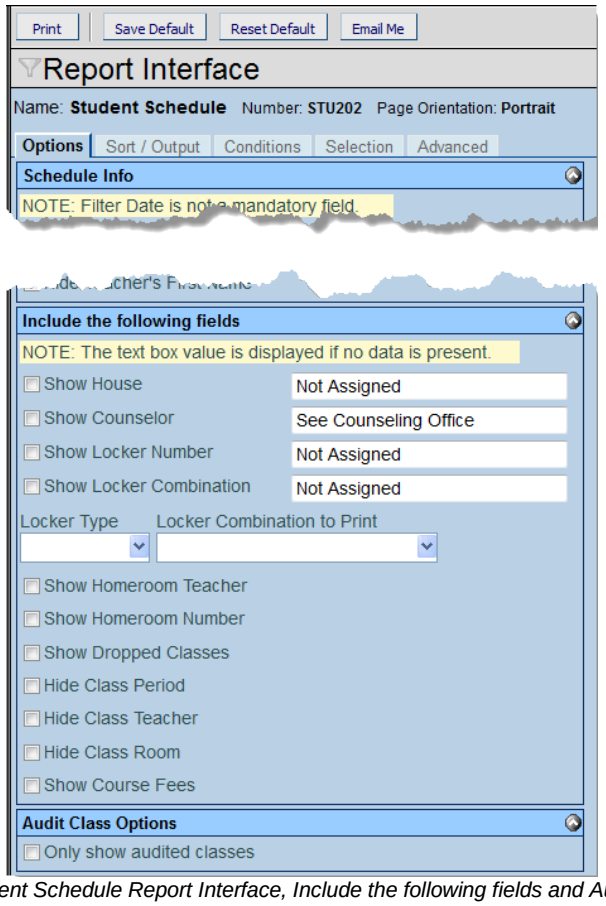
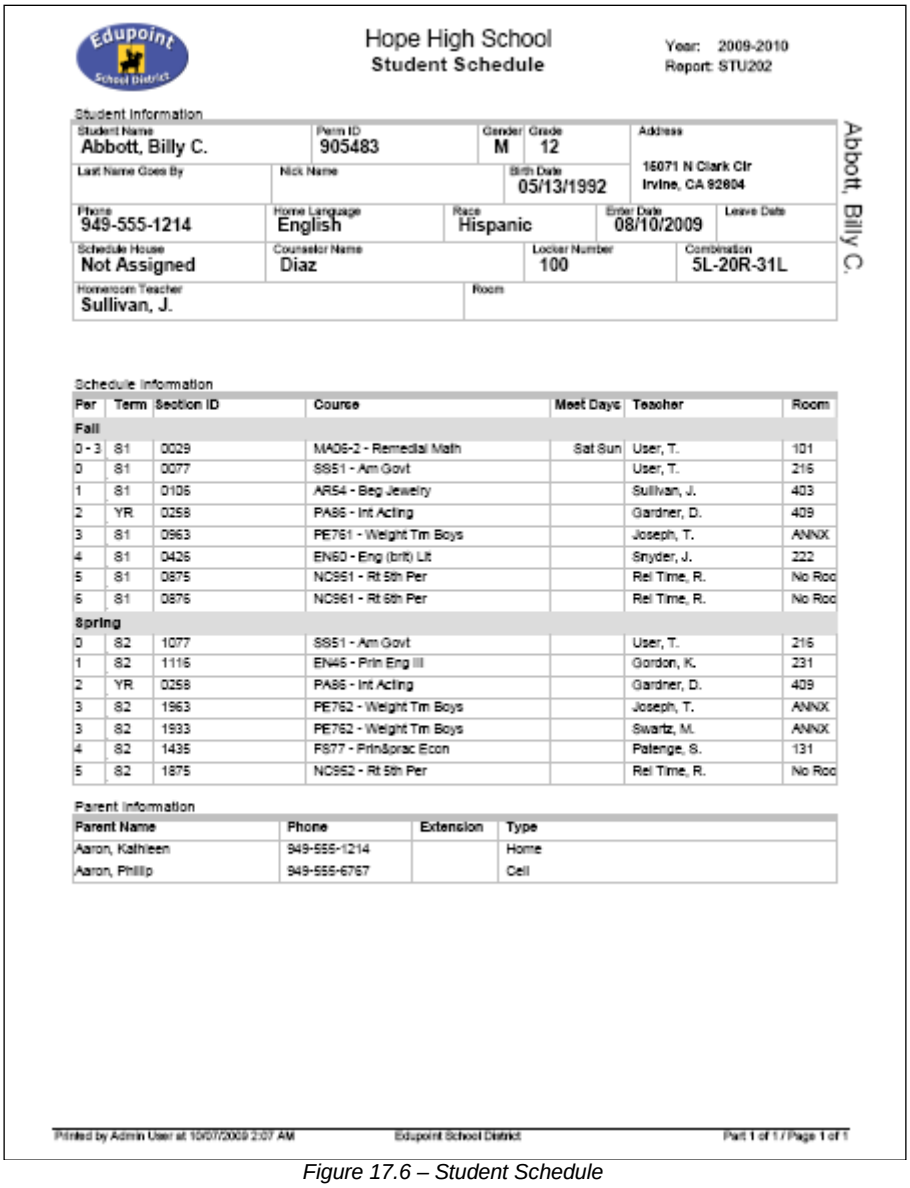


Figure 17.5 - Student Schedule Report Interface, Include the following fields and Audit Class Options

- Include the following fields – select the fields to display on the report, including **Show House, Counselor, Locker Number, Locker Type, Locker Combination, Homeroom Teacher, Homeroom Number, Dropped Classes, Class Period, Class Teacher, Class Room**, and/or **Course Fees.**
- **Only show audited classes** – only displays the results for audited classes.



Hope High School
Student Schedule

Year: 2009-2010
Report: STU202

Student Information

Student Name	Perm ID	Gender	Grade	Address
Abbott, Billy C.	905483	M	12	15071 N Clark Cir Irvine, CA 92604

Last Name Goes By	Nick Name	Birth Date	
		05/13/1992	

Phone	Home Language	Race	Enter Date	Leave Date
949-555-1214	English	Hispanic	08/10/2009	

Schedule House	Counselor Name	Locker Number	Combination
Not Assigned	Diaz	100	5L-20R-31L

Homeroom Teacher	Room
Sullivan, J.	

Abbott, Billy C.

Schedule Information

Per	Term	Section ID	Course	Meet Days	Teacher	Room
Fall						
0 - 3	S1	0029	MA06-2 - Remedial Math	Sat Sun	User, T.	101
0	S1	0077	SS51 - Am Govt		User, T.	216
1	S1	0106	AR54 - Beg Jewelry		Sullivan, J.	403
2	YR	0258	PA86 - Int Acting		Gardner, D.	409
3	S1	0963	PE761 - Weight Trn Boys		Joseph, T.	ANNX
4	S1	0426	EN60 - Eng (brit) Lit		Snyder, J.	222
5	S1	0875	NC951 - Rt 5th Per		Rel Time, R.	No Roo
6	S1	0876	NC961 - Rt 6th Per		Rel Time, R.	No Roo
Spring						
0	S2	1077	SS51 - Am Govt		User, T.	216
1	S2	1116	EN46 - Prin Eng III		Gordon, K.	231
2	YR	0258	PA86 - Int Acting		Gardner, D.	409
3	S2	1963	PE762 - Weight Trn Boys		Joseph, T.	ANNX
3	S2	1933	PE762 - Weight Trn Boys		Swartz, M.	ANNX
4	S2	1435	FS77 - Prin&prac Econ		Palenge, S.	131
5	S2	1875	NC952 - Rt 5th Per		Rel Time, R.	No Roo

Parent Information

Parent Name	Phone	Extension	Type
Aaron, Kathleen	949-555-1214		Home
Aaron, Phillip	949-555-6767		Cell

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Figure 17.6 – Student Schedule

Chapter Eighteen: NOTEPAD AND OSM REPORTS

In this chapter, the following topics are covered:

ACCESSING MASTER SCHEDULE BUILDER NOTEPAD REPORTS

When the Simulation is loaded, it creates a library of Notepad reports. These reports can alert you to scheduling conflicts and resource allocation problems. Review the reports to get a better idea of the overall success and potential issues of the scheduling run.

Many of the reports have additional explanations and/or summaries at the end. Please be sure to review all pages of the report.

1. On the Master Builder Option Set screen, select the run from the **Simulation** grid.
2. Click **Show Detail**.
   The Detail and Simulation Report tabs for the simulation run display.
3. Select the **Simulation Reports** tab.
4. Select the notepad report from the Reports grid.

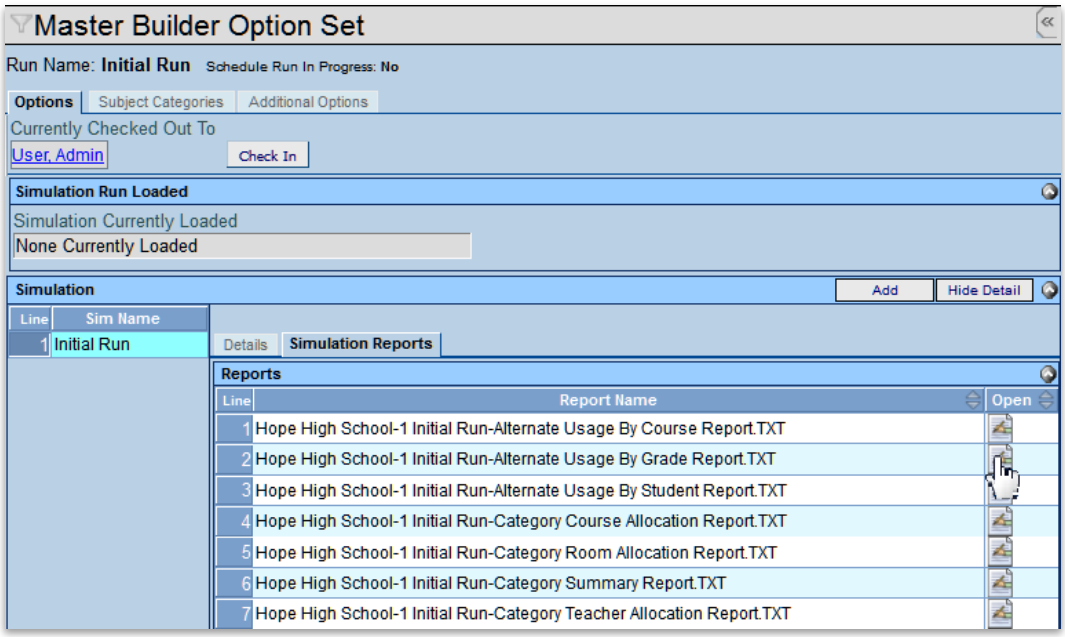


Figure 18.1 - Master Builder Option Set screen, Simulation Reports tab

01 - Alternate Usage By Course Report

This report shows students scheduled for at least one alternate. The report is sorted by primary course request and then by student name.

An asterisk (*) beside one of the alternate columns, indicates the alternate, for which the student is scheduled. Number of scheduled alternates, for the primary course, is shown at the bottom of each course. School level totals are shown at the end of the report.

Student ID - An asterisk (*) beside the student Id indicates a conflict schedule.

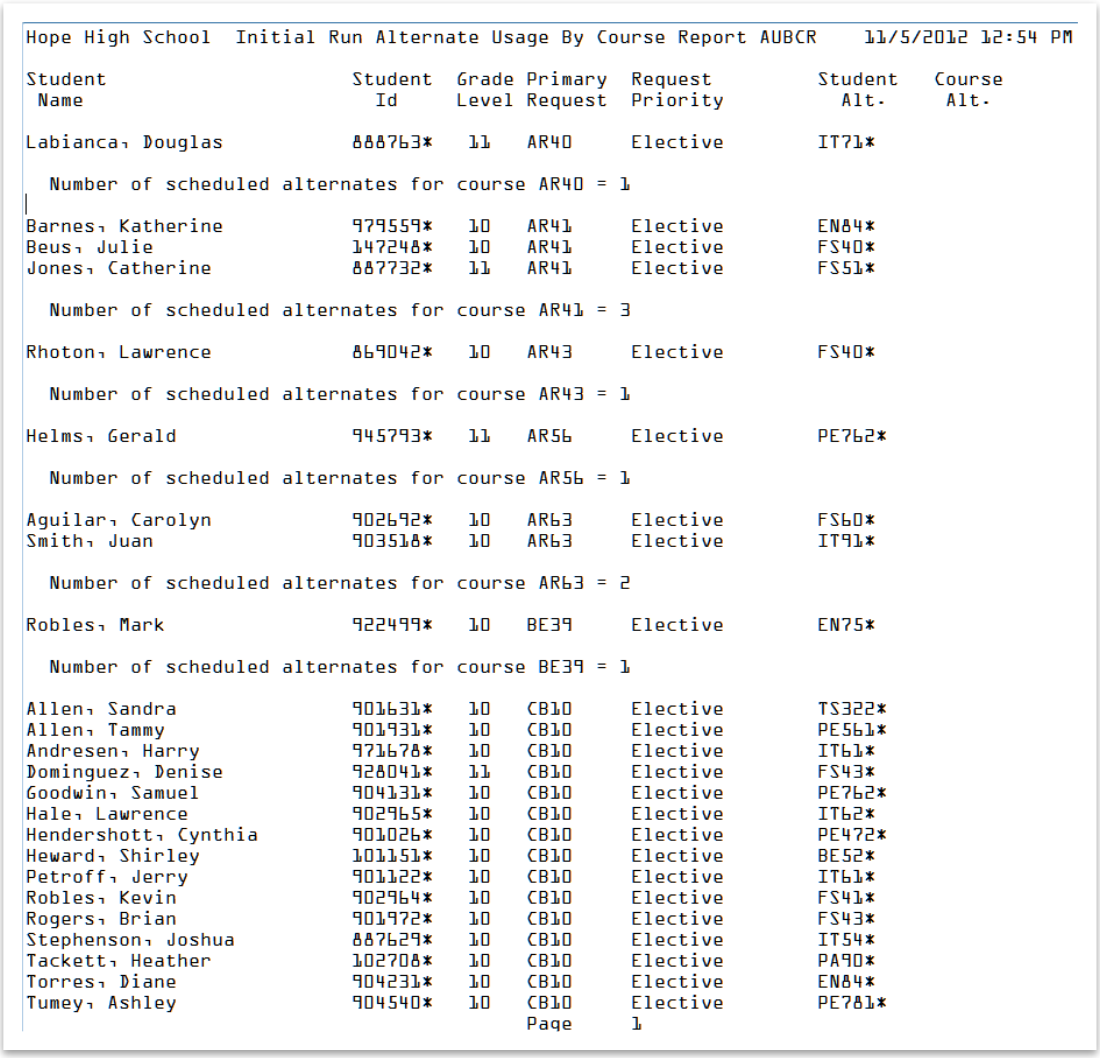
Grade Level - Student’s grade level.

Primary Request - Student’s primary/original course request.

Request Priority - The priority level of the primary course request (Required/Elective/Optional). Note that if student does not choose a priority, the priority shown is the default from the course. An asterisk (*) beside the Priority indicates student's choice. Bear in mind that if course level priority is changed, the student specific priority does not change. Required plus Elective requests constitute core requests. Optional requests are courses that are not mandatory, for example study hall type courses, or extracurricular activities. The system gives more weight to Required, then Electives, and finally Optional requests are last to be scheduled.

Student Alt. - Student’s specific alternate to their primary request. Note that different students may request different alternate for the same primary request. An asterisk (*) is shown beside the course, if student is scheduled for the course (student level alternate).

Course Alt. - Course level alternate. Course level alternates are considered for all students who requested the course, but did not select a specific alternate. An asterisk (*) is shown beside the course, if student is scheduled for the course (course level alternate).



Hope High School Initial Run Alternate Usage By Course Report AUBCR 11/5/2012 12:54 PM

Student Name	Student Id	Grade Level	Primary Request	Request Priority	Student Alt.	Course Alt.
Labianca, Douglas	888763*	11	AR40	Elective	IT71*	
Number of scheduled alternates for course AR40 = 1						
Barnes, Katherine	979559*	10	AR41	Elective	EN84*	
Beus, Julie	147248*	10	AR41	Elective	FS40*	
Jones, Catherine	887732*	11	AR41	Elective	FS51*	
Number of scheduled alternates for course AR41 = 3						
Rhoton, Lawrence	869042*	10	AR43	Elective	FS40*	
Number of scheduled alternates for course AR43 = 1						
Helms, Gerald	945793*	11	AR56	Elective	PE762*	
Number of scheduled alternates for course AR56 = 1						
Aguilar, Carolyn	902692*	10	AR63	Elective	FS60*	
Smith, Juan	903518*	10	AR63	Elective	IT91*	
Number of scheduled alternates for course AR63 = 2						
Robles, Mark	922499*	10	BE39	Elective	EN75*	
Number of scheduled alternates for course BE39 = 1						
Allen, Sandra	901631*	10	CB10	Elective	TS322*	
Allen, Tammy	901931*	10	CB10	Elective	PE561*	
Andresen, Harry	971678*	10	CB10	Elective	IT61*	
Dominguez, Denise	928041*	11	CB10	Elective	FS43*	
Goodwin, Samuel	904131*	10	CB10	Elective	PE762*	
Hale, Lawrence	902965*	10	CB10	Elective	IT62*	
Hendershott, Cynthia	901026*	10	CB10	Elective	PE472*	
Heward, Shirley	101151*	10	CB10	Elective	BE52*	
Petroff, Jerry	901122*	10	CB10	Elective	IT61*	
Robles, Kevin	902964*	10	CB10	Elective	FS41*	
Rogers, Brian	901972*	10	CB10	Elective	FS43*	
Stephenson, Joshua	887629*	10	CB10	Elective	IT54*	
Tackett, Heather	102708*	10	CB10	Elective	PA90*	
Torres, Diane	904231*	10	CB10	Elective	EN84*	
Tumey, Ashley	904540*	10	CB10	Elective	PE781*	

Page 1

Figure 18.2- Alternate Usage By Course

02 - Alternate Usage By Grade Report-

This report shows students that are scheduled in at least one alternate. The report is sorted by grade level and by student name.

An asterisk (*), beside the alternate columns, indicates the alternate the student is scheduled for. Total number of alternates scheduled for each grade is shown at the end of each grade. Total number of students, with at least one alternate assigned, is also shown for each grade level. Total number of students in the school, scheduled with at least one alternate, is shown at the bottom of the report.

Student ID - An asterisk (*) beside the student Id indicates a conflict schedule.

Grade Level - Student's grade level.

Primary Request - Student's primary/original course request.

Request Priority - The priority level of the primary course request (Required/Elective/Optional).

Note - if student does not choose a priority, the priority shown is the default from the course.

Required plus Elective requests constitute core requests. An asterisk (*) beside the Priority indicates student's choice. Bear in mind that if course level priority is changed, the student level priority, remains the same. Optional requests are courses that are not mandatory, for example study hall type courses, or extracurricular activities.

Student Alt. - Student's specific alternate to their primary request. Note that different students may request different alternate for the same primary request. An asterisk (*) is shown beside the course, if student is scheduled for the course (student level alternate).

Course Alt. - Course level alternate. Course level alternates are considered for all students who requested the course, but did not select a specific alternate. An asterisk (*) is shown beside the course, if student is scheduled for the course (course level alternate).

Hope High School Initial Run Alternate Usage By Grade Report AUBGSR 11/5/2012 12:54 PM

Student Name	Student Id	Grade Level	Primary Request	Request Priority	Student Alt.	Course Alt.
Aguilar, Carolyn	902692*	10	AR63	Elective	FS60*	
Allen, Aaron	992938*	10	IT91	Elective	PE761*	
Allen, Sandra	901631*	10	CB10	Elective	TS322*	
Allen, Tammy	901931*	10	CB10	Elective	PE561*	
Andresen, Harry	971678*	10	CB10	Elective	IT61*	
Arellano, Lisa	904050*	10	PE761	Elective	TS321*	
Barnes, Katherine	979559*	10	AR41	Elective	EN84*	
Beus, Julie	147248*	10	AR41	Elective	FS40*	
Black, Wanda	904780*	10	EN74	Elective	FS41*	
Brown, Mary	921056*	10	FS41	Elective	PE532*	
Falevai, Norma	902647*	10	CB11	Elective	FS40*	
Ghormley, Elizabeth	904991*	10	MU29	Elective	FS60*	
Goodwin, Samuel	904131*	10	CB10	Elective	PE762*	
Hale, Lawrence	902965*	10	CB10	Elective	IT62*	
Hendershott, Cynthia	901026*	10	CB10	Elective	PE472*	
Heward, Shirley	101151*	10	CB10	Elective	BE52*	
Hoffman, Denise	908228*	10	FS51	Elective	FS43*	
Monteverde,jr, Sean	902651*	10	FS40	Elective	BE53*	
Palmer, Doris	961302*	10	CB11	Elective	IT91*	
Petroff, Jerry	901122*	10	CB10	Elective	IT61*	
Reilly, Bobby	994740*	10	CB18	Elective	IT54*	
Rhoton, Lawrence	869042*	10	AR43	Elective	FS40*	
Robles, Kevin	902964*	10	CB10	Elective	FS41*	
Robles, Mark	922499*	10	BE39	Elective	EN75*	
Rodricks, Bruce	902635*	10	IT91	Elective	IT61*	
Rogers, Brian	901972*	10	CB10	Elective	FS43*	
Romney, Nicole	951660*	10	FS63	Elective	PE532*	
Roosa, Carolyn	110406*	10	PA90	Elective	FS52*	
Rota, Craig	901979*	10	IT92	Elective	IT54*	
Sanchez, Paula	122066*	10	PE531	Elective	PE761*	
Schicker, Phyllis	991809*	10	PA90	Elective	FS60*	
Short, Jane	923857*	10	PE532	Elective	FS60*	
Smith, Chris	900847*	10	CB12	Elective	IT71*	
Smith, Juan	903518*	10	AR63	Elective	IT91*	
Sprouse, Deborah	903186*	10	FS43	Elective	FS60*	
Steele, Kimberly	887642*	10	CB11	Elective	FS40*	
Stephenson, Joshua	887629*	10	CB10	Elective	IT54*	
Stocker, Kelly	904533*	10	PE531	Elective	FS40*	
Straub, Ernest	904132*	10	IT61	Elective	IT54*	
Tackett, Heather	102708*	10	CB10	Elective	PA90*	
Teague, Ann	143045*	10	FS51	Elective	FS60*	
Torres, Diane	904231*	10	CB10	Elective	EN84*	
Tumey, Ashley	904540*	10	CB10	Elective	PE781*	
Waldie, Donna	966551*	10	PE762	Elective	PE532*	
Willhelm, Andrew	902994*	10	CB10	Elective	FS41*	

Number of alternate requests scheduled for grade 10 = 45
Number of students scheduled for grade 10, with at least one alternate = 45

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Figure 18.3 - Alternate Usage By Grade Report

03 - Alternate Usage By Student Report

The purpose of the Category Rooms Allocation Report is to identify allocations and scheduling issues related to rooms. The report lists each subject category and the rooms assigned to them.

This report can help identify areas where a shortage of rooms is causing scheduling problems. Key numbers to look at are Requested Percentage and Scheduled Percentage. If Requested Percentage is less than 100%, it generally indicates the rooms are shared with other subject categories. If Scheduled Percentage is less than 100%, it indicates that some courses in the category were scheduled without rooms.

Category - Subject Category from the Option Set.

No. Crs's - Number of courses in the category.

No. Sec's - Number of sections for all courses in the category.

Period Load - Requested number of periods for all sections of all courses in the category.

Room - Number of rooms assigned to the sections of the courses in the category.

Avail Load - Maximum number of periods for which the rooms in use by the category can be assigned.

Req. Load - Requested or required number of periods for the room to be scheduled for in that subject category.

Req. Pct - Percentage of the periods available for the rooms requested for the category. If over 100%, it indicates a shortage of rooms. A percentage of less than 100% may indicate that the rooms are shared between categories.

Sched Load - Number of periods the rooms are scheduled.

Sched Pct - Percentage of the room's average number of periods that have been schedule. The percentage may be over 100% if the room is used by multiple categories, and may indicate that courses were scheduled without rooms.

Util. Pct - Percentage of the room's availability utilized by the category.

Hope High School Initial Run Alternate Usage By Student Report AUBSR 11/5/2012 12:54 PM

Student Name	Student Id	Grade Level	Primary Request	Request Priority	Student Alt.	Course Alt.
Aguilar Carolyn	902692*	10	AR63	Elective	FS60*	
Allen Aaron	992938*	10	IT91	Elective	PE761*	
Allen Sandra	901631*	10	CB10	Elective	TS322*	
Allen Tammy	901931*	10	CB10	Elective	PE561*	
Andresen Harry	971678*	10	CB10	Elective	IT61*	
Arellano Lisa	904050*	10	PE761	Elective	TS321*	
Barnes Katherine	979559*	10	AR41	Elective	EN84*	
Beus Julie	147248*	10	AR41	Elective	FS40*	
Black Wanda	904780*	10	EN74	Elective	FS41*	
Blasdell Todd	873622	12	IT72	Elective	IT93*	
Brown Mary	921056*	10	FS41	Elective	PE532*	
Dominguez Denise	928041*	11	CB10	Elective	FS43*	
Falevai Norma	902647*	10	CB11	Elective	FS40*	
Garcia Jane	117203	11	FS42	Elective	HE92*	
Gauger Jeffrey	889551*	11	PE562	Elective	IT61*	
Ghormley Elizabeth	904991*	10	MU29	Elective	FS60*	
Goodwin Samuel	904131*	10	CB10	Elective	PE762*	
Hale Lawrence	902965*	10	CB10	Elective	IT62*	
Helms Gerald	945793*	11	AR56	Elective	PE762*	
Hendershott Cynthia	901026*	10	CB10	Elective	PE472*	
Heward Shirley	101151*	10	CB10	Elective	BE52*	
Hoffman Denise	908228*	10	FS51	Elective	FS43*	
Ingham Stephanie	886414*	11	FS42	Elective	FS63*	
Jones Catherine	887732*	11	AR41	Elective	FS51*	
Labianca Douglas	888763*	11	AR40	Elective	IT71*	
Monteverde,jr Sean	902651*	10	FS40	Elective	BE53*	
Palmer Doris	961302*	10	CB11	Elective	IT91*	
Petroff Jerry	901122*	10	CB10	Elective	IT61*	
Reeder Denise	877895*	12	EN80	Required	EN52*	
Reilly Bobby	994740*	10	CB18	Elective	IT54*	
Rhoton Lawrence	869042*	10	AR43	Elective	FS40*	
Robles Kevin	902964*	10	CB10	Elective	FS41*	
Robles Mark	922499*	10	BE39	Elective	EN75*	
Rodricks Bruce	902635*	10	IT91	Elective	IT61*	
Rogers Brian	901972*	10	CB10	Elective	FS43*	
Romney Nicole	951660*	10	FS63	Elective	PE532*	
Roosa Carolyn	110406*	10	PA90	Elective	FS52*	
Rota Craig	901979*	10	IT92	Elective	IT54*	
Sanchez Paula	122066*	10	PE531	Elective	PE761*	
Schicker Phyllis	991809*	10	PA90	Elective	FS60*	
Short Jane	923857*	10	PE532	Elective	FS60*	
Smith Carl	923433	12	EN80	Required	EN52*	
Smith Chris	900847*	10	CB12	Elective	IT71*	
Smith Juan	903518*	10	AR63	Elective	IT91*	
Sprouse Deborah	903186*	10	FS43	Elective	FS60*	
Steele Kimberly	887642*	10	CB11	Elective	FS40*	
Stephenson Joshua	887629*	10	CB10	Elective	IT54*	

Figure 18.4 - Alternate Usage By Student Report

04 - Category Courses Allocation Report -

The purpose of the Category Courses Allocation Report is to verify that all courses are listed under the correct category, that each course time structure is correct and that the number of students requesting, and scheduled, in each course is reasonable.

This report lists all active district courses, sorted alphabetically by Course ID and grouped by Subject Category.

Category Name/Course Title - Subject Category from the Option Set.

Num Mtg. Pers - Resolved number of meeting periods. It is inherited from higher level or overridden at that level. Most classes meet for a single period, double or triple period classes are rare but not unusual.

For example, if Math category classes might meet for a single period for all Math courses. You only need to override courses that are different from this norm. An asterisk (*) beside the number indicates that it was specified or overridden at that level. Totals represent the sum of values for each column, except the ReqPct%

NOTE - Only override this field in lower levels, when necessary. This allows you to change the structure of your courses quickly and with minimal input. By changing the higher levels, the lower levels would inherit that, if it were not overridden.

An asterisk (*) beside the number indicates that it was specified/overridden at that level.

Num Mtg. Days - Number of meeting days in the scheduling cycle for each section/class.

In an M-F (5-day cycle) if each class meets every day of the week, then the number shown is 5. In the above example if classes meet 3 out of 5 days (i.e. Monday, Wednesday, Friday) then the number shows as 5. Similarly in an A/B type of school (2-day cycle) the number would be 1 or 2 depending on whether classes meet in one day or both days. An asterisk (*) beside the number indicates that it was specified or overridden at that level (similar to above).Num Mtg. Trms - Number of meeting terms in the scheduling cycle for each section.

Req. # of Sec's - Number of sections for the course (computed by system or provided by you). Verify that the number of sections/classes is what you expect.

Req. Per Load - Required/Requested number of periods, for all sections of the course. This number is computed as follows - number of sections X mtg terms X mtg days x mtg periods.

Sched Per Load - Scheduled number of periods for all sections of the course. ‘Total’ represents all sections for all courses.

Num Stu Req - Number of student course requests for the course. ‘Total’ represents all requests for all courses.

Sched Num Req - Number of scheduled courses requests. ‘Total’ represents the number of course requests scheduled for all courses.

% Sched Req - Percentage of students' course requests that were schedule.

King High School Initial Run Category Course Allocation Report CCAR 12/13/2012 2:08 PM

Category Name/ Course Title		Num Mtg Pers	Num Mtg Days	Num Mtg Trms	Req'd # of Sec's	sched # of Sec's	Req Per Load	Sched Per Load	Num Stu Req	Sched Num Req	Sched Req Pct%	Num of Confl
School												
	Totals	1*	1*	1*	1460	1460	1460	1460	25271	20978	83%	4293
-Agricultural Science												
Ag Co Op		1	1	1	1	1	1	1	22	21	95.5%	1
Ag Co-Op Ed		1	1	1	1	1	1	1	22	22	100%	0
Ag Co-Op Ed		1	1	1	1	1	1	1	22	22	100%	0
Ag Engin/tech 1		1	1	1	1	1	1	1	9	9	100%	0
Agri Eng Tech I		1	1	1	1	1	1	1	9	8	88.9%	1
Animal Sci		1	1	1	1	1	1	1	70	65	92.9%	5
Animal Science		1	1	1	1	1	1	1	0	0	0%	0
Animal Science		1	1	1	4	4	4	4	68	68	100%	0
Appl Biol Sys		1	1	1	1	1	1	1	93	92	98.9%	1
Appl Biol Syst		1	1	1	6	6	6	6	92	92	100%	0
Aquaculture		1	1	1	1	1	1	1	31	16	51.6%	15
Aquaculture		1	1	1	3	3	3	3	31	31	100%	0
Ex Of Ag		1	1	1	1	1	1	1	2	2	100%	0
Expl Agric		1	1	1	1	1	1	1	2	2	100%	0
Ind Study		1	1	1	1	1	1	1	0	0	0%	0
Intro Ag Sci		1	1	1	1	1	1	1	0	0	0%	0
Intro Ag Scienc		1	1	1	1	1	1	1	0	0	0%	0
Landscape D&m I		1	1	1	1	1	1	1	27	24	88.9%	3
Plant Sci		1	1	1	2	2	2	2	27	27	100%	0
Plant/animal Sc		1	1	1	1	1	1	1	22	18	81.8%	4
Prin Prac Econ		1	1	1	2	2	2	2	11	3	27.3%	8
Prin&prac Econ		1	1	1	2	2	2	2	51	51	100%	0
Veterinary Sci-		1	1	1	2	2	2	2	10	10	100%	0
Veterinary Tech		1	1	1	1	1	1	1	10	10	100%	0
	Totals	1	1	1	38	38	38	38	631	593	94%	38
-ALSI												
Allied Signal		1	1	1	1	1	1	1	0	0	0%	0
	Totals	1	1	1	1	1	1	1	0	0	0%	0

Figure 18.5 - Category Courses Allocation Report

05 - Category Room Allocation Report

The purpose of the Category Room Allocation Report is to identify allocations and scheduling issues related to rooms. The report lists each subject category and the rooms assigned to them.

This report can help identify areas where a shortage of rooms is causing scheduling problems. Key numbers to look at are Requested Percentage and Scheduled Percentage. If Requested Percentage is less than 100%, it generally indicates the rooms are shared with other subject categories. If Scheduled Percentage is less than 100%, it indicates that some courses in the category were scheduled without rooms.

Category - Subject Category from the Option Set.

No. Crs's - Number of courses in the category.

No. Sec's - Number of sections for all courses in the category.

Period Load - Requested number of periods for all sections of all courses in the category.

Room - Number of rooms assigned to the sections of the courses in the category.

Avail Load - Maximum number of periods for which the rooms in use by the category can be assigned.

Req. Load - Requested or required number of periods for the room to be scheduled for in that subject category.

Req. Pct - Percentage of the periods available for the rooms requested for the category. If over 100%, it indicates a shortage of rooms. A percentage of less than 100% may indicate that the rooms are shared between categories.

Sched Load - Number of periods the rooms are scheduled.

Sched Pct - Percentage of the room's average number of periods that have been schedule. The percentage may be over 100% if the room is used by multiple categories, and may indicate that courses were scheduled without rooms.

Util. Pct - Percentage of the room's availability utilized by the category.

King High School Initial Run Category Rooms Allocation Report CARAR 12/2/2011 11:26 AM

Category	No. Crs's	No. Sec's	Period Load	Room	Avail Load	Req. Load	Req. Pct	Sched Load	Sched Pct	Util. Pct
School	120	225	225							
Aerospace Science	10	10	10							
				P64	180	10	5.6%	10	100%	5.6%
				Totals	180	10	5.6%	10	100%	5.6%
Agricultural Science	24	46	46							
				313	180	11.5	6.4%	20	173.9%	11.1%
				922	180	11.5	6.4%	19	165.2%	10.6%
				923	180	11.5	6.4%	4	34.8%	2.2%
				924	180	11.5	6.4%	3	26.1%	1.7%
				Totals	720	46	6.4%	46	100%	6.4%
American History	76	128	128							
				126	180	16	8.9%	12	75%	6.7%
				210	180	16	8.9%	20	125%	11.1%
				215	180	16	8.9%	20	125%	11.1%
				217	180	16	8.9%	18	112.5%	10%
				234	180	16	8.9%	20	125%	11.1%
				236	180	16	8.9%	20	125%	11.1%
				300	180	16	8.9%	7	43.8%	3.9%
				406	180	16	8.9%	11	68.8%	6.1%
				Totals	1440	128	8.9%	128	100%	8.9%
Art	24	187	187							
				304	180	37.4	20.8%	20	53.5%	11.1%
				310	180	37.4	20.8%	47	125.7%	26.1%
				312	180	37.4	20.8%	40	107%	22.2%
				503	180	37.4	20.8%	40	107%	22.2%
				504	180	37.4	20.8%	40	107%	22.2%
				Totals	900	187	20.8%	187	100%	20.8%
Business Education	17	52	52							
				136	180	17.3	9.6%	16	92.3%	8.9%
				142	180	17.3	9.6%	24	138.5%	13.3%
				STU	180	17.3	9.6%	12	69.2%	6.7%
				Totals	540	52	9.6%	52	100%	9.6%
Computer/Business	16	26	26							
				131	180	8.7	4.8%	4	46.2%	2.2%
				135	180	8.7	4.8%	16	184.6%	8.9%
				137	180	8.7	4.8%	6	69.2%	3.3%
				Totals	540	26	4.8%	26	100%	4.8%

Figure 18.6 - Category Rooms Allocation Report

06 - Category Summary Report

The purpose of this report is to verify that all subject categories are scheduled as expected. Check the percentage column, under courses, teacher, rooms, and students. A percentage less than 100% signifies that something is not scheduled as expected. This may be normal for students, since some conflicts are often expected, but need to be investigated for resources. Category Teachers Allocation, Category Rooms Allocation, Course Teachers Allocation, and Course Room Allocation reports can provide more detail.

Subject Category Name - Subject Category from the Option Set. The period (.), preceding category name, denotes levels. One period (.) is shown for every sub-category level below the root.

Course:

Req # of Crs - Required/requested number of courses, under this category.

Req # of Sec - Required/requested number of sections, for all courses in the category.

Sched # of Sec - Number of sections scheduled, for all courses in the category.

Sched # of Sec% - Percentage of sections scheduled for this category.

Teachers:

Num of Tchrs - Number of teachers allocated/available to teach all courses in the category.

Opt Num of Sec - Optimum/Average number of sections to be scheduled for all teachers in the category. This number may be a fractional value.

Sched # of Sec - Actual number of sections scheduled with teachers of this category.

Sched # of Sec% - Percentage of sections scheduled with teachers for the category.

Rooms:

Num of Rooms - Number of rooms allocated to the category. Note that rooms may have been shared by multiple categories.

Opt Num of Sec - Optimum/Average number of sections to be scheduled with rooms in this category.

Sched # of Sec - Actual number of sections scheduled with rooms in the category.

Sched # of Sec% - Percentage of sections scheduled with rooms in the category.100% means room(s) are scheduled for every section in the category.

Students:

Num of Req - Number of students requests for all courses in the category.

Sched # of Req - Number of students requests scheduled for all courses in the category.

Sched # of Req% - Percentage of students requests scheduled, for all courses in the category.

Stu Req% - Percentage of students' course requests scheduled for the category. 100% means every student course request was satisfied.

King High School Initial Run — Category Summary Report CSR — 12/13/2012 2:09 PM

Subject Category Name	Courses: Req #of Crs	Req #of Sec	Sched #of Sec	Sched #of Sec%	Teachers: Num of Tchrs	Opt #of Sec	Sched #of Sec	Sched #of Sec%	Rooms: Num of Rooms	Opt #of Sec	Sched #of Sec	Sched #of Sec%	Students: Num of Req	Sched #of Req	Sched #of Req%
School	755	1460	1460	100%	0	1450.	1433	98.8%	258	1451.	1451	100%	25271	20978	83%
-Agricultural Science	24	38	38	100%	7	38	38	100%	7	37.99	38	100%	631	593	94%
-ALSI	1	1	1	100%	1	1	1	100%	2	1	1	100%	0	0	0%
-Art	23	43	43	100%	9	43	43	100%	18	43	43	100%	682	689	101%
-Aerospace Science	10	17	17	100%	1	17	17	100%	3	17	17	100%	136	83	61%
-AT	1	1	1	100%	1	1	1	100%	1	1	1	100%	0	0	0%
-AV	6	7	7	100%	4	7	7	100%	4	7	7	100%	222	218	98.2%
-Business Education	17	22	22	100%	9	22	22	100%	13	22.00	22	100%	180	169	93.9%
-Computer/Business	46	24	24	100%	11	24	24	100%	13	24.00	24	100%	236	103	43.6%
-CC	1	1	1	100%	1	1	1	100%	2	1	1	100%	0	0	0%
-CCPD	1	1	1	100%	1	1	1	100%	1	1	1	100%	0	0	0%
-CCDS	1	1	1	100%	1	1	1	100%	1	1	1	100%	0	0	0%
-CCSS	2	2	2	100%	1	2	2	100%	2	2	2	100%	0	0	0%
-CCFN	1	1	1	100%	1	1	1	100%	2	1	1	100%	0	0	0%
-Elementary School	143	205	205	100%	68	205	205	100%	72	204.9	205	100%	2468	1980	80.2%
-English	43	130	130	100%	43	130	130	100%	44	130	130	100%	2942	2669	90.7%
-Family and Consumer Sciences	32	40	40	100%	9	40	40	100%	13	40.00	40	100%	453	410	90.5%

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Figure 18.7 - Category Summary Report

07 - Category Teacher Allocation Report

The purpose of the Category Teacher Allocation Report is to identify allocations and scheduling issues related to staffing.

The Category Teachers Allocation Report is helpful in identifying staffing issues, by subject category. Please pay particular attention to optimum and scheduled values. Optimums are computed by the system based on the input provided by you.

Category Name - Category/sub-category name, for which statistics are shown. The number of periods (.), preceding the sub-category name, denotes the level.

Allocated Teacher Name - List of candidate teachers to teach the courses under the category, is shown in this column. Please verify that each subject category is staffed by sufficient and appropriate teachers. Teachers may be inherited from higher category levels by default. Each level may add teachers to the list or an exclusive list may be provided at any level. A plus sign (+) indicates that the teacher is added at the level shown.

Num of Crs's - Number of courses under this category that may be taught by the teacher.

Req Min# Sec's - Requested/required minimum number of sections to schedule for a teacher to teach in the category. This number is calculated by the system if one is not provided (Category-Teacher Constraint). If a value is not provided, then the Course-Teacher Constraints are used to derive this minimum. The system attempts to honor this minimum, but it may not be able to do so.

Req Max# Sec's - Requested/required maximum number of sections to schedule for teacher to teacher in the category. This number is calculated by the system if one is not provided (Category-Teacher Constraint). If a value is not provided, then the Course-Teacher Constraints are used to derive this maximum. Note that maximum is always observed, barring any rules that ignores it.

Opt # of Sec's - Optimum number of sections that we expect the teacher to teach for all courses in the category. This number is computed by the system, in order to fulfill staffing for all courses in the category. This optimum is an average, computed as the total number of sections divided by total number of teachers available. This number may be fractional if total number of sections is not divisible by the total number of teachers available.

Sched # of Sec's - Scheduled number of sections scheduled for all courses in the category. An asterisk (*) beside this number signifies that either minimum or maximum was violated.

Min Period Load - Minimum Period Load for a teacher to teach all courses in the category. It may be provided by users if needed (Category-Teacher Constraint). If one is not provided then system derives this number using Course-Teacher Constraints, if any. The system attempts to honor this minimum, but it may not be able to do so.

Max Period Load - Maximum Period Load for a teacher to teach all courses in the category. It may be provided by users if needed (Category-Teacher Constraint). If one is not provided then

system derives this number using Course-Teacher Constraints, if any. Note that maximum is always observed, barring any rules that ignores it.

Opt Period Load - Optimum Period Load for the teacher to teach all courses in the category. This number is computed by the system based on staffing requirements for all courses in the category, as well as other teachers' related minimums and maximums.

Sched Period Load - Scheduled Period Load (aka SPL is the number of periods taught), in the category. This number should be close to the Optimum Period Load (OPL previous column). Scheduled Period Load (SPL) is balanced amongst teachers allocated to teach each category. This balance may be improved by increasing simulation parameter 'Teacher Schedule Balance Priority By Category'. Course-Teacher constraints may also affect this number. An asterisk (*) beside this number indicates that either minimum or maximum was violated.

Util Pct % - Percentage of Scheduled Period Load, in this category, over the total available periods for the teacher. Note that the total available periods for each teacher may have been altered by you.

King High School Initial Run Category Teacher Allocation Report CATAR 12/13/2012 2:09 PM

Category Name	Allocated Teacher Name		Num of Crs's	Req Min# Sec's	Req Max# Sec's	Opt #of Sec's	Sched #of Sec's	Min Period Load	Max Period Load	Opt Period Load	Sched Period Load	Sched Period Load %	Util Pct %
School		Totals:	755			1450.6	1433			1450.5	1433	0%	0%
.Agricultural Sci	Cook, C		24			5.4	13			5.4	13	239.5%	54.2%
	Gless, G		24			5.4	3			5.4	3	55.3%	12.5%
	Rhoadarmer, R		24			5.4	6			5.4	6	110.5%	25%
	Tucker, T		24			5.4	8			5.4	8	147.4%	33.3%
	Watkins, W		24			5.4	4			5.4	4	73.7%	16.7%
	Wojcik, W		24			5.4	4			5.4	4	73.7%	16.7%
	Yanik, Y		24			5.4	0			5.4	0	0%	0%
		Totals:	24			38	38			37.999	38	0%	22.6%
.ALSI	Evit Teacher, E		1			1	1			1	1	100%	4.2%
		Totals:	1			1	1			1	1	0%	4.2%
.Art	Connelly, C		23			4.8	12			4.8	12	251.2%	50%
	Fleming, F		23			4.8	2			4.8	2	41.9%	8.3%
	Gilboe, G		23			4.8	8			4.8	8	167.4%	33.3%
	Graves, G		23			4.8	5			4.8	5	104.7%	20.8%
	Holcombe, H		23			4.8	6			4.8	6	125.6%	25%
	Lawrence, L		23			4.8	1			4.8	1	20.9%	4.2%
	Satterthwaite, S		23			4.8	2			4.8	2	41.9%	8.3%
	Schmidt, S		23			4.8	0			4.8	0	0%	0%
	Woerman, W		23			4.8	7			4.8	7	146.5%	29.2%
		Totals:	23			43	43			42.999	43	0%	19.9%
.Aerospace Scienc	Coldiron, C		10			17	17			17	17	100%	70.8%
		Totals:	10			17	17			17	17	0%	70.8%
.AT	Walters, W		1			1	1			1	1	100%	4.2%
		Totals:	1			1	1			1	1	0%	4.2%

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Figure 18.8 - Category Teacher Allocation Report

08 – Class List Report

The purpose of the Class List Report is to list the students scheduled by sections during the scheduling run.

The Class List report prints a page for each section created, and lists the period, term, meeting days, teacher, and room assigned to the section. It displays the optimal and maximum enrollments, as well as the number of students scheduled, broken down by gender and grade. It lists all students scheduled in the section.

Course-Sec - Course ID and section number.

Per - Meeting period of the section.

Term - Term section was scheduled.

Days - Meeting days section was scheduled.

Teacher - Teacher assigned to the section.

Room - Room assigned to the section.

Opt/Max/Enroll - Optimum class size.

Max - Maximum class size.

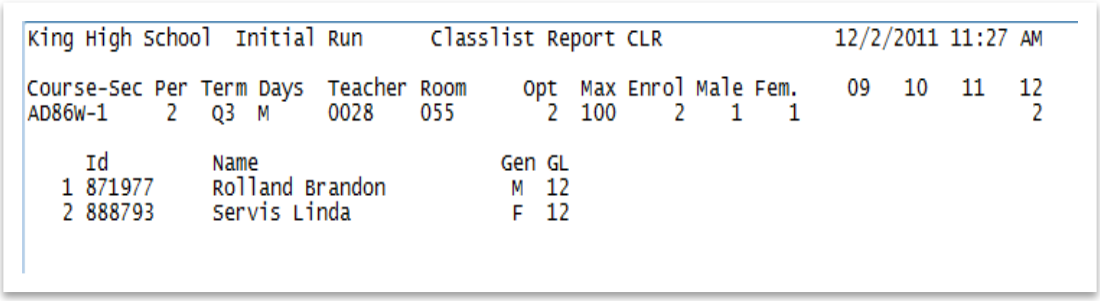
Enroll - Number of students scheduled into the section.

Male - Number of male students.

Female - Number of female students.

Grade Levels - Total number of students from each grade level.

Students are listed with their perm ID, Name (Last Name First Name), Gender and Grade Level.



King High School Initial Run Classlist Report CLR 12/2/2011 11:27 AM

Course-Sec	Per	Term	Days	Teacher	Room	Opt	Max	Enrol	Male	Fem.	09	10	11	12
AD86W-1	2	Q3	M	0028	055	2	100	2	1	1				2

	Id	Name	Gen	GL
1	871977	Rolland Brandon	M	12
2	888793	Servis Linda	F	12

Figure 18.9 - Class list Report

09 - Conflict Students By Course Report

The purpose of the Conflict Students By Course Report is to identify potential conflicts between courses and students.

The Conflict Students By Course Report lists all conflicts, grouped by course. It displays conflict totals by course and a conflict total for all courses. The report lists the type of conflict priority for each course, as well.

Student ID - Student's identification number.

Grade Level - Student's grade level.

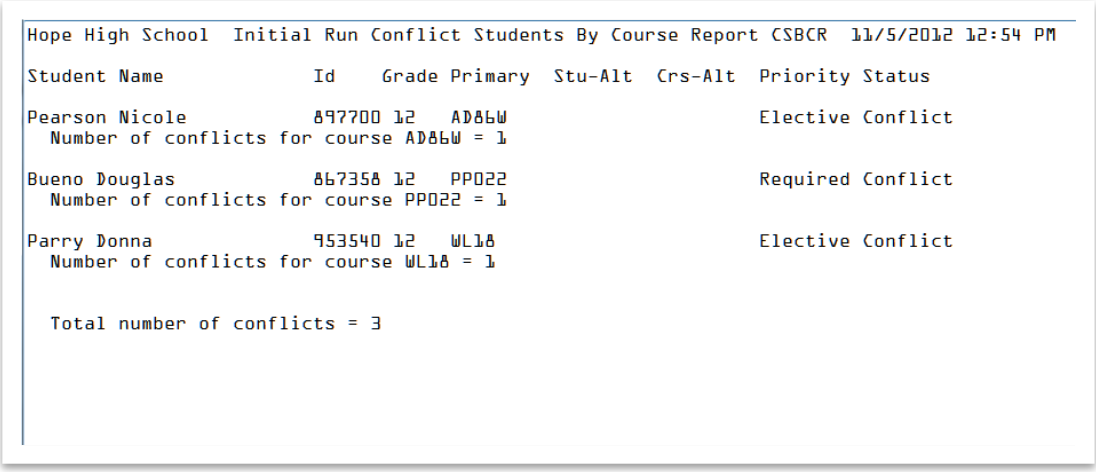
Primary Request - Student's primary/original course request.

Student Alt. - Student's specific alternate to their primary request. Note that different students may request different alternate for the same primary request.

Course Alt. - Elective course level alternate. Elective course level alternates are considered for all students who requested the course, but did not select a specific alternate.

Priority - The course priority such as an elective or required course.

Status - The course status such as conflict.



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Hope High School  Initial Run Conflict Students By Course Report CSBCR  11/5/2012 12:54 PM

Student Name             Id    Grade Primary  Stu-Alt  Crs-Alt  Priority Status

Pearson Nicole           897700 12   AD86W                     Elective Conflict
  Number of conflicts for course AD86W = 1

Bueno Douglas            867358 12   PPO22                     Required Conflict
  Number of conflicts for course PPO22 = 1

Parry Donna              953540 12   WL18                      Elective Conflict
  Number of conflicts for course WL18 = 1


  Total number of conflicts = 3
```

Figure 18.10 - Conflict Student By Course Report

10 - Conflict Students By Grade Report

The purpose of the Conflict Students By Grade Report is to identify potential conflicts between courses and students by grade.

The Conflict Students By Grade Report lists all conflicts, grouped by grade. It displays conflict totals by grade and a conflict total for all grades. The report lists the type of conflict priority for each course, as well.

Student ID - Student's identification number.

Grade Level - Student's grade level.

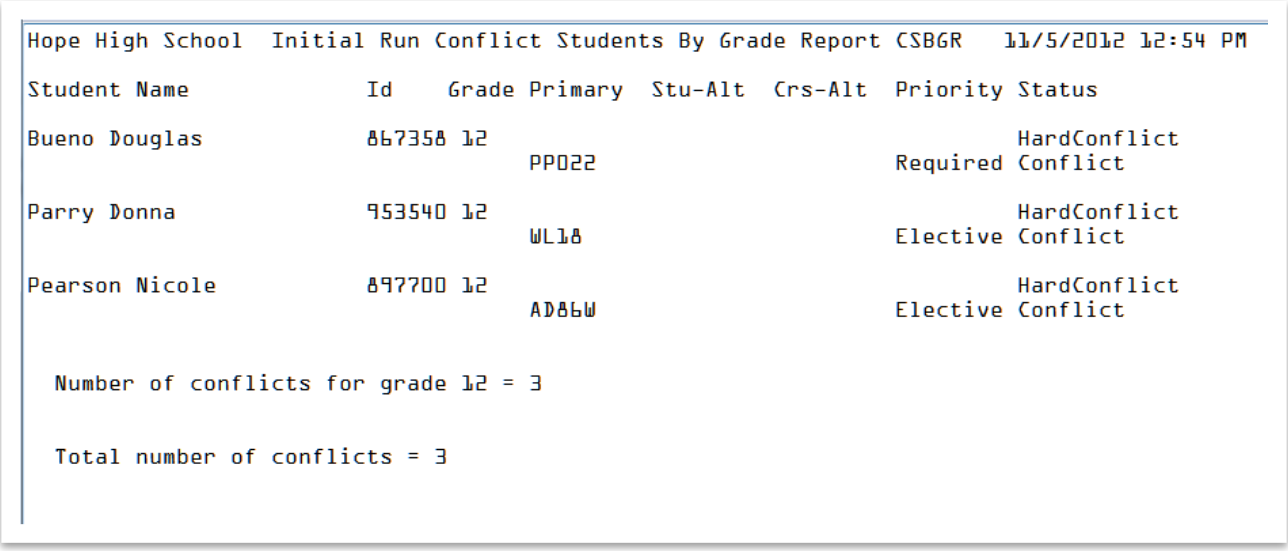
Primary Request - Student's primary/original course request.

Student Alt. - Student's specific alternate to their primary request. Note that different students may request different alternate for the same primary request.

Course Alt. - Elective course level alternate. Elective course level alternates are considered for all students who requested the course, but did not select a specific alternate.

Priority - The course priority such as an elective or required course.

Status - The course status such as conflict.



```
Hope High School  Initial Run Conflict Students By Grade Report CSBGR   11/5/2012 12:54 PM

Student Name             Id     Grade Primary  Stu-Alt  Crs-Alt  Priority Status

Bueno Douglas            867358 12                                       HardConflict
                                      PP022                     Required Conflict

Parry Donna              953540 12                                       HardConflict
                                      WL18                      Elective Conflict

Pearson Nicole           897700 12                                       HardConflict
                                      AD86W                     Elective Conflict


  Number of conflicts for grade 12 = 3


  Total number of conflicts = 3
```

Figure 18.11 - Conflict Students by Grade Report

11 - Conflict Students By Name Report

The Course Tally Report lists all courses alphabetically by course ID. The purpose of this report is to identify room allocations and scheduling issues related to a course.

Each course displays the number of sections, the period load by section and the number of course requests. It also breaks out the course requests by gender, grade, and student properties.

Student ID - Student's identification number.

Grade Level - Student's grade level.

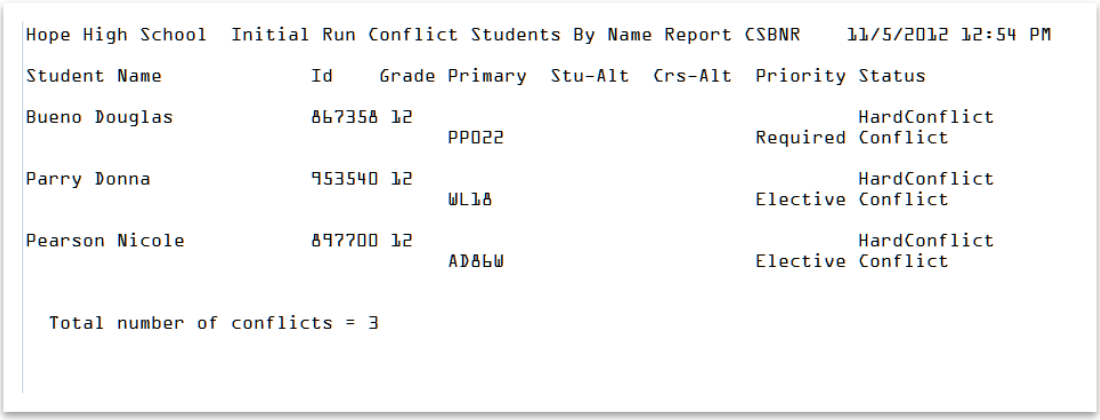
Primary Request - Student's primary/original course request.

Student Alt. - Student's specific alternate to their primary request. Note that different students may request different alternate for the same primary request.

Course Alt. - Elective course level alternate. Elective course level alternates are considered for all students who requested the course, but did not select a specific alternate.

Priority - The course priority such as an elective or required course.

Status - The course status such as conflict.



Hope High School Initial Run Conflict Students By Name Report CSBNR 11/5/2012 12:54 PM

Student Name	Id	Grade	Primary	Stu-Alt	Crs-Alt	Priority	Status
Bueno Douglas	867358	12					HardConflict
			PP022			Required	Conflict
Parry Donna	953540	12					HardConflict
			WL18			Elective	Conflict
Pearson Nicole	897700	12					HardConflict
			AD86W			Elective	Conflict

Total number of conflicts = 3

Figure 18.12 - Conflict Students By Name Report

12 - Course Request Conflict Mtx Report

The purpose of the Course Req Conflict Mtx Report is to identify potential conflicts between courses requested by students.

The Course Req Conflict Mtx Report lists all courses in alphabetical order by course ID. The purpose of this report is to identify potential conflicts between courses requested by students.

Each course displays the number of sections created, number of student course requests, and number of conflicts between student course requests. It then lists all the other courses requested by students, who requested that course. Each of these courses displays the number of sections created, number of student course requests, number of conflicts between student course requests, and number of students who requested both courses.

Course-X - Course ID.

#Sec - Number of sections.

#Requests - Total number of requests for the course.

#Conflicts - Total number of conflicts.

- Line number.

Course-#Sec - Course ID and number of sections.

#Requests - Total number of requests for the course.

#Common - Total number of students that have requested both courses.

#Conflicts - Total number of conflicts between the primary course listed and the course in the row.

King High School Initial Run Course Req Conflict Mtx Report CRCMR 12/2/2011 11:26 AM

Course-X	#Sec	#Requests	#Conflicts
AD86W	8	15	0

#	Course-#Sec	#Requests	#Common	#Conflicts
1	AD86W2	1	14	13	0
2	AD99W2	1	6	1	0
3	AR322	1	26	1	0
4	AR332	1	25	1	0
5	AR54	86	86	2	0
6	AR542	5	129	2	0
7	AR602	1	26	1	0
8	AV12	1	25	2	0
9	AV122	1	25	2	0
10	EN34	21	434	1	0
11	EN35W	3	85	2	0
12	EN35W2	4	84	2	0
13	EN44	13	38	1	0
14	EN46	21	271	2	0
15	EN52	4	202	1	0
16	EN57	56	390	1	0
17	EN70W	5	119	4	0
18	EN70W2	4	119	4	0
19	EN71W	21	41	4	0
20	EN71W2	2	41	4	0
21	EN72W	51	51	1	0
22	EN80	7	49	2	0
23	EN87	1	19	1	0
24	EN93W	2	42	1	0
25	MA40	14	311	2	0
26	MA41W	3	99	1	0
27	MA41W2	4	100	1	0
28	MA45D	4	73	5	0
29	MA45DE	3	72	5	0
30	MA45W	1	16	1	0
31	MA45W2	1	16	1	0
32	MA50W	1	21	2	0
33	MA50W2	1	20	2	0
34	MU75	4	71	1	0
35	MU752	1	71	1	0
36	MU80	5	18	1	0
37	MU802	1	18	1	0
38	MU81	4	52	3	0
39	MU83	1	34	2	0
40	MU832	2	34	2	0
41	MU86	1	12	2	0
42	MU92	5	41	1	0
43	MU922	2	41	1	0
44	NC40	10	292	3	0
45	NC402	6	293	3	0
46	NC40A	1	16	1	0
47	NC40B	1	16	1	0
48	NC90	50	1479	6	0
49	NC902	2	1555	7	0
50	NC91	2	45	1	0
51	NC912	1	59	1	0
52	NC92	1	19	1	0
53	NC922	1	27	1	0
54	NC94	1	27	1	0
55	NC942	1	61	1	0
56	PE53	78	78	1	0
57	PE532	3	81	1	0
58	PE76	18	265	1	0

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Figure 18.13 - Course Request Conflict Matrix Report

13 - Course Rooms Allocation Report

The Course Rooms Allocation Report lists all courses alphabetically by course ID. The purpose of this report is to identify room allocations and scheduling issues related to a course.

This report displays the category to which the course is assigned, number of sections created, and number of periods the course is taught. It lists all rooms used by the sections of the course.

Course/Categ. - Course ID

Course # Sec's - Number of sections created for the category.

Course Period Load - Number of periods needed for all sections in the category. This is the number of meeting days, times the number of sections, times the periods per section.

Category/Rooms ID - Category and Room Name/Number.

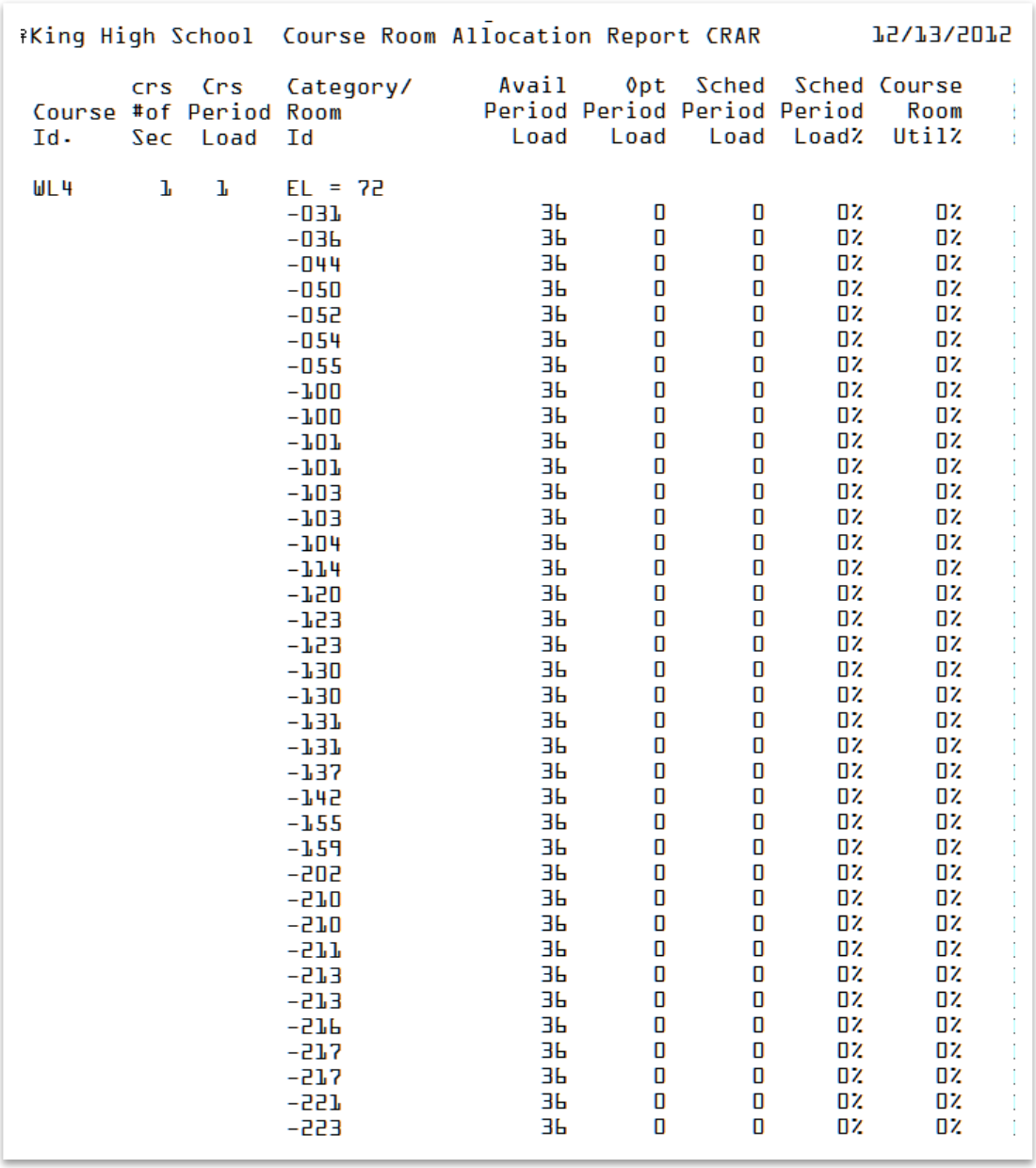
Avail Period Load - Maximum number of periods the room is available. This is the number of periods per day, times the number of meeting days, times the number of terms.

Opt. Period Load - Optimum number of periods the room is available.

Sched Period Load - Number of periods scheduled for the room.

Sched Period Load % - Percentage of scheduled periods for the room relative to average.

Course Room Util. % - Percentage of room utilized by the course, relative to the available number of periods for the room.



ŕKing High School Course Room Allocation Report CRAR 12/13/2012

Course Id.	crs #of Sec	Crs Period Load	Category/ Room Id	Avail Period Load	Opt Period Load	Sched Period Load	Sched Period Load%	Course Room Util%
WL4	1	1	EL = 72					
			-031	36	0	0	0%	0%
			-036	36	0	0	0%	0%
			-044	36	0	0	0%	0%
			-050	36	0	0	0%	0%
			-052	36	0	0	0%	0%
			-054	36	0	0	0%	0%
			-055	36	0	0	0%	0%
			-100	36	0	0	0%	0%
			-100	36	0	0	0%	0%
			-101	36	0	0	0%	0%
			-101	36	0	0	0%	0%
			-103	36	0	0	0%	0%
			-103	36	0	0	0%	0%
			-104	36	0	0	0%	0%
			-114	36	0	0	0%	0%
			-120	36	0	0	0%	0%
			-123	36	0	0	0%	0%
			-123	36	0	0	0%	0%
			-130	36	0	0	0%	0%
			-130	36	0	0	0%	0%
			-131	36	0	0	0%	0%
			-131	36	0	0	0%	0%
			-137	36	0	0	0%	0%
			-142	36	0	0	0%	0%
			-155	36	0	0	0%	0%
			-159	36	0	0	0%	0%
			-202	36	0	0	0%	0%
			-210	36	0	0	0%	0%
			-210	36	0	0	0%	0%
			-211	36	0	0	0%	0%
			-213	36	0	0	0%	0%
			-213	36	0	0	0%	0%
			-216	36	0	0	0%	0%
			-217	36	0	0	0%	0%
			-217	36	0	0	0%	0%
			-221	36	0	0	0%	0%
			-223	36	0	0	0%	0%

Figure 18.14 - Course Room Allocation Report

14 - Course Tally Report

The Course Tally Report shows total number of student requests for each course, broken down by gender and grade level. This report is useful in identifying potential course registration problems and issues. Requests for courses outside the appropriate grade levels may be identified quickly. This report is sorted by course code/Id.

Course ID - Course ID/ Course Code

Course Default Priority - Course's default priority (Required/Elective/Optional. If a student does not choose a priority, when they register for the course, then the default is applied. The required plus elective course requests are often called 'core' requests. Optional requests are courses that students may take as extracurricular activities. Study hall type courses may also be considered as optional requests.

If a student cannot be scheduled in an optional request, system does not consider it a conflict. In other words, students may take (or be assigned to) as many optional courses as needed, in order to fill their schedules.

Note - multiple requests for the same course, is also allowed (by default, unless overridden). For example if a study hall course is defined with lots of sections, then multiple requests for the same study hall course may be added to fill their schedules.

Course Level Alt. - Course Level Alternate. This is the default alternate for students who do not choose a specific alternate for their primary request.

No. of Sec. - Number of sections, expected or scheduled in the master schedule, for the course.

Period Load/ Sec. - Period Load requirements for each section of the course. This is the number of periods each section occupies in the scheduling grid. This number is derived by multiplying number of meeting terms, number of meeting days, and number of meeting periods for the course.

Total Reqs. - Total number of primary course requests.

Alt. Reqs. - Number of students specific requests for this course as an alternate.

Gender - Number of students requests by gender is shown under 'Male' and 'Fem.' columns.

Hope High School Initial Run Course Tally Report CTR 11/5/2012 12:53 PM

Course Id	Course Default Priority	Course Level Alt.	No. of Sec.	Period Load/ Sec.	Total Reqs.	Course Alt. Reqs.	Requests Gender Male	Fem.	Counts Grade Levels 09	10	11	12
AD86W	Elective		1	1	30		17	13	1	10	19	
AG29	Elective		1	1	1			1			1	
AG31	Elective		1	1	30		19	11	17	9	4	
AG51	Elective		1	1	2		2		2			
AR33	Elective		2	1	47		19	28	8	23	16	
AR34	Elective		1	1	11		3	8		3	8	
AR40	Elective		6	1	170		91	79	7	68	95	
AR41	Elective		6	1	172	2	86	86	79	54	39	
AR42	Elective		2	1	59		34	25	1	17	41	
AR43	Elective		2	1	38		25	13	1	19	18	
AR45	Elective		1	1	8		7	1	2	1	5	
AR64	Elective		2	1	50		33	17	4	29	17	
AR66	Elective		1	1	11		5	6		4	7	
AR80W	Elective		1	1	15		8	7		4	11	
AS312	Elective		1	1	1		1				1	
AS33	Elective		1	1	1		1			1		
AS35	Elective		1	1	1		1				1	
AS352	Elective		1	1	1		1				1	
BE30	Elective		2	1	53	2	37	16	33	8	12	
BE39	Elective		1	1	29	4	19	10	14	13	2	
BE47	Elective		1	1	29	4	17	12	13	9	7	
BE48	Elective		1	1	5		3	2	3	1	1	
BE52	Elective		2	1	45	2	31	14	20	16	9	
BE53	Elective		1	1	12	1	9	3	5	4	3	
BE54	Elective		1	1	11		7	4		7	4	
BE74	Elective		1	1	13		10	3			13	
CB10	Elective		5	1	147	5	80	67	108	28	11	
CB11	Elective		3	1	67	4	39	28	32	16	19	
CB12	Elective		2	1	46	2	26	20	26	10	10	
CB18	Elective		2	1	33	3	24	9	24	5	4	
CB20	Elective		1	1	22	2	17	5	3	10	9	
CB31	Elective		2	1	48	3	41	7	32	11	5	
CB32	Elective		1	1	22	1	19	3	17	3	2	
CB44	Elective		1	1	21		18	3	12	6	3	
EN11	Elective		1	1	3		1	2	3			
EN112	Required		1	1	3		1	2	3			
EN21	Elective		1	1	10		5	5	1	7	2	
EN212	Required		1	1	11		6	5	1	8	2	
EN31	Required		2	1	35		24	11	18	9	8	
EN32	Required		2	1	48		36	12	11	26	11	
EN33	Required		25	1	738		386	352	733	5		
EN33C	Required		1	1	2		1	1		1	1	
EN34	Required		21	1	623		336	287	24	586	13	
EN34C	Required		1	1	1			1			1	
EN35W	Required		2	1	57		19	38	57			
EN35W2	Required		2	1	57		19	38	57			

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Figure 18.15 - Course Tally Report

15 - Course Teachers Allocation Report

The purpose of Course Teachers Allocation Report is to identify teacher allocations and scheduling issues related to a course.

This report lists all courses alphabetically by course ID. It displays the category to which the course is assigned, the number of sections created, and the number of periods in which the course is taught. It lists all teachers assigned to the sections of the course. The system uses this information to schedule teachers for sections of each course. Accuracy of this information is vital for MSB.

Course ID - The course id/code, for which the staff allocation/input is shown.

Category/Teacher Name - Category of the course. The number after the (=) sign is the number of teachers that are candidates for MSB to schedule for the course. List of allocated teachers is shown below the category name.

# of Sec - Number of Sections for the course.

Min # of Sec - Minimum number of sections of the course to be scheduled for the teacher. This number may be zero/blank or provided by Course-Teacher constraints.

Max # of Sec - Maximum number of sections of the course to be scheduled for the teacher. This number is system calculated or may have been provided by you. (Course-Teacher constraints).

Opt # of Sec - Optimum number of sections of the course to be scheduled for the teacher. This number is calculated by the system and is the average of the two preceding numbers. This number may show fractions when the total number of sections for the course cannot be divided evenly between the allocated teachers.

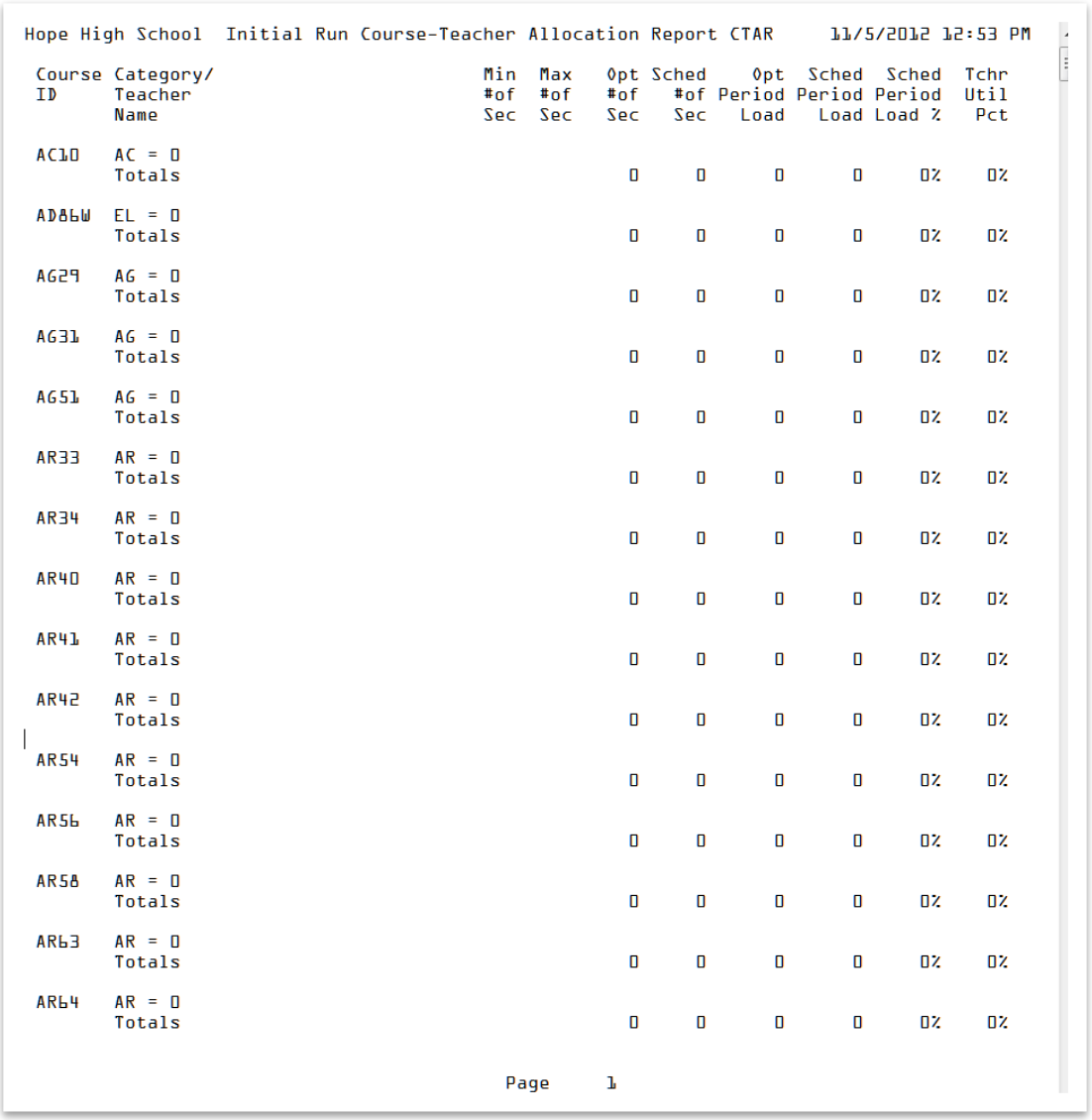
Sched # of Sec - The actual number of sections of the course that is scheduled for the teacher. The MSB attempts to schedule teachers as close to the optimum number of sections as possible.

Opt Period Load - Optimum Period Load parallels the optimum number of sections. Courses may have different period load requirements (time structures within the grid). This number reflects this difference. Input such as maximum period load per day, per term, entire grid, will affect this number. A low number is to be expected for part time teachers, due to the lower maximums. Constraints, such as minimum and maximum number of sections to the taught by a teacher, teacher time constraints, will also affects this number. This number will be the same for all teachers that have no special requirements/input.

Sched Period Load - Scheduled number of periods for the teacher for the course. This number may be skewed or small. This is normal if the teacher is shared by many courses. The system tries to schedule equal number of periods for each course for each teacher. This is not always possible. For example, if you have two teachers allocated to teach a 3-section course, obviously one teacher will be scheduled for one while the other will be scheduled for 2 sections.

Sched Period Load % - Percentage of scheduled periods, described above, for the teacher relative to the optimum/average. Note that this percentage may be zero or over 100% when teacher is shared between courses, as well as for reasons explained above. Look at the percentage scheduled on the total line for the course. A number less than 100% indicates that not all sections were scheduled with teachers, and input adjustments may be required.

Tchr Util Pct - Percentage of the teacher's available time utilized by each course. The teacher may have a low percentage in one course and a higher one for another course. The 'Teacher Utilization Report' provides a different view, on teacher utilization. Teacher's available time is adjusted for lunch allowance and other constraints, when present.



Hope High School Initial Run Course-Teacher Allocation Report CTAR 11/5/2012 12:53 PM

Course ID	Category/ Teacher Name	Min #of Sec	Max #of Sec	Opt #of Sec	Sched #of Sec	Opt Period Load	Sched Period Load	Sched Period Load %	Tchr Util Pct
AC10	AC = 0								
	Totals			0	0	0	0	0%	0%
AD86W	EL = 0								
	Totals			0	0	0	0	0%	0%
AG29	AG = 0								
	Totals			0	0	0	0	0%	0%
AG31	AG = 0								
	Totals			0	0	0	0	0%	0%
AG51	AG = 0								
	Totals			0	0	0	0	0%	0%
AR33	AR = 0								
	Totals			0	0	0	0	0%	0%
AR34	AR = 0								
	Totals			0	0	0	0	0%	0%
AR40	AR = 0								
	Totals			0	0	0	0	0%	0%
AR41	AR = 0								
	Totals			0	0	0	0	0%	0%
AR42	AR = 0								
	Totals			0	0	0	0	0%	0%
AR54	AR = 0								
	Totals			0	0	0	0	0%	0%
AR56	AR = 0								
	Totals			0	0	0	0	0%	0%
AR58	AR = 0								
	Totals			0	0	0	0	0%	0%
AR63	AR = 0								
	Totals			0	0	0	0	0%	0%
AR64	AR = 0								
	Totals			0	0	0	0	0%	0%

Page 1

Figure 18.16 - Course-Teacher Allocation Report

16 - Error Report

The purpose of the Error Report is to list all of the places where errors and warnings occurred during the scheduling run.

S Type - Type of Error

- E - = Error,
- I - = Info,
- W - = Warning,
- S - = Severe (which could be School, Category, Course, Room, Teacher, Section, etc.)

Identifier - Identity of type of error (School Name, Category Name, Course Id, Room Number, Teacher Name, Section ID, etc.)

* **Messages** - Area of MSB the error or warning generated from - Analyzer, Builder, Loader, Resolver, Balancer, and Reporter.

Totals for each type of message are listed at the bottom of the report.

King High School Initial Run Error Report ER
12/2/2011 11:26 AM

S	Type	Identifier	Analyzer Messages
W:	School	Kin	No term codes were provided, defaults are generated.
W:	School	Kin	No day codes were provided, defaults are generated.
W:	School	Kin	No period codes were provided, defaults are generated.
W:	Course	ALSI10	Unable to match any teachers for this course
W:	Course	AR32	Unable to match any teachers for this course
W:	Course	AR322	Unable to match any teachers for this course
W:	Course	AR33	Unable to match any teachers for this course
W:	Course	AR332	Unable to match any teachers for this course
W:	Course	AR34	Unable to match any teachers for this course
W:	Course	AR40	Unable to match any teachers for this course
W:	Course	AR402	Unable to match any teachers for this course
W:	Course	AR41	Unable to match any teachers for this course
W:	Course	AR412	Unable to match any teachers for this course
W:	Course	AR42	Unable to match any teachers for this course
W:	Course	AR43	Unable to match any teachers for this course
W:	Course	AR54	Unable to match any teachers for this course
W:	Course	AR542	Unable to match any teachers for this course
W:	Course	AR56	Unable to match any teachers for this course
W:	Course	AR60	Unable to match any teachers for this course
W:	Course	AR602	Unable to match any teachers for this course
W:	Course	AR63	Unable to match any teachers for this course
W:	Course	AR632	Unable to match any teachers for this course
W:	Course	AR64	Unable to match any teachers for this course
W:	Course	AR66	Unable to match any teachers for this course
W:	Course	AR662	Unable to match any teachers for this course
W:	Course	AR70	Unable to match any teachers for this course
W:	Course	AR71	Unable to match any teachers for this course
W:	Course	AR99	Unable to match any teachers for this course
W:	Course	AS31	Unable to match any teachers for this course
W:	Course	AS312	Unable to match any teachers for this course
W:	Course	AS32	Unable to match any teachers for this course
W:	Course	AS322	Unable to match any teachers for this course
W:	Course	AS33	Unable to match any teachers for this course
W:	Course	AS332	Unable to match any teachers for this course
W:	Course	AS34	Unable to match any teachers for this course
W:	Course	AS342	Unable to match any teachers for this course
W:	Course	AS35	Unable to match any teachers for this course
W:	Course	AS352	Unable to match any teachers for this course
W:	Course	AT91	Unable to match any teachers for this course
W:	Course	AV10	Unable to match any teachers for this course
W:	Course	AV102	Unable to match any teachers for this course
W:	Course	AV11	Unable to match any teachers for this course
W:	Course	AV112	Unable to match any teachers for this course

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Figure 18.17 - Error Report

17 - Free Rooms Report

The Free Rooms Report shows a list of free rooms for each period-term-day. The report is sorted by period first, then by term code and day code.

Tip - Lunch periods, if defined, will probably have a long list of free rooms. This is normal, since most class are empty during lunch periods. One way to reduce the list of rooms during lunch periods is to use a Modular Lunch concept.

For example if your regular periods are 50 minutes long, make your lunch hour 75 minutes (one and half times the regular period). Each class still meets 50 minutes, as before. Student lunch hour now can be 25 minutes or 50 minutes. Assuming you choose 25 minute lunch for most of your students, then 1/3rd of the students are at lunch during any given lunch period, while 2/3rd are in class.

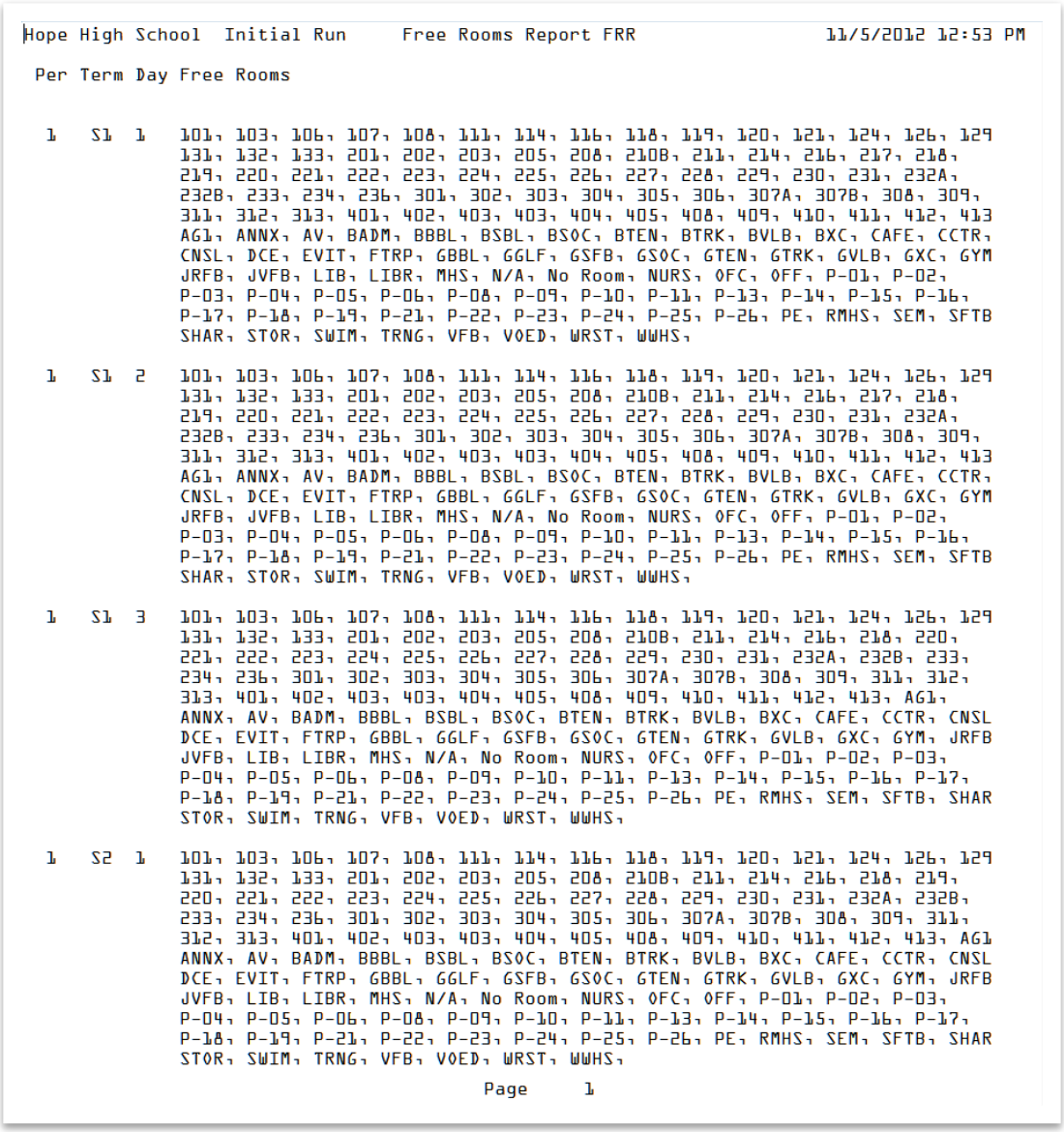
To use this scheme, you need to increase the number of periods in the grid by doubling the number of regular periods and adding the one extra lunch period. If your school day consisted of 5 periods, it now becomes a 2 x 5 + 1 =11 period day school. MSB also allows you to name your periods, which may be defined as 1, 1a, 2, 2a, 3, 3a, etc. The next step is to override Period Sets so classes only start at 1, 2, and 3. This insures no classes start at 1a or 2a, etc. The last step is to double the number of meeting periods at the school level to 2, since each period in the grid is now 25 minutes and you need 2 to make them 50 minutes long.

Per - Period of the day.

Term - Smallest terms as setup in the option set.

Day - Meeting Day.

Free Rooms - Room numbers of all of those that are free during the term, period, and day.



Hope High School Initial Run Free Rooms Report FRR 11/5/2012 12:53 PM

Per Term Day Free Rooms

1 S1 1 101, 103, 106, 107, 108, 111, 114, 116, 118, 119, 120, 121, 124, 126, 129
131, 132, 133, 201, 202, 203, 205, 208, 210B, 211, 214, 216, 217, 218,
219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232A,
232B, 233, 234, 236, 301, 302, 303, 304, 305, 306, 307A, 307B, 308, 309,
311, 312, 313, 401, 402, 403, 403, 404, 405, 408, 409, 410, 411, 412, 413
AG1, ANNX, AV, BADM, BBBL, BSBL, BS0C, BTEN, BTRK, BVLB, BXC, CAFE, CCTR,
CNSL, DCE, EVIT, FTRP, GBBL, GGLF, GSFB, GS0C, GTEN, GTRK, GVLB, GXC, GYM
JRFB, JVFB, LIB, LIBR, MHS, N/A, No Room, NURS, OFC, OFF, P-01, P-02,
P-03, P-04, P-05, P-06, P-08, P-09, P-10, P-11, P-13, P-14, P-15, P-16,
P-17, P-18, P-19, P-21, P-22, P-23, P-24, P-25, P-26, PE, RMHS, SEM, SFTB
SHAR, ST0R, SWIM, TRNG, VFB, V0ED, WRST, WWHS,

1 S1 2 101, 103, 106, 107, 108, 111, 114, 116, 118, 119, 120, 121, 124, 126, 129
131, 132, 133, 201, 202, 203, 205, 208, 210B, 211, 214, 216, 217, 218,
219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232A,
232B, 233, 234, 236, 301, 302, 303, 304, 305, 306, 307A, 307B, 308, 309,
311, 312, 313, 401, 402, 403, 403, 404, 405, 408, 409, 410, 411, 412, 413
AG1, ANNX, AV, BADM, BBBL, BSBL, BS0C, BTEN, BTRK, BVLB, BXC, CAFE, CCTR,
CNSL, DCE, EVIT, FTRP, GBBL, GGLF, GSFB, GS0C, GTEN, GTRK, GVLB, GXC, GYM
JRFB, JVFB, LIB, LIBR, MHS, N/A, No Room, NURS, OFC, OFF, P-01, P-02,
P-03, P-04, P-05, P-06, P-08, P-09, P-10, P-11, P-13, P-14, P-15, P-16,
P-17, P-18, P-19, P-21, P-22, P-23, P-24, P-25, P-26, PE, RMHS, SEM, SFTB
SHAR, ST0R, SWIM, TRNG, VFB, V0ED, WRST, WWHS,

1 S1 3 101, 103, 106, 107, 108, 111, 114, 116, 118, 119, 120, 121, 124, 126, 129
131, 132, 133, 201, 202, 203, 205, 208, 210B, 211, 214, 216, 218, 220,
221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232A, 232B, 233,
234, 236, 301, 302, 303, 304, 305, 306, 307A, 307B, 308, 309, 311, 312,
313, 401, 402, 403, 403, 404, 405, 408, 409, 410, 411, 412, 413, AG1,
ANNX, AV, BADM, BBBL, BSBL, BS0C, BTEN, BTRK, BVLB, BXC, CAFE, CCTR, CNSL
DCE, EVIT, FTRP, GBBL, GGLF, GSFB, GS0C, GTEN, GTRK, GVLB, GXC, GYM, JRFB
JVFB, LIB, LIBR, MHS, N/A, No Room, NURS, OFC, OFF, P-01, P-02, P-03,
P-04, P-05, P-06, P-08, P-09, P-10, P-11, P-13, P-14, P-15, P-16, P-17,
P-18, P-19, P-21, P-22, P-23, P-24, P-25, P-26, PE, RMHS, SEM, SFTB, SHAR
ST0R, SWIM, TRNG, VFB, V0ED, WRST, WWHS,

1 S2 1 101, 103, 106, 107, 108, 111, 114, 116, 118, 119, 120, 121, 124, 126, 129
131, 132, 133, 201, 202, 203, 205, 208, 210B, 211, 214, 216, 218, 219,
220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232A, 232B,
233, 234, 236, 301, 302, 303, 304, 305, 306, 307A, 307B, 308, 309, 311,
312, 313, 401, 402, 403, 403, 404, 405, 408, 409, 410, 411, 412, 413, AG1
ANNX, AV, BADM, BBBL, BSBL, BS0C, BTEN, BTRK, BVLB, BXC, CAFE, CCTR, CNSL
DCE, EVIT, FTRP, GBBL, GGLF, GSFB, GS0C, GTEN, GTRK, GVLB, GXC, GYM, JRFB
JVFB, LIB, LIBR, MHS, N/A, No Room, NURS, OFC, OFF, P-01, P-02, P-03,
P-04, P-05, P-06, P-08, P-09, P-10, P-11, P-13, P-14, P-15, P-16, P-17,
P-18, P-19, P-21, P-22, P-23, P-24, P-25, P-26, PE, RMHS, SEM, SFTB, SHAR
ST0R, SWIM, TRNG, VFB, V0ED, WRST, WWHS,

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Figure 18.18 - Free Rooms Report

18 - Free Students Report

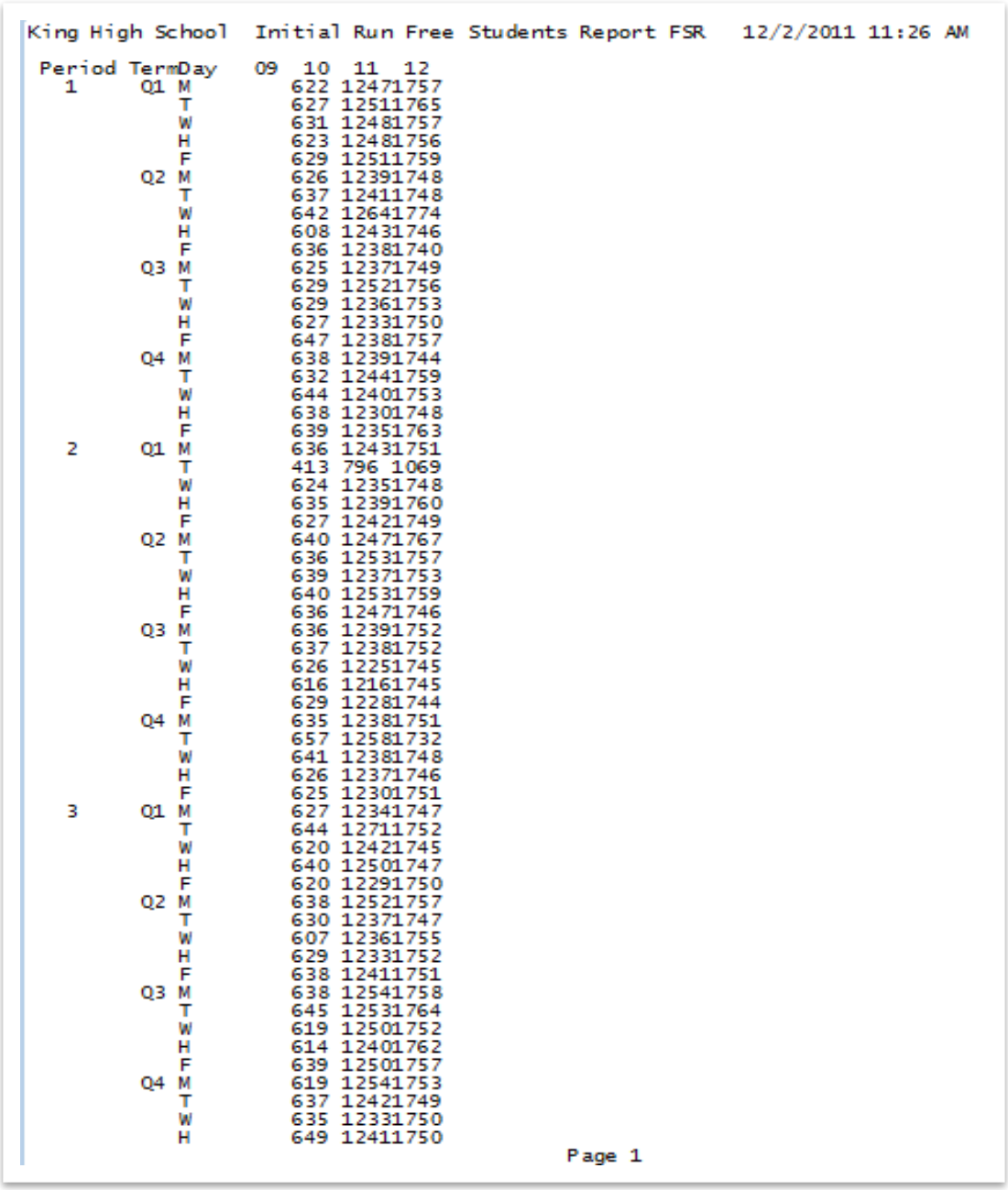
The purpose of the Free Students Report is to identify the number of students for each grade level that do not have a section scheduled for the Period, Term, and Meeting Day listed.

Period - Period of the day

Term - Smallest terms as setup in the option set.

Day - Meeting Day

***Grade Levels** - Number of students that are free for the listed period, term and day, broken out by grade level.



King High School Initial Run Free Students Report FSR 12/2/2011 11:26 AM

Period	Term	Day	09	10	11	12
1	Q1	M		622	12471757	
		T		627	12511765	
		W		631	12481757	
		H		623	12481756	
		F		629	12511759	
	Q2	M		626	12391748	
		T		637	12411748	
		W		642	12641774	
		H		608	12431746	
		F		636	12381740	
	Q3	M		625	12371749	
		T		629	12521756	
		W		629	12361753	
		H		627	12331750	
		F		647	12381757	
	Q4	M		638	12391744	
		T		632	12441759	
		W		644	12401753	
		H		638	12301748	
		F		639	12351763	
2	Q1	M		636	12431751	
		T		413	796	1069
		W		624	12351748	
		H		635	12391760	
		F		627	12421749	
	Q2	M		640	12471767	
		T		636	12531757	
		W		639	12371753	
		H		640	12531759	
		F		636	12471746	
	Q3	M		636	12391752	
		T		637	12381752	
		W		626	12251745	
		H		616	12161745	
		F		629	12281744	
	Q4	M		635	12381751	
		T		657	12581732	
		W		641	12381748	
		H		626	12371746	
		F		625	12301751	
3	Q1	M		627	12341747	
		T		644	12711752	
		W		620	12421745	
		H		640	12501747	
		F		620	12291750	
	Q2	M		638	12521757	
		T		630	12371747	
		W		607	12361755	
		H		629	12331752	
		F		638	12411751	
	Q3	M		638	12541758	
		T		645	12531764	
		W		619	12501752	
		H		614	12401762	
		F		639	12501757	
	Q4	M		619	12541753	
		T		637	12421749	
		W		635	12331750	
		H		649	12411750	

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Figure 18.19 = Free Students Report

19 - Free Teachers Report

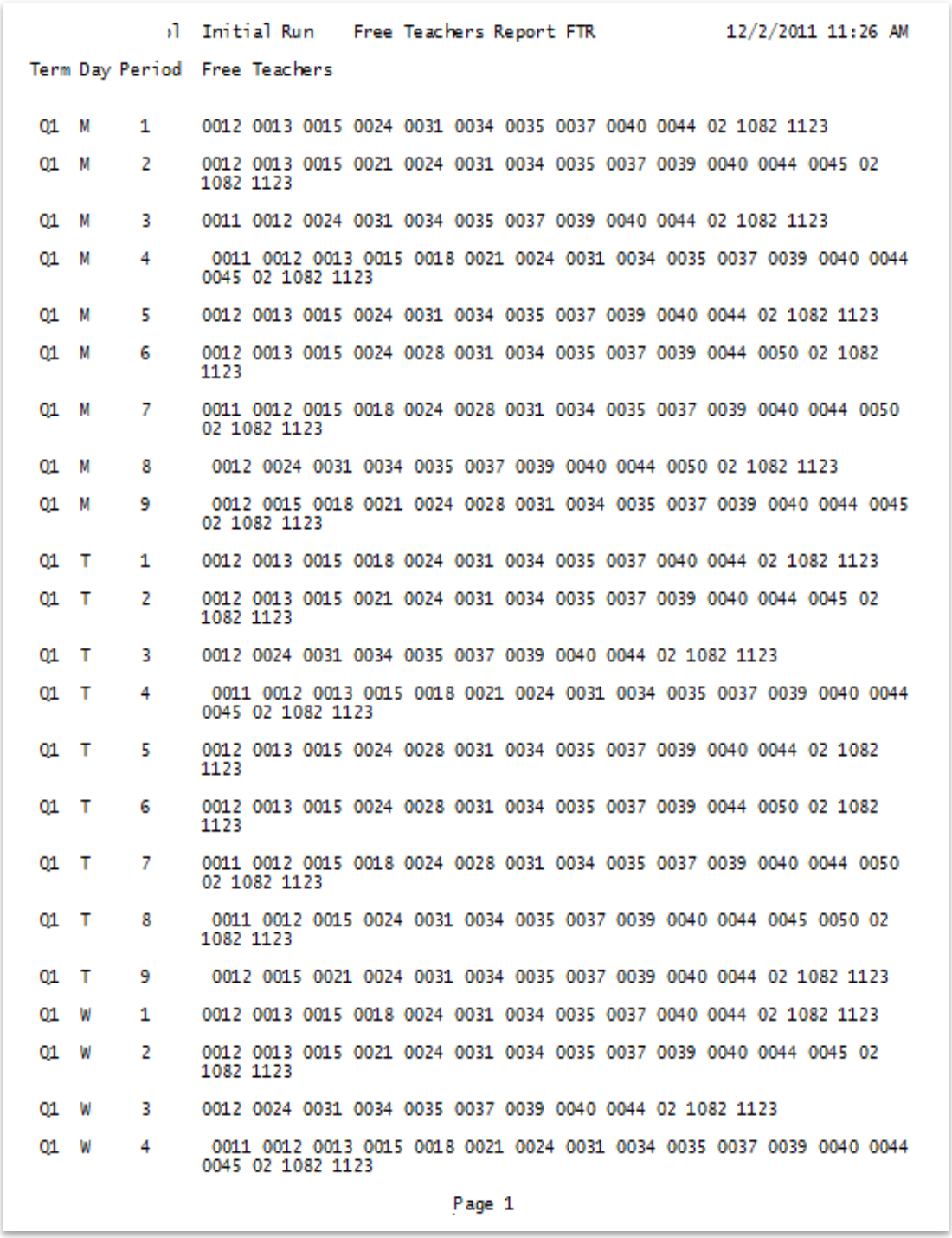
The purpose of the Free Teachers Report is to identify all teachers by teacher ID that do not have a section scheduled for the Term, Day, and Period indicated.

Term - Smallest terms as setup in the option set.

Day - Meeting Day

Period - Period of the day

***Badge Numbers** - Badge numbers of all of the teachers that are free during the listed term, period, and day.



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                 ıl  Initial Run    Free Teachers Report FTR            12/2/2011 11:26 AM

Term Day Period  Free Teachers

 Q1  M      1     0012 0013 0015 0024 0031 0034 0035 0037 0040 0044 02 1082 1123

 Q1  M      2     0012 0013 0015 0021 0024 0031 0034 0035 0037 0039 0040 0044 0045 02
                  1082 1123

 Q1  M      3     0011 0012 0024 0031 0034 0035 0037 0039 0040 0044 02 1082 1123

 Q1  M      4      0011 0012 0013 0015 0018 0021 0024 0031 0034 0035 0037 0039 0040 0044
                  0045 02 1082 1123

 Q1  M      5     0012 0013 0015 0024 0031 0034 0035 0037 0039 0040 0044 02 1082 1123

 Q1  M      6     0012 0013 0015 0024 0028 0031 0034 0035 0037 0039 0044 0050 02 1082
                  1123

 Q1  M      7     0011 0012 0015 0018 0024 0028 0031 0034 0035 0037 0039 0040 0044 0050
                  02 1082 1123

 Q1  M      8      0012 0024 0031 0034 0035 0037 0039 0040 0044 0050 02 1082 1123

 Q1  M      9      0012 0015 0018 0021 0024 0028 0031 0034 0035 0037 0039 0040 0044 0045
                  02 1082 1123

 Q1  T      1     0012 0013 0015 0018 0024 0031 0034 0035 0037 0040 0044 02 1082 1123

 Q1  T      2     0012 0013 0015 0021 0024 0031 0034 0035 0037 0039 0040 0044 0045 02
                  1082 1123

 Q1  T      3     0012 0024 0031 0034 0035 0037 0039 0040 0044 02 1082 1123

 Q1  T      4      0011 0012 0013 0015 0018 0021 0024 0031 0034 0035 0037 0039 0040 0044
                  0045 02 1082 1123

 Q1  T      5     0012 0013 0015 0024 0028 0031 0034 0035 0037 0039 0040 0044 02 1082
                  1123

 Q1  T      6     0012 0013 0015 0024 0028 0031 0034 0035 0037 0039 0044 0050 02 1082
                  1123

 Q1  T      7     0011 0012 0015 0018 0024 0028 0031 0034 0035 0037 0039 0040 0044 0050
                  02 1082 1123

 Q1  T      8      0011 0012 0015 0024 0031 0034 0035 0037 0039 0040 0044 0045 0050 02
                  1082 1123

 Q1  T      9      0012 0015 0021 0024 0031 0034 0035 0037 0039 0040 0044 02 1082 1123

 Q1  W      1     0012 0013 0015 0018 0024 0031 0034 0035 0037 0040 0044 02 1082 1123

 Q1  W      2     0012 0013 0015 0021 0024 0031 0034 0035 0037 0039 0040 0044 0045 02
                  1082 1123

 Q1  W      3     0012 0024 0031 0034 0035 0037 0039 0040 0044 02 1082 1123

 Q1  W      4      0011 0012 0013 0015 0018 0021 0024 0031 0034 0035 0037 0039 0040 0044
                  0045 02 1082 1123

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Figure 18.20 - Free Teachers Report

20 - Master Schedule Analysis Report

The purpose of the Master Schedule Analysis Report is to list the singleton, doubleton, and tripleton sections for each grade level. The grid displays each section (indicated by a reference code) and lists period, meeting day and term.

The report displays teacher, room, number of students enrolled, and section sequence number.

Grid - Displays a group of sections, which are indicated by a reference code, sorted by term, period, and meeting day.

Legend

Ref - The code used in the grid to represent the section.

Course –Sec - Course Id and Section number.

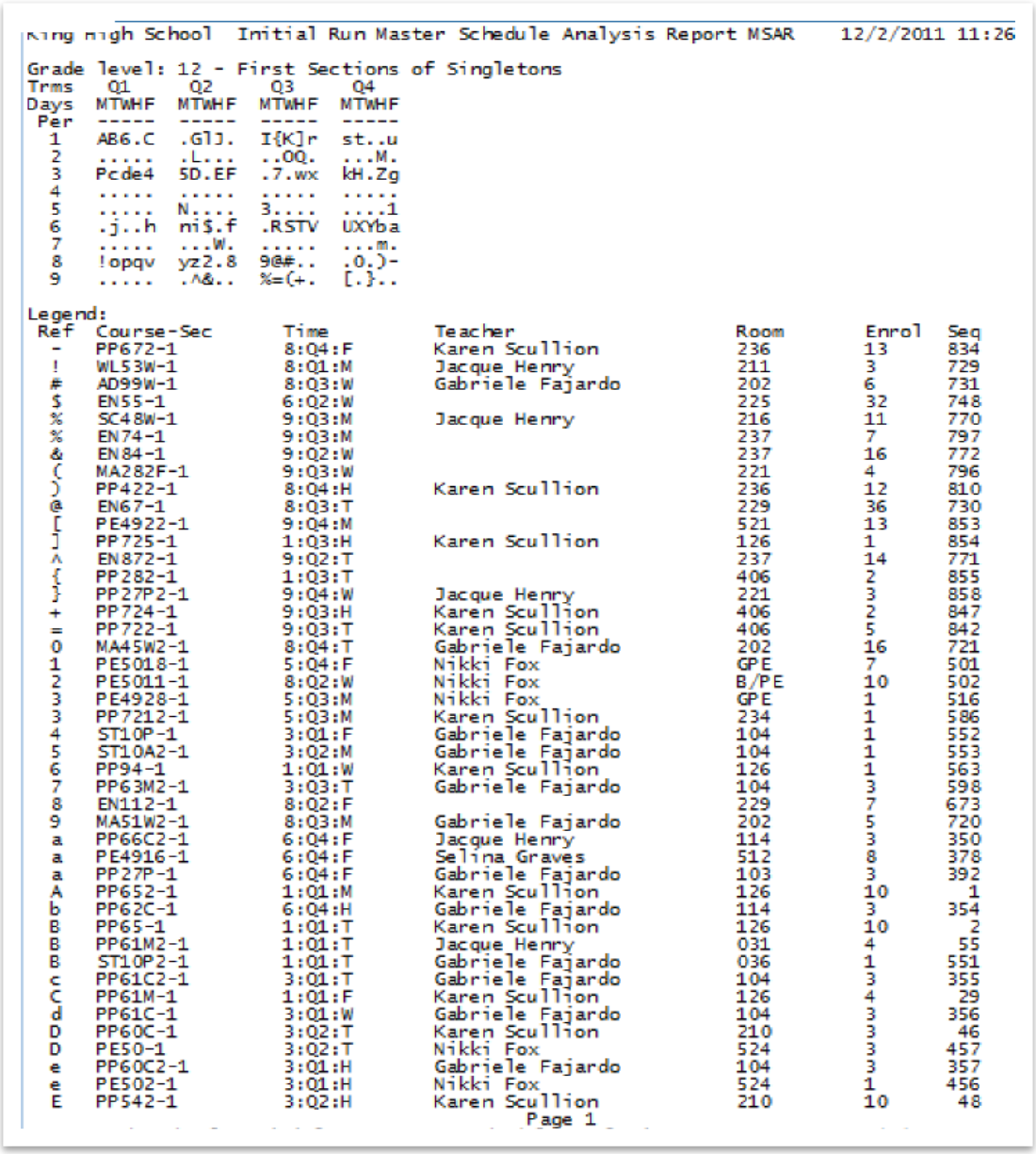
Time - Time the section meets. (Period:Term:Meeting Day)

Teacher - Teacher assigned to the section.

Room - Room number assigned to the section.

Enrol - Total number of students enrolled in the section.

Seq - Sequence number of the section (when it was created).



King High School Initial Run Master Schedule Analysis Report MSAR 12/2/2011 11:26

Grade level: 12 - First Sections of Singletons

Trms Days Per	Q1 MTWHF	Q2 MTWHF	Q3 MTWHF	Q4 MTWHF
1	AB6.C	.Gl].	I{K]r	st..u
2	.....	.L...	..OQ.	...M.
3	Pcde4	5D.EF	.7.wx	kH.Zg
4	.....	.....	.....	.....
5	.....	N....	3....	1
6	.j..h	ni$.f	.RSTV	UXYba
7	.....	...W.	.....	...m.
8	!opqv	yz2.8	9@#..	.0.)-
9	.....	.^&..	%=(+.	[.}..

Legend:

Ref	Course-Sec	Time	Teacher	Room	Enrol	Seq
-	PP672-1	8:Q4:F	Karen Scullion	236	13	834
!	WL53W-1	8:Q1:M	Jacque Henry	211	3	729
#	AD99W-1	8:Q3:W	Gabriele Fajardo	202	6	731
$	EN55-1	6:Q2:W		225	32	748
%	SC48W-1	9:Q3:M	Jacque Henry	216	11	770
%	EN74-1	9:Q3:M		237	7	797
&	EN84-1	9:Q2:W		237	16	772
(	MA282F-1	9:Q3:W		221	4	796
)	PP422-1	8:Q4:H	Karen Scullion	236	12	810
@	EN67-1	8:Q3:T		229	36	730
[	PE4922-1	9:Q4:M		521	13	853
]	PP725-1	1:Q3:H	Karen Scullion	126	1	854
^	EN872-1	9:Q2:T		237	14	771
{	PP282-1	1:Q3:T		406	2	855
}	PP27P2-1	9:Q4:W	Jacque Henry	221	3	858
+	PP724-1	9:Q3:H	Karen Scullion	406	2	847
=	PP722-1	9:Q3:T	Karen Scullion	406	5	842
0	MA45W2-1	8:Q4:T	Gabriele Fajardo	202	16	721
1	PE5018-1	5:Q4:F	Nikki Fox	GPE	7	501
2	PE5011-1	8:Q2:W	Nikki Fox	B/PE	10	502
3	PE4928-1	5:Q3:M	Nikki Fox	GPE	1	516
3	PP7212-1	5:Q3:M	Karen Scullion	234	1	586
4	ST10P-1	3:Q1:F	Gabriele Fajardo	104	1	552
5	ST10A2-1	3:Q2:M	Gabriele Fajardo	104	1	553
6	PP94-1	1:Q1:W	Karen Scullion	126	1	563
7	PP63M2-1	3:Q3:T	Gabriele Fajardo	104	3	598
8	EN112-1	8:Q2:F		229	7	673
9	MA51W2-1	8:Q3:M	Gabriele Fajardo	202	5	720
a	PP66C2-1	6:Q4:F	Jacque Henry	114	3	350
a	PE4916-1	6:Q4:F	Selina Graves	512	8	378
a	PP27P-1	6:Q4:F	Gabriele Fajardo	103	3	392
A	PP652-1	1:Q1:M	Karen Scullion	126	10	1
b	PP62C-1	6:Q4:H	Gabriele Fajardo	114	3	354
B	PP65-1	1:Q1:T	Karen Scullion	126	10	2
B	PP61M2-1	1:Q1:T	Jacque Henry	031	4	55
B	ST10P2-1	1:Q1:T	Gabriele Fajardo	036	1	551
c	PP61C2-1	3:Q1:T	Gabriele Fajardo	104	3	355
C	PP61M-1	1:Q1:F	Karen Scullion	126	4	29
d	PP61C-1	3:Q1:W	Gabriele Fajardo	104	3	356
D	PP60C-1	3:Q2:T	Karen Scullion	210	3	46
D	PE50-1	3:Q2:T	Nikki Fox	524	3	457
e	PP60C2-1	3:Q1:H	Gabriele Fajardo	104	3	357
e	PE502-1	3:Q1:H	Nikki Fox	524	1	456
E	PP542-1	3:Q2:H	Karen Scullion	210	10	48

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Figure 18.21 - Master Schedule Analysis Report

21 - Master Schedule Build Seq Report

The purpose of the Master Schedule Build Seq Report is to view the order in which the sections were created by the builder during the scheduling run.

The report lists all course sections. Each section shows the period, the meeting days, the term, the teacher, the room, the number enrolled, and breaks out the number of students enrolled by gender, grade level, and other student properties.

Build Seq - Sequence number

Course-Sec - Course ID and section#

Schedule

Per - Period

Term - Term

Days - Meeting Day

Resources

Teacher - Initials of the teacher assigned to the section.

Room - Room number assigned to the section.

Student Enrollments

Opt Size - Optimum size of the course section.

Max Size - Maximum size of the course section.

Total Enrol - Total number of students enrolled in that course section.

Gender Male Fem. - Total number of male/female students enrolled in that course section.

Grade Levels 09 10 11 12 - Total number of students in each grade enrolled in that course section.

King High School Initial Run Master Schedule Build Seq Report MSBSR
12/13/2012 2:12 PM

Build Seq	Course-Sec	Per	Term	Days	Teacher	Room	Opt Size	Max Size	Total Enrol	Gender Male	Gender Fem.	Grade Levels 09	10	11	12
1	CCEN-01	1	Q1	1	RD	280	40	50	30	16	14				
2	ALSI10-01	1	Q1	1	EP	No Room	10	10	10	5	5	4	4	2	
3	NC961-01	1	Q2	1	RD	No Room	30	40	2	1	1		1	1	
4	NC951-01	1	Q3	1	RD	No Room	30	40	22	11	11		3	8	11
5	NC941-01	1	Q4	1	RD	No Room	30	40	30	18	12			2	28
6	NC931-01	1	Q1	1	RD	SEM	30	40	28	13	15		2	15	11
7	NC921-01	1	Q2	1	SC	SEM	30	40	29	17	12			29	
8	NC911-01	1	Q3	1	SC	SEM	30	40	30	15	15			11	19
9	NC901-01	1	Q4	1	SC	SEM	30	40	29	17	12		3	26	
10	NC501-01	1	Q1	1	SC	SEM	30	40	22	12	10		6	10	6
11	NC401-01	1	Q2	1	MS	SEM	43	56	27	18	9		24	2	1
12	ST15-01	1	Q2	1	DE	280	30	40	22	11	11		3	8	11
13	ST102-01	1	Q3	1	DE	280	15	10	14	9	5		1	6	7
14	PA891-01	1	Q4	1	WR	280	23	26	22	17	5			21	1
15	AG99-01	2	Q1	1	CM	280	20	25	4	4			4		
16	AG311-01	2	Q2	1	CM	280	16	26	0						
17	AG252-01	2	Q3	1	CM	280	24	26	0						
18	AG251-01	2	Q4	1	CM	280	30	40	28	13	15		2	15	11
19	TS321-01	3	Q1	1	PW	280	30	30	0						
20	IT99-01	3	Q2	1	PW	280	10	15	4	4			4		
21	IT952-01	3	Q3	1	PW	280	26	28	0						
22	IT951-01	3	Q4	1	PW	280	30	40	28	13	15		2	15	11
23	IT931-01	3	Q1	1	PW	No Room	19	26	0						
24	IT73-01	3	Q2	1	CD	No Room	20	22	0						
25	IT51-01	3	Q3	1	CD	No Room	24	26	0						
26	IT35-01	3	Q4	1	CD	No Room	1	1	0						
27	IT34-01	3	Q1	1	CD	317	5	8	3	3			2	1	
28	IT33-01	3	Q2	1	PT	317	1	1	0						
29	RD702-01	4	Q1	1	CK	280	26	26	14	9	5		1	6	7
30	RD701-01	4	Q2	1	CK	280	26	26	0						
31	BE91-01	4	Q3	1	PW	280	30	40	30	15	15			11	19
32	BE74-01	4	Q4	1	PW	280	33	34	0						
33	BE53-01	4	Q1	1	PW	STU	30	40	28	13	15		2	15	11
34	BE51-01	4	Q2	1	PW	STU	22	30	0						
35	BE48-01	4	Q3	1	WR	STU	7	15	4	4			4		
36	BE39-01	4	Q4	1	WR	136	29	30	0						
37	PE99-01	1	Q2	1	RD	B/PE	5	5	3	3			2	1	

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King High School Initial Run Master Schedule Build Seq Report MSBSR
12/13/2012 2:12 PM

Figure 18.22 - Master Schedule Build Seq Report

22 - Master Schedule Report

The purpose of the Master Schedule Report is to view all of the sections for each course created by the builder during the schedule run, sorted by course.

Course-Sec - Course ID and section#

Build Seq - Sequence number

Schedule

Per - Period

Term - Term

Days - Meeting Day

Resources

Teacher - Initials of the teacher assigned to the section.

Room - Room number assigned to the section.

Student Enrollments

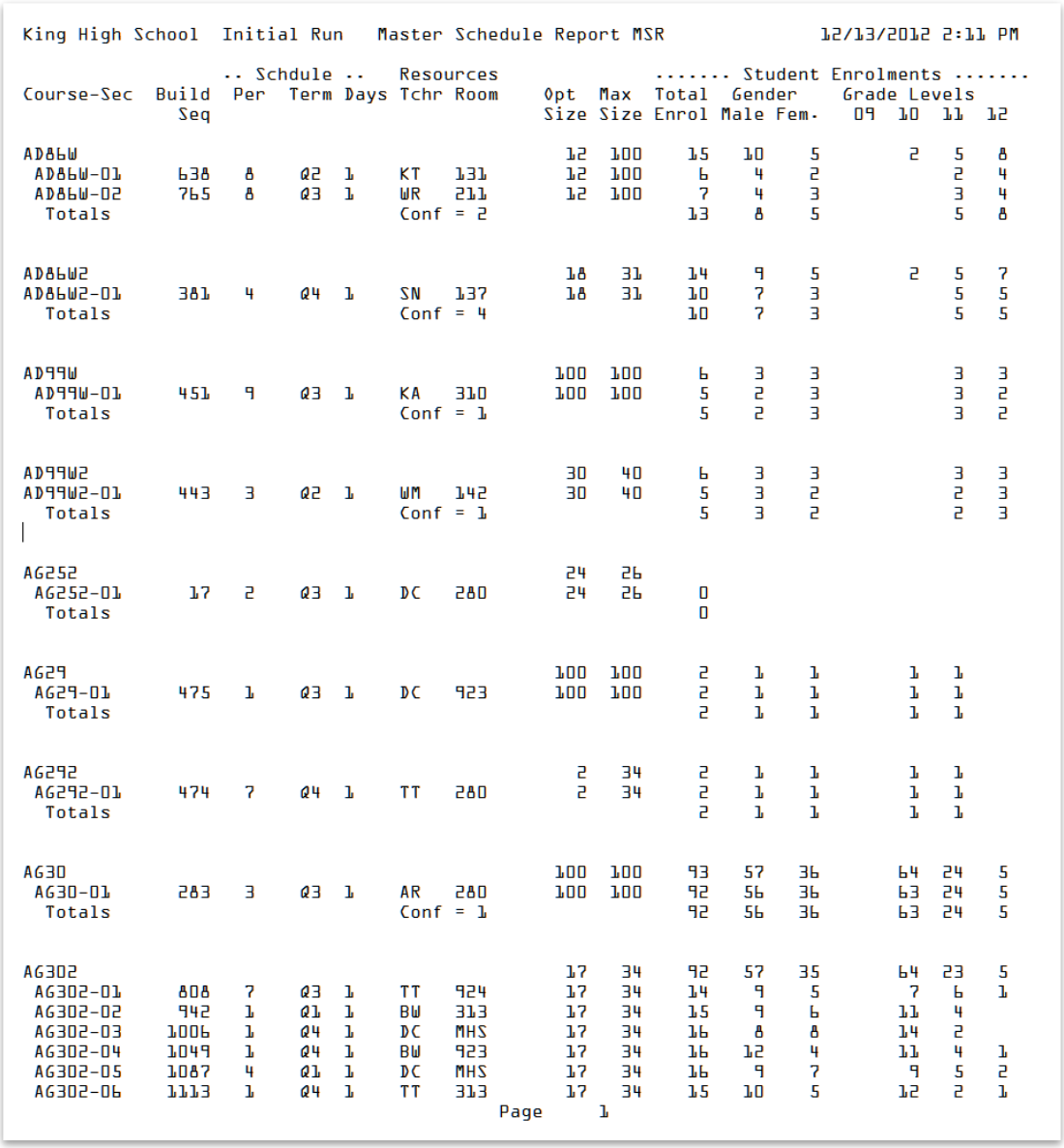
Opt Size - Optimum size of the course section.

Max Size - Maximum size of the course section.

Total Enrol - Total number of students enrolled in that course section.

Gender Male Fem. - Total number of male/female students enrolled in that course section.

Grade Levels 09 10 11 12 - Total number of students in each grade enrolled in that course section.



King High School Initial Run Master Schedule Report MSR 12/13/2012 2:11 PM

Course-Sec	Build Seq	.. Schdule .. Per	Term	Days	Resources Tchr	Room	Opt Size	Max Size	..... Student Enrolments ..... Total Enrol	Gender Male	Fem.	Grade Levels 09	10	11	12
AD86W							12	100	15	10	5	2	5	8	
AD86W-01	638	8	Q2	1	KT	131	12	100	6	4	2		2	4	
AD86W-02	765	8	Q3	1	WR	211	12	100	7	4	3		3	4	
Totals					Conf = 2				13	8	5		5	8	
AD86W2							18	31	14	9	5	2	5	7	
AD86W2-01	381	4	Q4	1	SN	137	18	31	10	7	3		5	5	
Totals					Conf = 4				10	7	3		5	5	
AD99W							100	100	6	3	3		3	3	
AD99W-01	451	9	Q3	1	KA	310	100	100	5	2	3		3	2	
Totals					Conf = 1				5	2	3		3	2	
AD99W2							30	40	6	3	3		3	3	
AD99W2-01	443	3	Q2	1	WM	142	30	40	5	3	2		2	3	
Totals					Conf = 1				5	3	2		2	3	
AG252							24	26							
AG252-01	17	2	Q3	1	DC	280	24	26	0						
Totals									0						
AG29							100	100	2	1	1	1	1		
AG29-01	475	1	Q3	1	DC	923	100	100	2	1	1	1	1		
Totals									2	1	1	1	1		
AG292							2	34	2	1	1	1	1		
AG292-01	474	7	Q4	1	TT	280	2	34	2	1	1	1	1		
Totals									2	1	1	1	1		
AG30							100	100	93	57	36	64	24	5	
AG30-01	283	3	Q3	1	AR	280	100	100	92	56	36	63	24	5	
Totals					Conf = 1				92	56	36	63	24	5	
AG302							17	34	92	57	35	64	23	5	
AG302-01	808	7	Q3	1	TT	924	17	34	14	9	5	7	6	1	
AG302-02	942	1	Q1	1	BW	313	17	34	15	9	6	11	4		
AG302-03	1006	1	Q4	1	DC	MHS	17	34	16	8	8	14	2		
AG302-04	1049	1	Q4	1	BW	923	17	34	16	12	4	11	4	1	
AG302-05	1087	4	Q1	1	DC	MHS	17	34	16	9	7	9	5	2	
AG302-06	1113	1	Q4	1	TT	313	17	34	15	10	5	12	2	1	

Page 1

Figure 18.23 - Master Schedule Report

23 - Master Schedule Sections Report

The purpose of the Master Schedule Sections Report is to view all the sections for each course created by the builder during the schedule run, sorted by course.

The Master Schedule Sections Report sorted alphabetically by section ID. Each section lists the sequence number, period, term, meeting days, teacher ID, room name, maximum course size, and total enrollments broken out by gender and grade level. It groups sections by course and shows totals for each course below the list of sections for the course.

Course-Sec - Course ID and section#

Build Seq - Sequence number

Schedule

Per - Period

Term - Term

Days - Meeting Day

Resources

Teacher - Initials of the teacher assigned to the section.

Room - Room number assigned to the section.

Student Enrollments

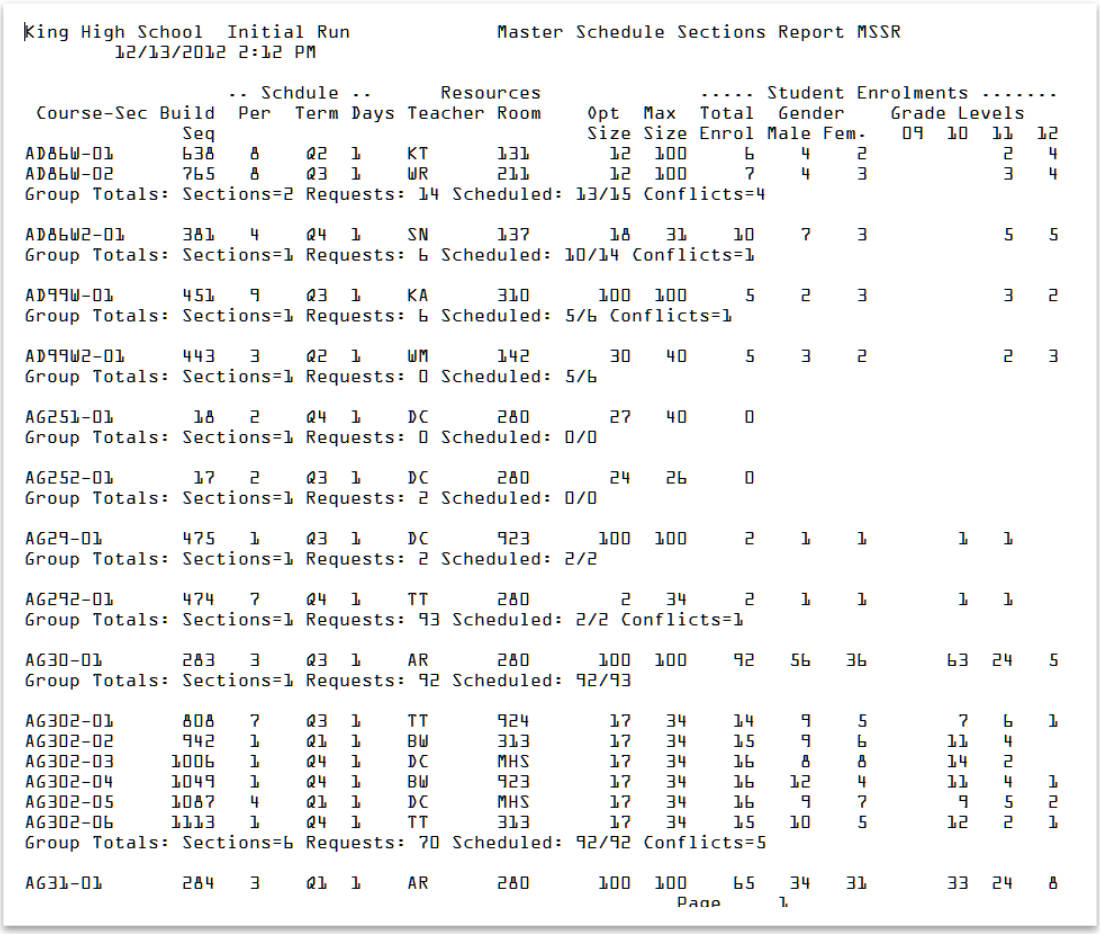
Opt Size - Optimum size of the course section.

Max Size - Maximum size of the course section.

Total Enrol - Total number of students enrolled in that course section.

Gender Male Fem. - Total number of male/female students enrolled in that course section.

Grade Levels 09 10 11 12 - Total number of students in each grade enrolled in that course section.



```
King High School  Initial Run              Master Schedule Sections Report MSSR
        12/13/2012 2:12 PM

                  .. Schdule ..      Resources              ..... Student Enrolments .......
 Course-Sec Build  Per  Term Days Teacher Room    Opt  Max  Total  Gender    Grade Levels
            Seq                                   Size Size Enrol Male Fem.   09  10  11  12
AD86W-01      638   8    Q2  1    KT      131       12  100     6    4    2            2   4
AD86W-02      765   8    Q3  1    WR      211       12  100     7    4    3            3   4
Group Totals: Sections=2 Requests: 14 Scheduled: 13/15 Conflicts=4

AD86W2-01     381   4    Q4  1    SN      137       18   31    10    7    3            5   5
Group Totals: Sections=1 Requests: 6 Scheduled: 10/14 Conflicts=1

AD99W-01      451   9    Q3  1    KA      310      100  100     5    2    3            3   2
Group Totals: Sections=1 Requests: 6 Scheduled: 5/6 Conflicts=1

AD99W2-01     443   3    Q2  1    WM      142       30   40     5    3    2            2   3
Group Totals: Sections=1 Requests: 0 Scheduled: 5/6

AG251-01       18   2    Q4  1    DC      280       27   40     0
Group Totals: Sections=1 Requests: 0 Scheduled: 0/0

AG252-01       17   2    Q3  1    DC      280       24   26     0
Group Totals: Sections=1 Requests: 2 Scheduled: 0/0

AG29-01       475   1    Q3  1    DC      923      100  100     2    1    1        1   1
Group Totals: Sections=1 Requests: 2 Scheduled: 2/2

AG292-01      474   7    Q4  1    TT      280        2   34     2    1    1        1   1
Group Totals: Sections=1 Requests: 93 Scheduled: 2/2 Conflicts=1

AG30-01       283   3    Q3  1    AR      280      100  100    92   56   36       63  24   5
Group Totals: Sections=1 Requests: 92 Scheduled: 92/93

AG302-01      808   7    Q3  1    TT      924       17   34    14    9    5        7   6   1
AG302-02      942   1    Q1  1    BW      313       17   34    15    9    6       11   4
AG302-03     1006   1    Q4  1    DC      MHS       17   34    16    8    8       14   2
AG302-04     1049   1    Q4  1    BW      923       17   34    16   12    4       11   4   1
AG302-05     1087   4    Q1  1    DC      MHS       17   34    16    9    7        9   5   2
AG302-06     1113   1    Q4  1    TT      313       17   34    15   10    5       12   2   1
Group Totals: Sections=6 Requests: 70 Scheduled: 92/92 Conflicts=5

AG31-01       284   3    Q1  1    AR      280      100  100    65   34   31       33  24   8
                                                                Page     1
```

Figure 18.24 - Master Schedule Sections Report

24 - Master Schedule Summary Report

The purpose of Master Schedule Summary Report is to give an overall view of what occurred during the entire scheduling run. This is one of the key reports that should be analyzed after each simulation run.

The Master Schedule Summary Report displays the statistics for each step of the builder process. The Builder section shows statistics relevant to the building process while the Loader-Resolver-Balancer section shows statistics related to scheduling students.

The two most important columns in this report are Required Percent and Scheduled Percent.

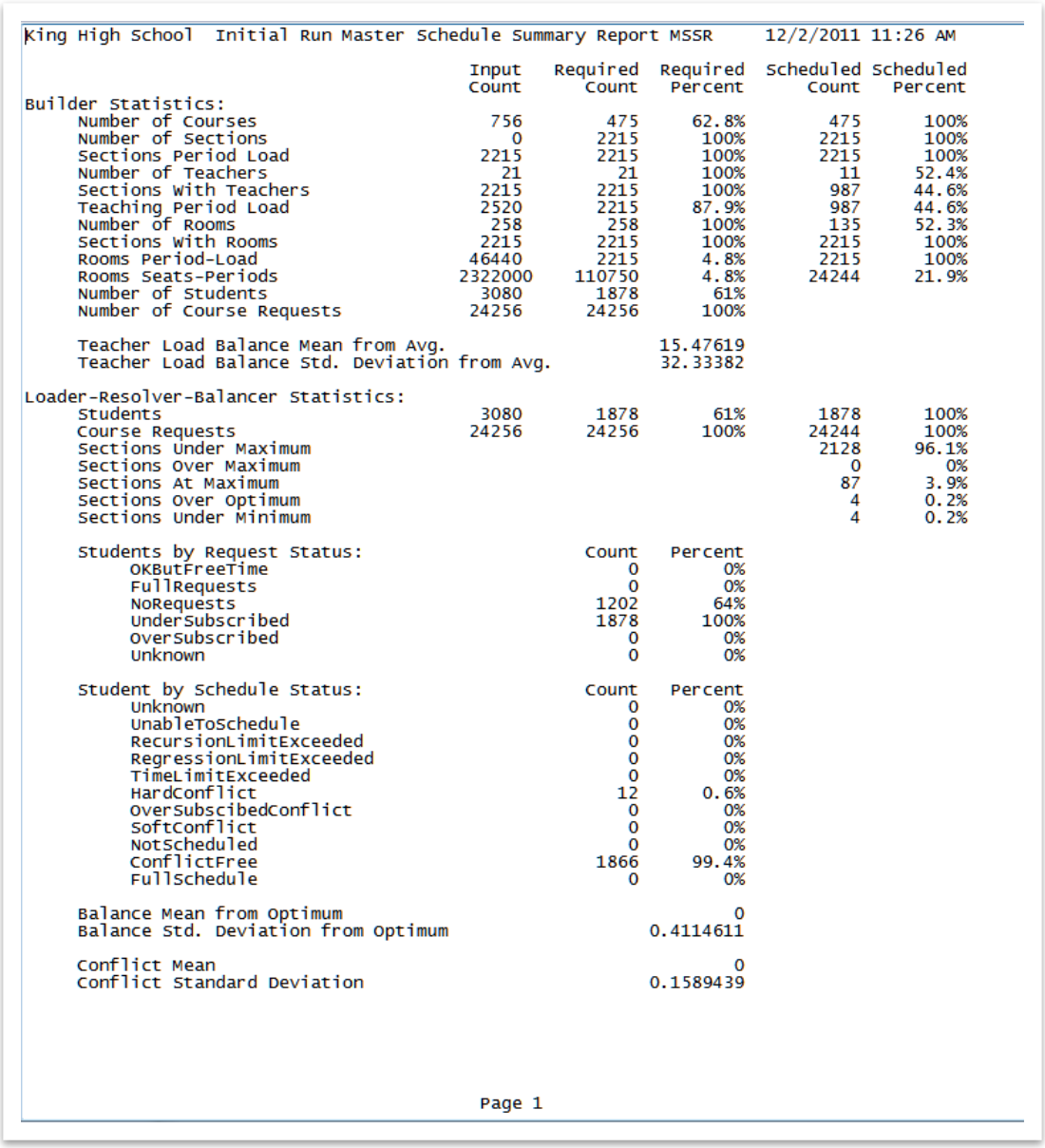
Input Count - The number of records seen by the Scheduler.

Required Count - The number of records processed by the system.

Required Percent - The percentage of records that were processed by the system.

Scheduled Count - The number of records scheduled by the system.

Scheduled Percent - The percentage of records scheduled by the system.



King High School Initial Run Master Schedule Summary Report MSSR 12/2/2011 11:26 AM

	Input Count	Required Count	Required Percent	Scheduled Count	Scheduled Percent
Builder Statistics:					
Number of Courses	756	475	62.8%	475	100%
Number of Sections	0	2215	100%	2215	100%
Sections Period Load	2215	2215	100%	2215	100%
Number of Teachers	21	21	100%	11	52.4%
Sections With Teachers	2215	2215	100%	987	44.6%
Teaching Period Load	2520	2215	87.9%	987	44.6%
Number of Rooms	258	258	100%	135	52.3%
Sections With Rooms	2215	2215	100%	2215	100%
Rooms Period-Load	46440	2215	4.8%	2215	100%
Rooms Seats-Periods	2322000	110750	4.8%	24244	21.9%
Number of Students	3080	1878	61%		
Number of Course Requests	24256	24256	100%		
Teacher Load Balance Mean from Avg.			15.47619		
Teacher Load Balance Std. Deviation from Avg.			32.33382		
Loader-Resolver-Balancer Statistics:					
Students	3080	1878	61%	1878	100%
Course Requests	24256	24256	100%	24244	100%
Sections Under Maximum				2128	96.1%
Sections Over Maximum				0	0%
Sections At Maximum				87	3.9%
Sections Over Optimum				4	0.2%
Sections Under Minimum				4	0.2%

Students by Request Status:	Count	Percent
OKButFreeTime	0	0%
FullRequests	0	0%
NoRequests	1202	64%
UnderSubscribed	1878	100%
OverSubscribed	0	0%
Unknown	0	0%

Student by Schedule Status:	Count	Percent
Unknown	0	0%
UnableToSchedule	0	0%
RecursionLimitExceeded	0	0%
RegressionLimitExceeded	0	0%
TimeLimitExceeded	0	0%
HardConflict	12	0.6%
OverSubscibedConflict	0	0%
SoftConflict	0	0%
NotScheduled	0	0%
ConflictFree	1866	99.4%
FullSchedule	0	0%

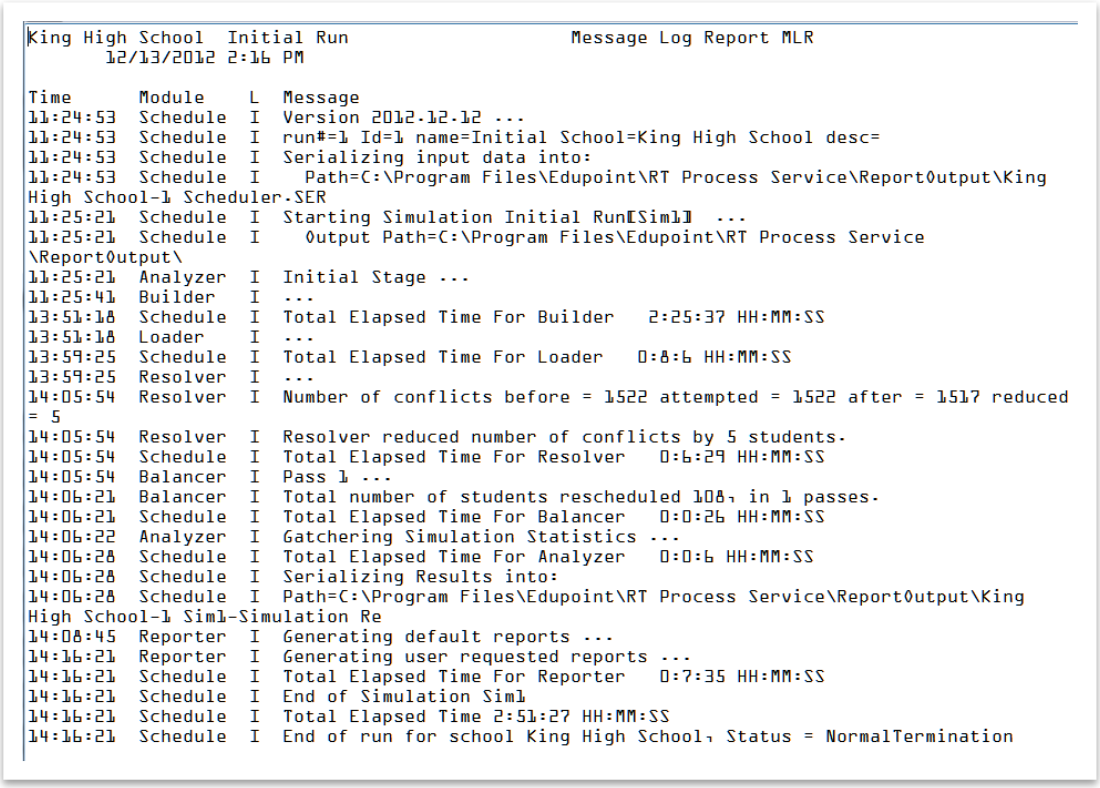
Balance Mean from Optimum	0
Balance Std. Deviation from Optimum	0.4114611
Conflict Mean	0
Conflict Standard Deviation	0.1589439

Page 1

Figure 18.25 - Master Schedule Summary Report

25 - Message Log Report

The Message Log Report lists all messages logged by the last run of the Master Schedule Builder.



```
King High School  Initial Run                    Message Log Report MLR
       12/13/2012 2:16 PM

Time      Module    L  Message
11:24:53  Schedule  I  Version 2012.12.12 ...
11:24:53  Schedule  I  run#=1 Id=1 name=Initial School=King High School desc=
11:24:53  Schedule  I  Serializing input data into:
11:24:53  Schedule  I    Path=C:\Program Files\Edupoint\RT Process Service\Report0utput\King
High School-1 Scheduler.SER
11:25:21  Schedule  I  Starting Simulation Initial Run[Sim1]  ...
11:25:21  Schedule  I    0utput Path=C:\Program Files\Edupoint\RT Process Service
\Report0utput\
11:25:21  Analyzer  I  Initial Stage ...
11:25:41  Builder   I  ...
13:51:18  Schedule  I  Total Elapsed Time For Builder   2:25:37 HH:MM:SS
13:51:18  Loader    I  ...
13:59:25  Schedule  I  Total Elapsed Time For Loader   0:8:6 HH:MM:SS
13:59:25  Resolver  I  ...
14:05:54  Resolver  I  Number of conflicts before = 1522 attempted = 1522 after = 1517 reduced
= 5
14:05:54  Resolver  I  Resolver reduced number of conflicts by 5 students.
14:05:54  Schedule  I  Total Elapsed Time For Resolver   0:6:29 HH:MM:SS
14:05:54  Balancer  I  Pass 1 ...
14:06:21  Balancer  I  Total number of students rescheduled 108, in 1 passes.
14:06:21  Schedule  I  Total Elapsed Time For Balancer   0:0:26 HH:MM:SS
14:06:22  Analyzer  I  Gatchering Simulation Statistics ...
14:06:28  Schedule  I  Total Elapsed Time For Analyzer   0:0:6 HH:MM:SS
14:06:28  Schedule  I  Serializing Results into:
14:06:28  Schedule  I  Path=C:\Program Files\Edupoint\RT Process Service\Report0utput\King
High School-1 Sim1-Simulation Re
14:08:45  Reporter  I  Generating default reports ...
14:16:21  Reporter  I  Generating user requested reports ...
14:16:21  Schedule  I  Total Elapsed Time For Reporter   0:7:35 HH:MM:SS
14:16:21  Schedule  I  End of Simulation Sim1
14:16:21  Schedule  I  Total Elapsed Time 2:51:27 HH:MM:SS
14:16:21  Schedule  I  End of run for school King High School, Status = NormalTermination
```

Figure 18.26 - Message Log Report

26 - Period-Load Stats Report

The purpose of the Period-Load Stats Report is to view the load statistics for each period in the scheduling grid.

The Period-Load Stats Report lists all periods for each term by grade level and overall. For each period, it lists the optimum number of students, the provisioned (possible) number of students, the actual number of students scheduled, and the number of sections for each meeting day.

Term - Term Code

Per - Period

Days - Meeting Day

Opt - Optimum number of students.

Prv - Provisioned number of students.

Act - Actual number of students scheduled.

NS - Number of sections held during the period.

Hope High School Initial Run Period-Load Stats Report PLSR 11/12/2013 5:54 PM
By Grade Level

Grade = 10 Students = 1046 Period Loads (R/E/G/O): 3159/3997/0/0 Target Load = 6156.75

		Day1: 1				Day2: 2				Day3: 3			
Term	Per	Opt	Prv	Act	NS	Opt	Prv	Act	NS	Opt	Prv	Act	NS
S1	1	103	119	120	3.3	103	91	88	2.3	103	116	111	2.8
	2	103	126	91	3.7	103	99	97	2.7	103	123	99	4.2
	3	103	110	103	3.3	103	123	109	5.5	103	89	79	3.7
	4	103	103	97	2.5	103	110	110	2.7	103	113	81	3.3
	5	103	89	81	3.8	103	141	133	3.5	103	146	139	3
	6	103	70	61	1.7	103	108	105	3.5	103	87	69	2.8
	7	103	119	98	3	103	123	115	3.5	103	113	72	3
	8	103	172	147	3.5	103	123	91	2.7	103	143	133	3.3
	9	103	150	153	3.3	103	158	141	3	103	161	159	3.5
	10	103	113	108	2.7	103	61	55	2.8	103	115	119	2.8
S2	1	103	99	96	3	103	104	100	4.3	103	116	106	3.7
	2	103	90	79	3	103	99	97	3	103	100	99	4.7
	3	103	118	90	4.7	103	153	156	5	103	128	89	5.7
	4	103	133	87	3.7	103	137	123	4	103	120	89	3
	5	103	159	135	3.3	103	88	79	3.5	103	162	124	4
	6	103	55	54	2.2	103	100	67	4.8	103	141	126	3.8
	7	103	133	104	3.5	103	145	147	3.7	103	142	108	3.3
	8	103	165	171	3.8	103	133	141	3.5	103	122	119	3
	9	103	138	144	3.3	103	153	152	3.2	103	132	126	3
	10	103	68	64	1.7	103	62	60	2.8	103	151	150	3.2

Figure 18.27 - Period Load Stats Report

27 - Room Schedule Report

The purpose of the Room Schedule Report is to display the schedule for each room.

The Room Schedule Report lists room by name. Each room lists the sections for that room in the legend. For each section in the legend, it shows the section ID, period, term, meeting days, teacher, the number of students enrolled, and the section sequence number. Above displays a grid that indicates, through listing the reference code for the section, the period and meeting day for each section by term.

Room - Room number and Name

Category - Subject Category Code

Opt. Capacity - Optimum Capacity

Max. Capacity - Maximum Capacity

Grid - Displays a group of sections, which are indicated by a reference code, sorted by term, period, and meeting day.

Legend

Ref - The code used in the grid to represent the section.

Course–Sec - Course Id and Section number.

Per - Period the section meets.

Term - Term the section meets.

Days - Meeting day(s) the section meets.

Teacher - Teacher assigned to the section.

Enrol - Total number of students enrolled in the section.

Seq - Sequence number of the section (when it was created).

Summary

Avail Load - Maximum number of periods for which the room can be scheduled.

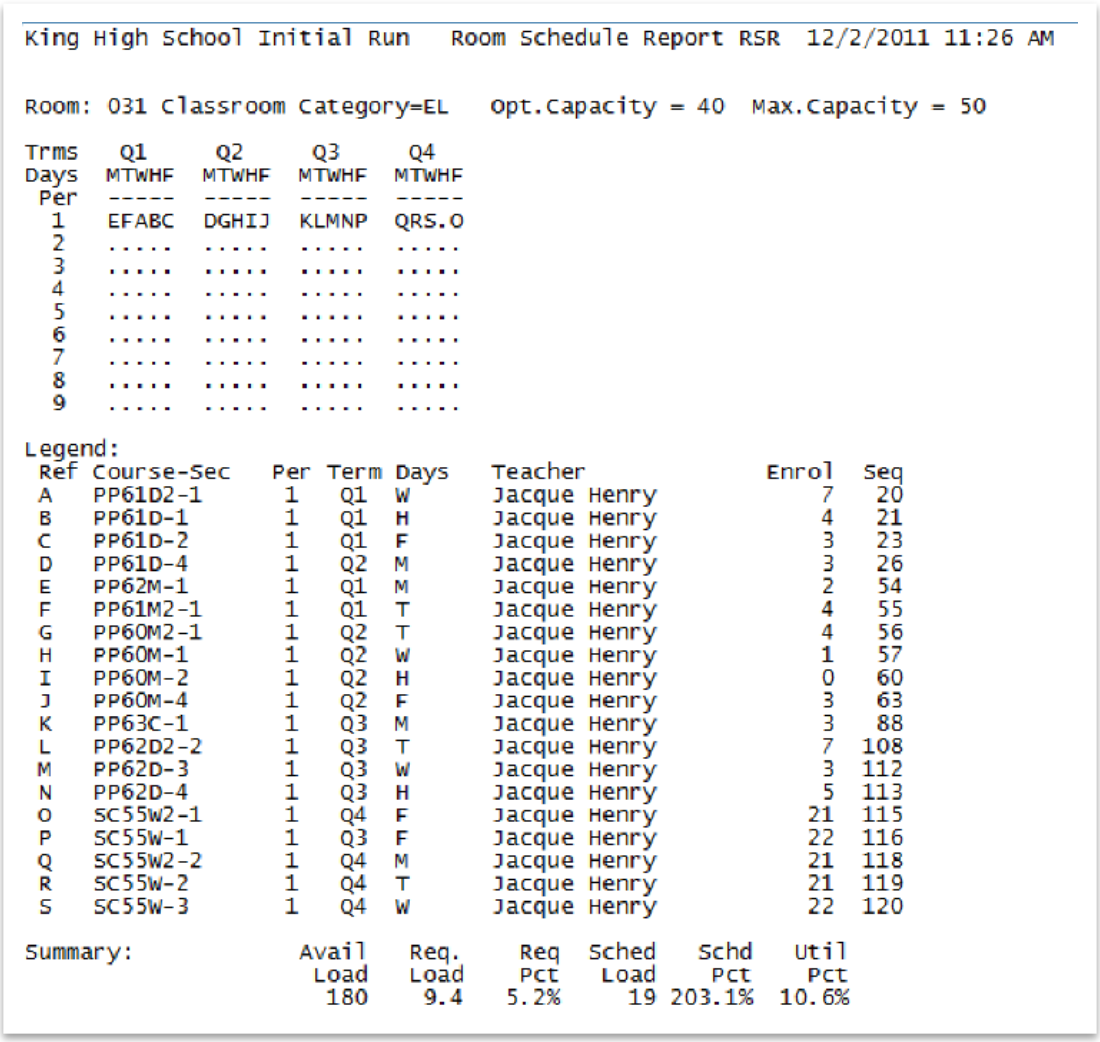
Req. Load - Requested average number of periods for the room to be scheduled for the course.

Req Pct - Percentage of above relative to the room's available number of periods.

Sched Load - Scheduled number of periods for the room.

Sched Pct - Percentage of scheduled periods for the room relative to average.

Util Pct - Percentage of room utilized.



King High School Initial Run Room Schedule Report RSR 12/2/2011 11:26 AM

Room: 031 Classroom Category=EL Opt.Capacity = 40 Max.Capacity = 50

Trms	Q1	Q2	Q3	Q4
Days	MTWHF	MTWHF	MTWHF	MTWHF
Per				
1	EFABC	DGHIJ	KLMNP	QRS.O
2	.....	.....	.....	.....
3	.....	.....	.....	.....
4	.....	.....	.....	.....
5	.....	.....	.....	.....
6	.....	.....	.....	.....
7	.....	.....	.....	.....
8	.....	.....	.....	.....
9	.....	.....	.....	.....

Legend:

Ref	Course-Sec	Per	Term	Days	Teacher	Enrol	Seq
A	PP61D2-1	1	Q1	W	Jacque Henry	7	20
B	PP61D-1	1	Q1	H	Jacque Henry	4	21
C	PP61D-2	1	Q1	F	Jacque Henry	3	23
D	PP61D-4	1	Q2	M	Jacque Henry	3	26
E	PP62M-1	1	Q1	M	Jacque Henry	2	54
F	PP61M2-1	1	Q1	T	Jacque Henry	4	55
G	PP60M2-1	1	Q2	T	Jacque Henry	4	56
H	PP60M-1	1	Q2	W	Jacque Henry	1	57
I	PP60M-2	1	Q2	H	Jacque Henry	0	60
J	PP60M-4	1	Q2	F	Jacque Henry	3	63
K	PP63C-1	1	Q3	M	Jacque Henry	3	88
L	PP62D2-2	1	Q3	T	Jacque Henry	7	108
M	PP62D-3	1	Q3	W	Jacque Henry	3	112
N	PP62D-4	1	Q3	H	Jacque Henry	5	113
O	SC55W2-1	1	Q4	F	Jacque Henry	21	115
P	SC55W-1	1	Q3	F	Jacque Henry	22	116
Q	SC55W2-2	1	Q4	M	Jacque Henry	21	118
R	SC55W-2	1	Q4	T	Jacque Henry	21	119
S	SC55W-3	1	Q4	W	Jacque Henry	22	120

Summary:

Avail Load	Req. Load	Req Pct	Sched Load	Schd Pct	Util Pct
180	9.4	5.2%	19	203.1%	10.6%

Figure 18.28 - Room Schedule Report

28 - Room Utilization Report

The purpose of Room Utilization Report is to display the percentage of time rooms are being utilized in the schedule.

The Room Utilization Report lists all rooms by name, and shows the available period load, requested period load, the requested period load percentage, the scheduled period load, the scheduled period load percentage, and the room utilization percentage.

Room Id - Room Number

Room Type - Type of room. Example regular classroom, gym, cafeteria, labs, etc. Cafeteria type rooms need to be set up in one or more of the following situations:

1) System is to handle lunch (lunch is defined for the school.

2) Multiple cafeteria/lunch rooms exist.

3) Lunch type courses are present.

4) Different student groups need to be scheduled during different periods.

5) Lunch type courses are assigned to students, or system is requested to auto-generate lunch requests based on some criteria i.e. grade level, term, etc.

Tchrs Pref Count - Number of teachers requesting the room as their preferred room. If more than one teacher is requesting the same room, as their preferred room, then the room may be shared between those teachers. It is desirable to have no more than one teacher to ask for the same room as their preferred room.

Maximum Capacity Seats - Maximum capacity or number of seats is the maximum number of students that can be scheduled in the room. If this maximum is observed, then sections with optimum section size greater than the capacity may not be scheduled in this room. Note that this maximum is different from section/class maximum size. MSB tries to find a room that meets each course and section's requirements. Normally both, capacity and section maximums should be observed during the final runs.

Avail Period Load - Available number of periods for which the room can be scheduled. By default, all rooms are available for the entire grid. Rules, such as Time Constraints, will reduce the availability. Time Constraints are usually used to reserve the room for other purposes. An example of that would be a regularly scheduled departmental meeting on certain periods (within the scheduling grid).

Req Period Load - Requested/Required period load is calculated by the system. This is the average period load for all courses that can possibly be scheduled in the room.

Sched Period Load - Actual scheduled periods for the room.

Req Load/ Avail% - This is a percentage of requested period loads over the available/maximum period load.

Sched Load/Req% - Percentage of scheduled period load over requested/avg periods. 100% means all requests were met. A value less than 100% means that some sections were not scheduled with rooms, as expected.

Util Sched/Avail% - Percentage of overall utilization. This number is computed by dividing the scheduled period load by the total/maximum available load. It may be under 100% for classrooms, especially if lunch is scheduled by the system (that is because most classrooms would be empty during lunch hours).

King High School Initial Run Room Utilization Report RUR 12/13/2012 2:12 PM

Room Id	Room Type	Tchrs Pref Count	Maximum Capacity Seats	Avail Period Load	Req Perio Load	Sched Period Load	Req Load/ Avail%	Sched Load/ Req%	Util Sched/ Avail%
031	Default		50	36	5	8	14%	159%	22.2%
033	Default		50	36	1.9	3	5.1%	162%	8.3%
034	Default		50	36	2.2	3	6.1%	137.3%	8.3%
035	Default		50	36	2.2	4	6.1%	183.1%	11.1%
036	Default		50	36	5	6	14%	119.2%	16.7%
039	Default		50	36	2.2	3	6.1%	137.3%	8.3%
040	Default		50	36	2.2	3	6.1%	137.3%	8.3%
041	Default		50	36	2.2	3	6.1%	137.3%	8.3%
042	Default		50	36	1.9	1	5.1%	54%	2.8%
043	Default		50	36	2.2	3	6.1%	137.3%	8.3%
044	Default		50	36	3.2	4	8.8%	125.8%	11.1%
050	Default		50	36	7.9	10	22.1%	125.8%	27.8%
051	Default		50	36	4.4	4	12.2%	90.8%	11.1%
052	Default		50	36	2.8	4	7.9%	140.5%	11.1%
053	Default		50	36	4.4	4	12.2%	90.8%	11.1%
054	Default		50	36	2.8	4	7.9%	140.5%	11.1%
055	Default		50	36	3.2	4	8.8%	125.8%	11.1%
056	Default		50	36	4.4	7	12.2%	158.9%	19.4%
100	Default		50	36	23.5	25	65.4%	106.2%	69.4%
100	Default		50	36	23.5	19	65.4%	80.7%	52.8%
101	Default		50	36	9.8	11	27.1%	112.7%	30.6%
101	Default		50	36	9.8	7	27.1%	71.7%	19.4%
102	Default		50	36	5.6	5	15.4%	90%	13.9%
102	Default		50	36	5.6	7	15.4%	126%	19.4%
103	Default		50	36	4.8	8	13.3%	166.8%	22.2%
103	Default		50	36	4.8	7	13.3%	146%	19.4%
104	Default		50	36	5.3	5	14.8%	93.9%	13.9%
105	Default		50	36	7.9	12	22.1%	151%	33.3%
105	Default		50	36	7.9	9	22.1%	113.3%	25%
106	Default		50	36	5.1	8	14.2%	156.8%	22.2%
108	Default		50	36	2.5	3	6.9%	121%	8.3%
110	Default		50	36	2.5	3	6.9%	121%	8.3%
111	Default		50	36	3	4	8.2%	135.4%	11.1%
112	Default		50	36	3.8	4	10.6%	104.9%	11.1%
112	Default		50	36	3.8	4	10.6%	104.9%	11.1%
113	Default		50	36	2.1	4	6%	186.4%	11.1%
114	Default		50	36	5.3	6	14.8%	112.6%	16.7%
116	Default		50	36	2.5	4	6.9%	161.3%	11.1%
119	Default		50	36	5.1	7	14.2%	137.2%	19.4%
120	Default		50	36	5.3	6	14.8%	112.6%	16.7%
121	Default		50	36	7.2	9	20.1%	124.2%	25%
121	Default		50	36	7.2	8	20.1%	110.4%	22.2%
123	Default		50	36	5.3	6	14.8%	112.6%	16.7%
123	Default		50	36	5.3	6	14.8%	112.6%	16.7%

Page 1

Figure 18.29 - Room Utilization Report

29 - Rules Report

The purpose of the Rules Report is to list all of rules applied during the scheduling run.

The Rules Report lists all rules set for the simulation.

Level - Category Level (School, Category, Course, etc.)

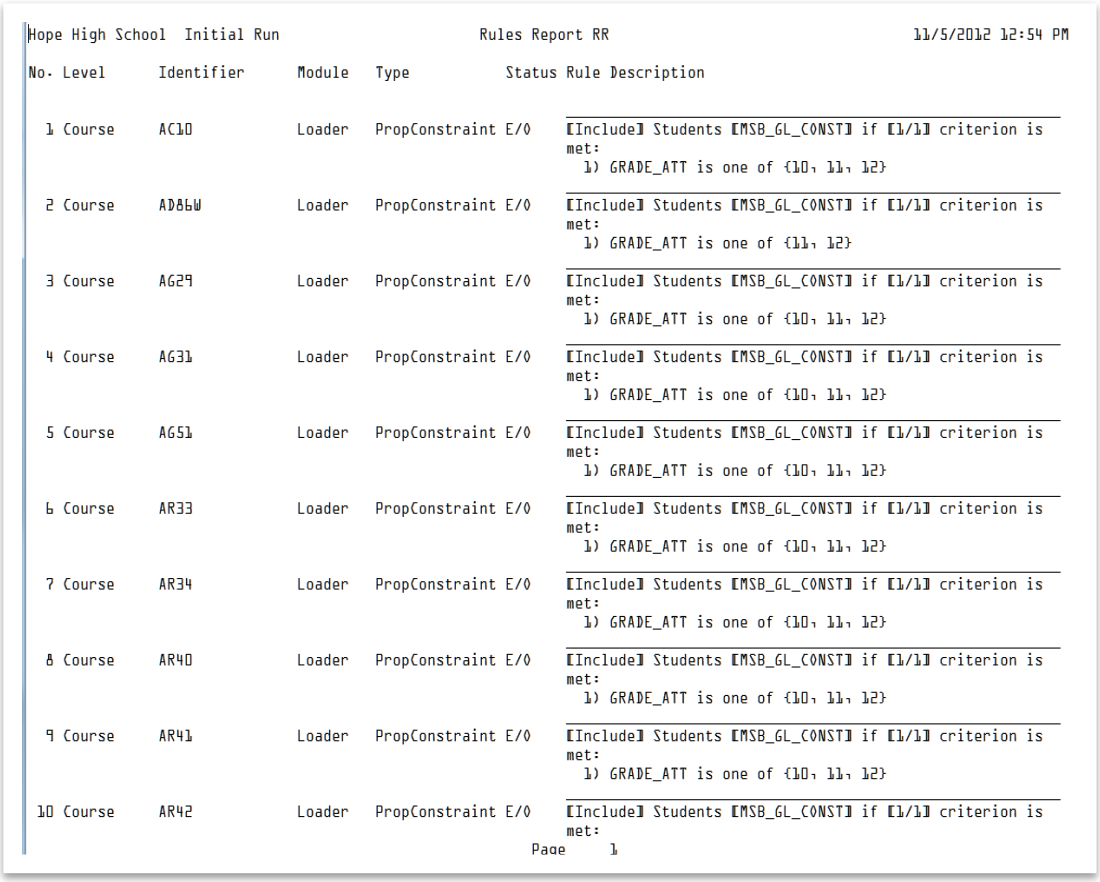
Identifier - Course ID number(s)

Module - The part the scheduler to which the rule was applied. (i.e. Builder, Loader, etc.)

Type - The type of rule that was applied. (i.e. Link, Section Attributes)

Status - *

Rule Description - A description of the rule that was applied, including which sections it applied to if applicable.



Hope High School Initial Run Rules Report RR 11/5/2012 12:54 PM

No.	Level	Identifier	Module	Type	Status	Rule Description
1	Course	AC10	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met: 1) GRADE_ATT is one of {10, 11, 12}
2	Course	AD86W	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met: 1) GRADE_ATT is one of {11, 12}
3	Course	AG29	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met: 1) GRADE_ATT is one of {10, 11, 12}
4	Course	AG31	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met: 1) GRADE_ATT is one of {10, 11, 12}
5	Course	AG51	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met: 1) GRADE_ATT is one of {10, 11, 12}
6	Course	AR33	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met: 1) GRADE_ATT is one of {10, 11, 12}
7	Course	AR34	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met: 1) GRADE_ATT is one of {10, 11, 12}
8	Course	AR40	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met: 1) GRADE_ATT is one of {10, 11, 12}
9	Course	AR41	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met: 1) GRADE_ATT is one of {10, 11, 12}
10	Course	AR42	Loader	PropConstraint	E/0	[Include] Students [MSB_GL_CONST] if [1/1] criterion is met:

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Figure 18.30 - Rules Report

30 - Sections Scheduled Time Analysis Report

The purpose of the Sections Scheduled Time Analysis Report is to list each section and each possible time pattern (Period:Term:MeetingDay) that it can be scheduled.

The Sections Scheduled Time Analysis Report lists each section, and for each section lists each possible time pattern (Period:Term:Meeting Day), the fit factor for the time pattern, the student factor for the time pattern, the period load factor, the teacher factor, room factor, and rank.

Time Pattern - (Period:Term:MeetingDay)

Fit Factor - Fit Factor is computed by the system. It measures how well this pattern fits other patterns For example patterns that conflict with lunch sections will show higher numbers. A time pattern that forms a horizontal block (same period, but on different days) with other patterns show lower numbers (good). An asterisk (*) beside this number indicates that the time pattern overlaps with mapped sections and was not chosen. A question mark(?) beside this number indicates that the time pattern overlaps with mapped sections, but was chosen. a relative number measuring how well this structure fits other structures.

Student Factor - Student Factor is a number representing availability of the pattern for the relevant student groups. For example, any pattern that conflicts with a previously built singleton sections shows high numbers, especially if many students are requesting the course. In other words, it measures the probability of the number students that may end up in conflict, should the pattern be chosen for the section.

NOTE - Although the Builder does not really schedule students, it keeps track of their availability, by group, using an internally constructed Conflict Matrix (please refer to 'Course Req Conflict Mtx Report (CRCMR)' for more details.

P. Load Factor - Period Load Factor is a function of number of students already allocated to the periods in the pattern. In general, MSB tries to balance number of students scheduled for each period in the grid by grade level as well as totals for the school. The result of this factor, and how well it worked, could be verified by the 'Period-Load Stats Report (PLSR)' For example if you have 1000 students in your school and expect a full schedule for every student, then the optimum number of students expected to be scheduled in each period is 1000. The patterns that cause this number to go over the 1000 optimum, for any periods in the pattern, are penalized, and show a much larger number. The Builder tries to avoid patterns with large numbers, as it builds each section. An asterisk (*) besides the number indicates that at least one period would be overloaded, if the pattern were chosen. A question mark (?) besides the number indicates that at least one period was overloaded and the pattern was chosen.

Teacher Factor - Teacher Factor is computed based on the availability of teachers, for the pattern. The more teachers are available the smaller this number will be. An asterisk (*) besides the number indicates that no teacher is available for the pattern. MSB avoids patterns that no teacher is available, unless it is forced to.

NOTE - Teachers' availability is automatically adjusted for variables, such as, lunch allowance, Time Constraints, optimums/maximums, etc.

An asterisk(*) beside this number indicates that no teacher was available for the time pattern.

Room Factor - Room Factor is computed based on the availability of rooms for the pattern (similar to Teacher Factor). An asterisk(*) beside this number indicates that no room was available for the time pattern.

Composite Rank - Composite Rank is computed by a formula based on all the factors explained above. This is the number, ultimately, the Builder uses to choose a pattern, unless some rules alter its decision. The Builder chooses the time pattern with the lowest Composite Rank. Three asterisks (***) to the right of the number, indicates the pattern chosen with available resources. Less than 3 asterisks, indicates inability to find resources for the section, but scheduled it where students and/or resource were available. No asterisk beside the Rand indicates that the pattern was not selected (rejected). MSB always chooses a pattern, unless some rules or constraints instruct it to do otherwise.

King High School Initial Run Sections Scheduled Time Analysis Report SSTAR 12/13/2012 2:12 PM
CCEN-01/1 (1) SchedPrio = Medium

#	Time Pattern	Fit Factor	Student Factor	P.Load Factor	Teacher Factor	Room Factor	Resource Factor	Composite Rank	
1	1:Q1:1	456	49	110	337	453	1?	375760420864	***
2	2:Q1:1	456	49	110	337	453	1*	375760420864	
3	3:Q1:1	456	49	110	337	453	1*	375760420864	
4	4:Q1:1	456	49	110	337	453	1*	375760420864	
5	5:Q1:1	456	49	110	337	453	1*	375760420864	
6	6:Q1:1	456	49	110	337	453	1*	375760420864	
7	7:Q1:1	456	49	110	337	453	1*	375760420864	
8	8:Q1:1	456	49	110	337	453	1*	375760420864	
9	9:Q1:1	456	49	110	337	453	1*	375760420864	
10	1:Q2:1	456	49	110	337	453	1*	375760420864	
11	2:Q2:1	456	49	110	337	453	1*	375760420864	
12	3:Q2:1	456	49	110	337	453	1*	375760420864	
13	4:Q2:1	456	49	110	337	453	1*	375760420864	
14	5:Q2:1	456	49	110	337	453	1*	375760420864	
15	6:Q2:1	456	49	110	337	453	1*	375760420864	
16	7:Q2:1	456	49	110	337	453	1*	375760420864	
17	8:Q2:1	456	49	110	337	453	1*	375760420864	
18	9:Q2:1	456	49	110	337	453	1*	375760420864	
19	1:Q3:1	456	49	110	337	453	1*	375760420864	
20	2:Q3:1	456	49	110	337	453	1*	375760420864	
21	3:Q3:1	456	49	110	337	453	1*	375760420864	
22	4:Q3:1	456	49	110	337	453	1*	375760420864	
23	5:Q3:1	456	49	110	337	453	1*	375760420864	
24	6:Q3:1	456	49	110	337	453	1*	375760420864	
25	7:Q3:1	456	49	110	337	453	1*	375760420864	
26	8:Q3:1	456	49	110	337	453	1*	375760420864	
27	9:Q3:1	456	49	110	337	453	1*	375760420864	
28	1:Q4:1	456	49	110	337	453	1*	375760420864	
29	2:Q4:1	456	49	110	337	453	1*	375760420864	
30	3:Q4:1	456	49	110	337	453	1*	375760420864	
31	4:Q4:1	456	49	110	337	453	1*	375760420864	
32	5:Q4:1	456	49	110	337	453	1*	375760420864	
33	6:Q4:1	456	49	110	337	453	1*	375760420864	
34	7:Q4:1	456	49	110	337	453	1*	375760420864	

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Figure 18.31 - Sections Schedule Time Analysis Report

31 - Sections Scheduled-Seq Report

The purpose of the Sections Scheduled-Seq Report is to list all the sections in the sequence they were scheduled with the time analysis information for each.

The Sections Scheduled-Seq Report lists all sections by sequence number. Each section lists the time structure used for the section, the number of sections, the general load factor, time factor, teacher factor, room factor, student factor, course-link factor, pattern choice, and composite rank.

Seq - Sequence number of the section, in what order it was created.

Course-Sec - Course ID and section number

Time Struct - Number of periods, times the number of terms, times the number of meeting days. For example, courses that have one period and are scheduled for only one term, and use one meeting day would have a structure of 1x1x1.

# of Sec. - Total number of sections for that course.

Grade Factor - Grade Factor is a computed number based on the grade level to which the course/section is offered. The higher grades are given a higher priority by default, unless altered by the simulation rule(s). Lower number represents higher priority.

Time Factor - Time structure of the section, represented by PxTxD, where 'P' is the number of periods, 'T' is the number of terms, and 'D' is the number of days for each section/class.

Teacher Factor - Teacher Factor is computed based on number of teachers and their availability. The lower the number the more difficult it is to find teachers for the section.

Room Factor - Room Factor (similar to above). Sections with less room choices, like labs or gym show lower numbers. The lower the number the more difficult it is to find rooms for the section.

Student Factor - Student Factor is computed based on number of students requesting the course and the conflict matrix. Popular courses, especially if requests come from different grades, will show lower numbers. The lower the number the more difficult it is to build the section.

Crs-Link Factor - Course-Link Factor is computed when the section is involved in a pair or more linked courses. The lower the number the more difficult it is to build the section.

Pattern Choice - Two numbers are shown with a slash '/' between them. Available time patterns are ranked based on the quality and overall fitness for students. The first choice is shown as '1', and the 2nd choice as '2', etc.. The 2nd number (after the /) is the total number of available patterns for the section. However if resources are not available for the 1st choice, then the Builder may choose 2nd, 3rd, choice. Lower numbered choices, usually, results in lower number of conflict students.

Composite Rank - Composite Rank, an overall number computed based on all the factors. This is the number that determines the order the section is built ('Seq' column). The lower the number the more difficult it is to build. A letter 'F' or 'P' may follow the Rank number, indicating a Frozen or a Prescheduled section.

King High School Initial Run Sections Scheduled-Seq Report SSSR 12/13/2012 2:12 PM

Seq	Course-Sec	Time Struct	# of Sec.	Sched Prio	Grade Factor	Time Factor	Teacher Factor	Room Factor	Student Factor	Crs-Link Factor	Pattern Choice	Composite Rank
1	CCEN-01	1x1x1	1	41	3	5567	39	2	2	100	1/36	10681960
2	ALSI10-01	1x1x1	1	41	3	5567	48	3	2	100	1/36	19720540
3	NC961-01	1x1x1	1	41	3	5567	20	13	2	100	1/36	35606531
4	NC951-01	1x1x1	1	41	3	5567	20	13	2	100	1/36	35606531
5	NC941-01	1x1x1	1	41	3	5567	20	13	2	100	1/36	35606531
6	NC931-01	1x1x1	1	41	3	5567	20	13	2	100	1/36	35606531
7	NC921-01	1x1x1	1	41	3	5567	20	13	2	100	1/36	35606531
8	NC911-01	1x1x1	1	41	3	5567	20	13	2	100	1/36	35606531
9	NC901-01	1x1x1	1	41	3	5567	20	13	2	100	1/36	35606531
10	NC501-01	1x1x1	1	41	3	5567	20	13	2	100	1/36	35606531
11	NC401-01	1x1x1	1	41	3	5567	20	13	2	100	1/36	35606531
12	ST15-01	1x1x1	1	41	3	5567	41	11	2	100	1/36	61763635
13	ST102-01	1x1x1	1	41	3	5567	41	11	2	100	1/36	61763635
14	PA891-01	1x1x1	1	41	3	5567	40	18	2	100	1/36	98602700
15	AG99-01	1x1x1	1	41	3	5567	41	21	2	100	1/36	117912396
16	AG311-01	1x1x1	1	41	3	5567	41	21	2	100	1/36	117912396
17	AG252-01	1x1x1	1	41	3	5567	41	21	2	100	1/36	117912396
18	AG251-01	1x1x1	1	41	3	5567	41	21	2	100	1/36	117912396
19	TS321-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
20	IT99-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
21	IT952-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
22	IT951-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
23	IT931-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
24	IT73-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
25	IT51-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
26	IT35-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
27	IT34-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
28	IT33-01	1x1x1	1	41	3	5567	43	22	2	100	1/36	129552998
29	RD702-01	1x1x1	1	41	3	5567	40	24	2	100	1/36	131470272
30	RD701-01	1x1x1	1	41	3	5567	40	24	2	100	1/36	131470272
31	BE91-01	1x1x1	1	41	3	5567	39	25	2	100	1/36	133524492
32	BE74-01	1x1x1	1	41	3	5567	39	25	2	100	1/36	133524492
33	BE53-01	1x1x1	1	41	3	5567	39	25	2	100	1/36	133524492
34	BE51-01	1x1x1	1	41	3	5567	39	25	2	100	1/36	133524492
35	BE48-01	1x1x1	1	41	3	5567	39	25	2	100	1/36	133524492
36	BE39-01	1x1x1	1	41	3	5567	39	25	2	100	1/36	133524492
37	PE99-01	1x1x1	1	41	3	5567	41	24	2	100	1/36	134757030

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Figure 18.32 - Sections Scheduled Seq Report

32 - Student Properties Report

The Student Properties Report lists all students in the schedule alphabetically. It provides detailed information about each student including, ID number, ethnic code, gender, grade level and House or Team.

Student - Student's name.

ID - Student's identification number

EthnicCode - Ethnic code used by the district

Gender - Gender

Gradelevel - Grade level

SchedHouse - The House the student is scheduled in.

SchedTeam - The Team the student is scheduled in.

Hope High School Initial Run Student Properties Report SPR 11/5/2012 12:54 PM

Student	ID	EthnicCode	Gender	GRADE_ATT	Gradelevel	SchedHouse	SchedTeam
Abbott, Billy	905483	__HIS	M	12	12	blank	blank
Abel, Albert	132683	01	M	12	12	blank	blank
Abernathy, Bruce	879138	__HIS	M	12	12	blank	blank
Abernethy, Anne	902870	__TWO	F	11	11	blank	blank
Abers, Douglas	900757	01	M	12	12	blank	blank
Abrigo, Scott	148102	01	M	12	12	blank	blank
Acevedo, Andrew	886630	__HIS	M	11	11	blank	blank
Acevedo, Ashley	901830	__HIS	F	10	10	blank	blank
Acevedo, Gloria	985872	__HIS	F	12	12	blank	blank
Ackley, Brian	913948	__TWO	M	12	12	blank	blank
Acosta, Eugene	873921	__HIS	M	12	12	blank	blank
Acosta, John	150265	__HIS	M	11	11	blank	blank
Acunia, Kenneth	110412	__HIS	M	10	10	blank	blank
Adair, Alan	871626	01	M	11	11	blank	blank
Adair, Diane	903912	01	F	10	10	blank	blank
Adair, Timothy	888621	01	M	11	11	blank	blank
Adams, Albert	889844	01	M	11	11	blank	blank
Adams, Howard	873985	01	M	12	12	blank	blank
Adamski, Alan	872035	01	M	10	10	blank	blank
Adams, Larry	889314	01	M	11	11	blank	blank
Adams, Martin	887623	01	M	11	11	blank	blank
Adams, Scott	939208	01	M	12	12	blank	blank
Adams, Sean	877340	01	M	12	12	blank	blank
Adams, Stephen	901622	01	M	10	10	blank	blank
Addington, Paula	871686	01	F	12	12	blank	blank
Aelvoet, Jesse	944233	01	M	12	12	blank	blank
Aguado, Bobby	943822	__HIS	M	10	10	blank	blank
Aguado, Karen	135319	__HIS	F	12	12	blank	blank
Aguilar, Carolyn	902692	__HIS	F	10	10	blank	blank
Aguilar, Gregory	115003	__HIS	M	10	10	blank	blank
Aguilar, Kathleen	132888	__HIS	F	10	10	blank	blank
Aguilar, Roger	991071	__HIS	M	12	12	blank	blank
Aguilar, Stephen	108367	__HIS	M	11	11	blank	blank
Aguirre, Jason	952357	__HIS	M	12	12	blank	blank
Aguirre, Mary	952375	__HIS	F	11	11	blank	blank
Ahlstrom, Jack	888112	01	M	11	11	blank	blank
Ahlstrom, Linda	120451	01	F	10	10	blank	blank
Aitchison, Alice	871731	01	F	12	12	blank	blank
Aitchison, Karen	902998	01	F	10	10	blank	blank

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Figure 18.33 - Student Properties Report

33 - Student Requests Summary Report

The purpose of the Student Requests Summary Report provides a quick summary to view the number of required and elective requests for the student.

Student - Student's name.

Student ID - Student's identification number

GL - Student's grade level

Required-Requests

No.of Reqs - Number of required requests

Per. Load - Number of periods with required requests

Sched Load - Actual scheduled required requests

Elective-Requests

No.of Reqs - Number of elective requests

Per. Load - Number of periods with elective requests

Sched Load - Actual scheduled elective requests

Hope High School Initial Run Student Requests Summary Report SCRSR 11/5/2012 12:54 PM

Student Name	Student ID	GL	Required-Requests No.of Reqs	Per. Load	Sched Load	Elective-Requests No.of Reqs.	Per Load	Sched Load
Abbott, Billy	905483	12	7	7	6	12	12	12
Abernethy, Anne	902870	11	1	1	1	2	2	2
Acevedo, Andrew	886630	11	4	4	3	2	2	2
Acevedo, Ashley	901830	10	6	6	4	7	7	5
Ackley, Brian	913948	12	5	5	4	9	9	9
Acosta, Eugene	873921	12	7	7	6	12	12	12
Acosta, John	150265	11	9	9	6	6	6	5
Acunia, Kenneth	110412	10	6	6	4	6	6	4
Adair, Alan	871626	11	4	4	3	11	11	11
Adair, Diane	903912	10	6	6	3	7	7	7
Adair, Timothy	888621	11	8	8	7	6	6	6
Adams, Albert	889844	11	6	6	6	9	9	8
Adams, Howard	873985	12	3	3	3	10	10	10
Adams, Larry	889314	11	8	8	7	5	5	5
Adams, Martin	887623	11	7	7	7	6	6	4
Adams, Scott	939208	12	3	3	3	11	11	11
Adams, Sean	877340	12	3	3	3	11	11	10
Adams, Stephen	901622	10	6	6	3	8	8	8
Addington, Paula	871686	12	5	5	4	7	7	7
Aelvoet, Jesse	944233	12	5	5	4	5	5	5
Aguado, Bobby	943822	10	6	6	4	8	8	5
Aguado, Karen	135319	12	6	6	3	8	8	6
Aguilar, Carolyn	902692	10	6	6	2	8	8	6
Aguilar, Roger	991071	12						
Aguilar, Stephen	108367	11	8	8	7	6	6	6
Aguirre, Jason	952357	12	3	3	3	10	10	10
Aguirre, Mary	952375	11	4	4	4	10	10	9
Ahlstrom, Jack	888112	11	8	8	7	5	5	5
Ahlstrom, Linda	120451	10						
Aitchison, Alice	871731	12	5	5	4	10	10	10
Aitchison, Karen	902998	10	6	6	3	8	8	8
Akagawa, Adam	165923	11						
Ake, Joshua	889794	11	8	8	7	6	6	6
Akin, Andrea	902875	10	6	6	3	8	8	8
Akpan, Tina	165110	10						
Alarcon, Frank	886651	10	6	6	5	8	8	8
Alcazar, Eugene	141517	10	6	6	4	8	8	8
Alcazar, Eugene	141666	10	9	9	3	3	3	3
Alcorn, Donald	929994	11						
Alder, Brenda	967569	10	4	4	3	9	9	8
Alder, Lawrence	910024	12	5	5	5	8	8	8
Alder, Sarah	968416	12	3	3	3	9	9	9
Aldrich, Steve	873815	12	3	3	2	10	10	10
Alexander, Fred	975140	12	7	7	5	7	7	7

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Figure 18.34 - Student Requests Summary Report

34 - Student Schedule Report

The purpose of the Student Schedule Report is to display each student's schedule.

The Student Schedule Report lists each student by student ID. For each student, it lists the sections scheduled for that student in the legend. For each section in the legend, it shows the period, the term, the meeting days, the room, the teacher, the number of students enrolled, and the section sequence number. Above it shows a grid that indicates, through listing the reference code for the section, the period and meeting day for each section by term.

Student Name and Perm Number

Status - Student's Schedule Status, including undersubscribed, oversubscribed, etc.

Conflict Status

Grid - Displays a group of sections, which are indicated by a reference code, sorted by term, period, and meeting day.

Legend

Ref - The code used in the grid to represent the section.

Course–Sec - Course Id and Section number.

Per - Period the section meets.

Term - Term the section meets.

Days - Meeting day(s) the section meets.

Room - Room number where the section meets

Teacher - Teacher assigned to the section.

Enrol - Total number of students enrolled in the section.

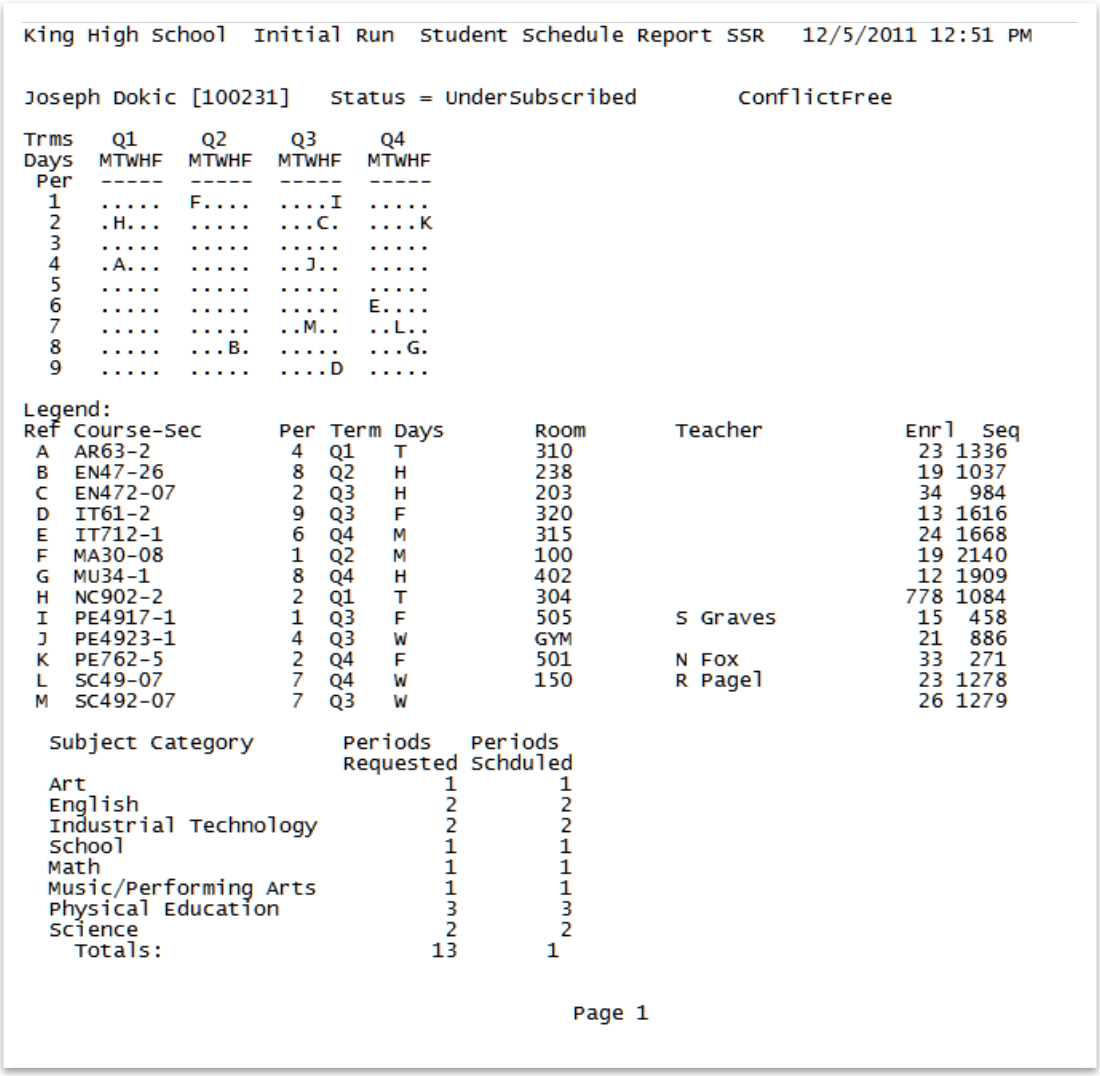
Seq - Sequence number of the section (when it was created).

Summary

Subject Category - The subject category under which the student's course requests were listed.

Periods Requested - The number of periods requested in each subject category.

Periods Scheduled - The number of periods scheduled in each subject category.



King High School Initial Run Student Schedule Report SSR 12/5/2011 12:51 PM

Joseph Dokic [100231] Status = UnderSubscribed ConflictFree

Trms Days Per	Q1 MTWHF	Q2 MTWHF	Q3 MTWHF	Q4 MTWHF
1	.....	F....	I	.....
2	.H...	.....	...C.	....K
3	.....	.....	.....	.....
4	.A...	.....	..J..	.....
5	.....	.....	.....	.....
6	.....	.....	.....	E....
7	.....	.....	..M..	..L..
8	.....	...B.	.....	...G.
9	.....	.....	....D	.....

Legend:

Ref	Course-Sec	Per	Term	Days	Room	Teacher	Enrl	Seq
A	AR63-2	4	Q1	T	310		23	1336
B	EN47-26	8	Q2	H	238		19	1037
C	EN472-07	2	Q3	H	203		34	984
D	IT61-2	9	Q3	F	320		13	1616
E	IT712-1	6	Q4	M	315		24	1668
F	MA30-08	1	Q2	M	100		19	2140
G	MU34-1	8	Q4	H	402		12	1909
H	NC902-2	2	Q1	T	304		778	1084
I	PE4917-1	1	Q3	F	505	S Graves	15	458
J	PE4923-1	4	Q3	W	GYM		21	886
K	PE762-5	2	Q4	F	501	N Fox	33	271
L	SC49-07	7	Q4	W	150	R Pagel	23	1278
M	SC492-07	7	Q3	W			26	1279

Subject Category	Periods Requested	Periods Schduled
Art	1	1
English	2	2
Industrial Technology	2	2
School	1	1
Math	1	1
Music/Performing Arts	1	1
Physical Education	3	3
Science	2	2
Totals:	13	1

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Figure 18.35 - Student Schedule Report

35 - Teacher Allocation Summary Report

The purpose of the Teacher Allocation Summary Report is to show what categories teachers are allocated to for the builder. This will give statistics for their utilization by category.

Teacher Name -

Category - Subject Category

Cat # of Crs's - Number of courses in that category.

Cat # of Sec's - Number of sections in that category.

Cat # of tchr's - Number of teachers in that category.

Tchr # of Crs's - Number of teachers for courses in that category.

Min # of Sec - Minimum number of sections, assigned to the teacher scheduled for the course.

Max # of Sec - Maximum number of sections, assigned to the teacher scheduled for the course.

Opt # of Sec - Optimum number of sections, the teacher is expected to be scheduled for the course. If this number is computed by the system. This number may show fractions when number of sections is not divisible by the number of teachers allocated to the course.

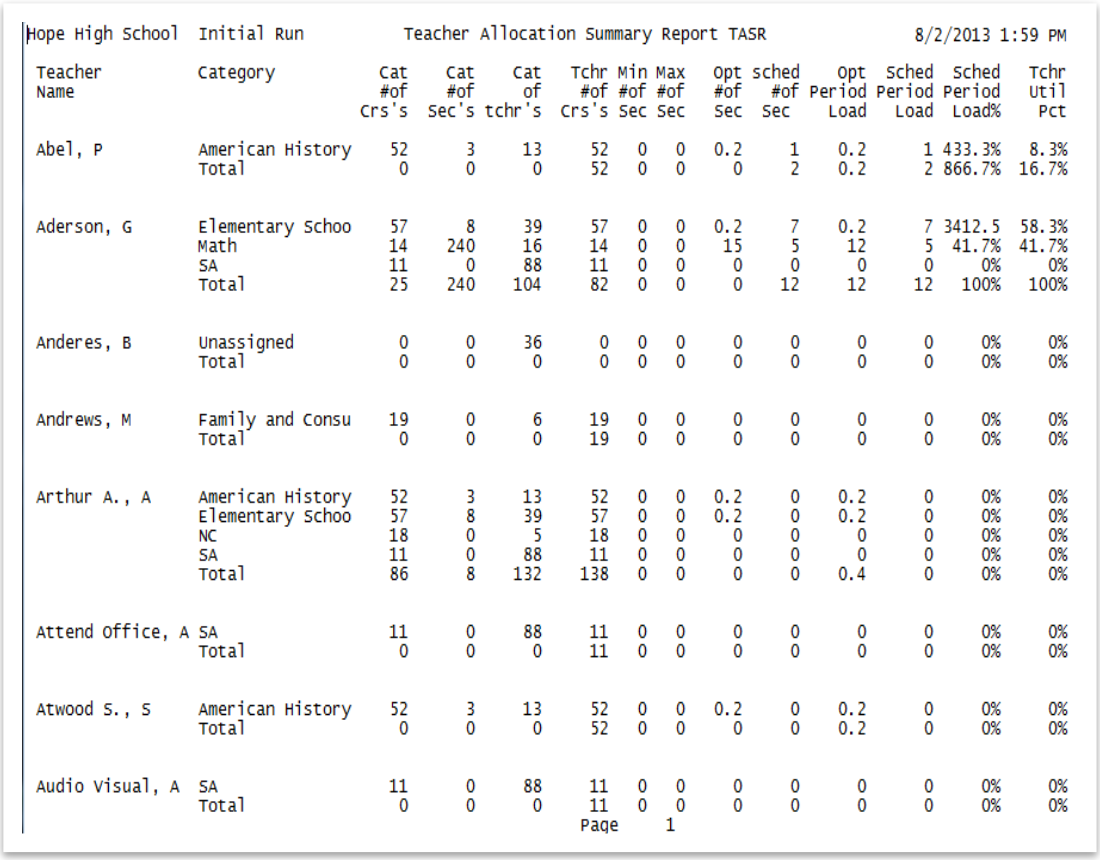
Sched # of Sec - Scheduled number of sections with the teacher.

Opt Period Load - Optimum period load is analogous to average hours of instructions, we expect the teacher to teach the course. This number is a better gage than the optimum number of sections, especially when courses do not have the same number of periods of instructions.

Sched Period Load - The actual number of scheduled periods for the teacher and each course. This number may be different for each course, if minimum and maximum number of sections to be taught is provided by you.

Sched Period Load% - Percentage of periods scheduled, relative to optimum. This number may exceed 100%, especially if the optimum number of sections is fractional, (number of sections cannot be divided equally among teachers). The school total shows the average scheduled percentage, relative to optimum.

Tchr Util Pct - Percentage of teacher's utilization for each course, relative to the optimum. Total is the percentage of teacher's utilization for all courses. The school total shows the average utilization for all teachers.



Hope High School Initial Run Teacher Allocation Summary Report TASR 8/2/2013 1:59 PM

Teacher Name	Category	Cat #of Crs's	Cat #of Sec's	Cat of tchr's	Tchr #of Crs's	Min #of Sec	Max #of Sec	Opt #of Sec	sched #of Sec	Opt Period Load	Sched Period Load	Sched Period Load%	Tchr Util Pct
Abel, P	American History	52	3	13	52	0	0	0.2	1	0.2	1	433.3%	8.3%
	Total	0	0	0	52	0	0	0	2	0.2	2	866.7%	16.7%
Aderson, G	Elementary Schoo	57	8	39	57	0	0	0.2	7	0.2	7	3412.5	58.3%
	Math	14	240	16	14	0	0	15	5	12	5	41.7%	41.7%
	SA	11	0	88	11	0	0	0	0	0	0	0%	0%
	Total	25	240	104	82	0	0	0	12	12	12	100%	100%
Anderes, B	Unassigned	0	0	36	0	0	0	0	0	0	0	0%	0%
	Total	0	0	0	0	0	0	0	0	0	0	0%	0%
Andrews, M	Family and Consu	19	0	6	19	0	0	0	0	0	0	0%	0%
	Total	0	0	0	19	0	0	0	0	0	0	0%	0%
Arthur A., A	American History	52	3	13	52	0	0	0.2	0	0.2	0	0%	0%
	Elementary Schoo	57	8	39	57	0	0	0.2	0	0.2	0	0%	0%
	NC	18	0	5	18	0	0	0	0	0	0	0%	0%
	SA	11	0	88	11	0	0	0	0	0	0	0%	0%
	Total	86	8	132	138	0	0	0	0	0.4	0	0%	0%
Attend Office, A	SA	11	0	88	11	0	0	0	0	0	0	0%	0%
	Total	0	0	0	11	0	0	0	0	0	0	0%	0%
Atwood S., S	American History	52	3	13	52	0	0	0.2	0	0.2	0	0%	0%
	Total	0	0	0	52	0	0	0	0	0.2	0	0%	0%
Audio Visual, A	SA	11	0	88	11	0	0	0	0	0	0	0%	0%
	Total	0	0	0	11	0	0	0	0	0	0	0%	0%

Page 1

Figure 18.36 - Teacher Allocation Summary Report

36 - Teacher Schedule Report

The purpose of the Teacher Schedule Report is to display the schedule for each teacher.

The Teacher Schedule Report lists each teacher by last name. For each teacher, it lists the sections scheduled for that teacher in the legend. For each section in the legend, it shows the period, the term, the meeting days, the room, the number of students enrolled, and the section sequence number. Above it shows a grid which indicates, through listing the reference code for the section, the period and meeting day for each section by term.

Teacher Name

Category - Subject Category

Grade Levels - Grade Levels that the teacher is able to teach.

Grid - Displays a group of sections, which are indicated by a reference code, sorted by term, period, and meeting day.

Legend

Ref - The code used in the grid to represent the section.

Course–Sec - Course Id and Section number.

Per - Period the section meets.

Term - Term the section meets.

Days - Meeting day(s) the section meets.

Enrol - Total number of students enrolled in the section.

Seq - Sequence number of the section (when it was created).

Summary

Avail Load - Maximum number of periods for which the teacher can be scheduled.

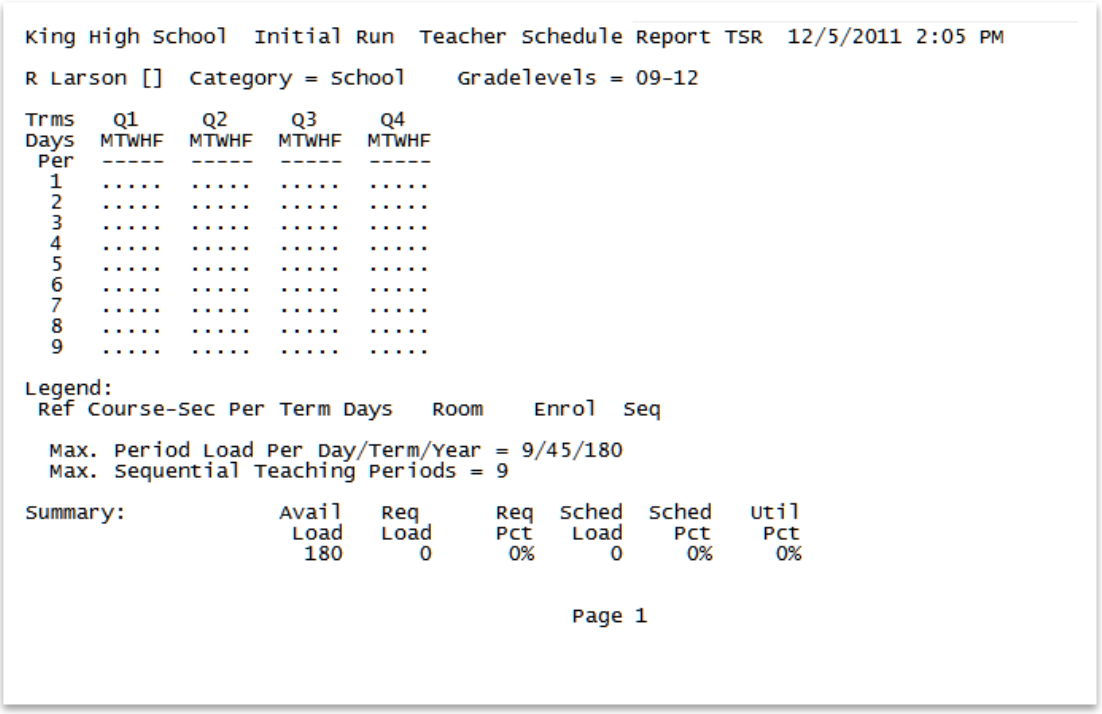
Req. Load - Requested average number of periods for the teacher to be scheduled for the course.

Req Pct - Percentage of above relative to the teacher's available number of periods.

Sched Load - Scheduled number of periods for the teacher.

Sched Pct - Percentage of scheduled periods for the teacher relative to average.

Util Pct - Percentage of teacher's available time that is being utilized.



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King High School  Initial Run  Teacher Schedule Report TSR  12/5/2011 2:05 PM

R Larson []  Category = School    Gradelevels = 09-12

Trms   Q1      Q2      Q3      Q4
Days  MTWHF   MTWHF   MTWHF   MTWHF
 Per  -----   -----   -----   -----
  1   .....   .....   .....   .....
  2   .....   .....   .....   .....
  3   .....   .....   .....   .....
  4   .....   .....   .....   .....
  5   .....   .....   .....   .....
  6   .....   .....   .....   .....
  7   .....   .....   .....   .....
  8   .....   .....   .....   .....
  9   .....   .....   .....   .....

Legend:
 Ref Course-Sec Per Term Days   Room    Enrol  Seq

  Max. Period Load Per Day/Term/Year = 9/45/180
  Max. Sequential Teaching Periods = 9

Summary:            Avail   Req      Req  Sched  Sched   Util
                     Load   Load     Pct   Load    Pct    Pct
                      180      0      0%      0     0%     0%


                                        Page 1
```

Figure 18.37 - Teacher Schedule Report

37 - Teacher Utilization Report

The purpose of the Teacher Utilization Report is to display the percentage of teacher utilization time in the schedule.

The Teacher Utilization Report lists all teachers by last name. It lists their badge number in brackets, and shows the statistics indicating the amount of teacher time used by the schedule.

This report shows teacher's availability and utilization. The availability is automatically adjusted in the following cases:

1) One or more of maximums per day/tem/all-year are overridden by you

2) Time Constraints are present to block out a particular time, for any reason.

3) To reserve lunch periods, when applicable.

Teacher - Teacher name and badge number.

Max Cons Per - Maximum number of consecutive teaching periods, in a day. This number is computed by the system, if not provided by you. Teacher's lunch period, if any, is considered a break and does not count as a teaching period. Overriding this number may reduce availability.

Avail Per Day - Available/Maximum number of teaching periods per day. This number is computed by the system, if maximum number of teaching periods/day is not provided by you. Availability is automatically adjusted for lunch period(s), if lunch is defined for your school.

TIP - You may override this value if you wish to reduce this number, to reserve a floating prep period/day, or for part time teachers. Alternatively, you may use Time Constraints to reserve a particular time as prep period, or for any other purpose.

Avail Per Term - Available/Maximum number of teaching periods per term-cycle (scheduling grid, and it is not based on calendar). This number is computed by the system, if maximum number of teaching periods/term is not provided by you.

TIP - You may want to reduce this number for part time teachers, or to reserve prep periods in each term-cycle. For example, in a 5-day cycle school (weekly schedule or grid's/number of days = 5), then this number represents number of periods a teacher can teach in a week (each term-cycle).

Avail All Year - Available/Maximum number of teaching periods, in scheduling grid. This number is computed by the system, and may be overridden by you (i.e. for part time teachers).

TIP - Time Constraints may be used to reserve a particular time/periods, for which a teacher is not available to teach.

Req Per Load - Requested/Allocated number of periods. This number is computed by the system, based on allocation information provided by you. This number is an average and may

be fractional when a teacher is requested to teach many subjects along with other teachers, or number of sections to be scheduled is not divisible by the number of allocated teachers.

Sched Per Load - Actual number of scheduled periods.

Req Load/Avail% - Percentage of requested/allocated periods over available number of periods (all year/grid).

Sched Load/Req% - Percentage of scheduled periods over requested periods.

Util Sched/Avail% - Percentage of scheduled periods over available periods.

King High School Initial Run Teacher Utilization Report TUR 12/13/2012 2:16 PM

#	Teacher Name	Max Cons Per	Avail Per Day	Avail Per Term	Avail All Year	Req Per Load	Opt Per Load	Sched Per Load	Req Load/ Avail%	Sched Load/ Req%	Util Sched/ Avail%
1	R Larson []	6	6	6	24	3.3	3.3	12	14%	358.2%	50%
2	Jacque Henry [0011]	6	6	6	24	8.3	8.3	18	34.8%	215.8%	75%
3	Scott Bolka [0012]	6	6	6	24	3.3	3.3	1	14%	29.9%	4.2%
4	Ross Pagel [0013]	6	6	6	24	2.4	2.4	2	10%	83%	8.3%
5	Darcy Cook [0015]	6	6	6	24	5.8	5.8	16	24%	278%	66.7%
6	Nikki Fox [0018]	6	6	6	24	3.1	3.1	7	12.8%	227.1%	29.2%
7	Staff Staff [0018]	6	6	6	24	0	0	0	0%	0%	0%
8	Karen Scullion [0021]	6	6	6	24	4.6	4.6	17	19.1%	370.2%	70.8%
9	Howard Welch [0024]	6	6	6	24	0.3	0.3	0	1.4%	0%	0%
10	Gabriele Fajardo [0028]	6	6	6	24	5.4	5.4	12	22.6%	221.2%	50%
11	Staff Staff [0031]	6	6	6	24	0	0	0	0%	0%	0%
12	Staff/spe Ed Staff [0034]	6	6	6	24	0	0	0	0%	0%	0%
13	Gregory Pott [0035]	6	6	6	24	6.4	6.4	10	26.8%	155.2%	41.7%
14	Jeff Taylor [0037]	6	6	6	24	0	0	0	0%	0%	0%
15	Sharon Cuculic-Hain [0039]	6	6	6	24	5.3	5.3	12	21.9%	228.6%	50%
16	Bruce Watkins [0040]	6	6	6	24	5.8	5.8	4	24%	69.5%	16.7%
17	Staff/eng Staff/eng [0044]	6	6	6	24	0	0	0	0%	0%	0%
18	Selina Graves [0045]	6	6	6	24	5.2	5.2	19	21.5%	367.8%	79.2%
19	Debra Fischer [0050]	6	6	6	24	6.2	6.2	15	25.9%	241.1%	62.5%
20	A/v Staff A/v Staff [02]	6	6	6	24	0	0	0	0%	0%	0%
21	Cissy Horn [1]	6	6	6	24	0	0	0	0%	0%	0%
22	Eric Hoag [10]	6	6	6	24	0	0	0	0%	0%	0%
23	Charlie Robbins []	6	6	6	24	3.1	3.1	1	12.8%	32.5%	4.2%
24	Craig Hale []	6	6	6	24	3.5	3.5	8	14.7%	226.4%	33.3%
25	Anna Cicero []	6	6	6	24	0	0	0	0%	0%	0%
26	Patricia Abel []	6	6	6	24	3.3	3.3	1	14%	29.9%	4.2%
27	Marvin Jones []	6	6	6	24	3.1	3.1	3	12.8%	97.3%	12.5%
28	James Kass []	6	6	6	24	2.8	2.8	0	11.5%	0%	0%
29	Staff17 Staff17 []	6	6	6	24	0	0	0	0%	0%	0%
30	Robert Connelly []	6	6	6	24	5.1	5.1	12	21.3%	235.1%	50%
31	Brian Buck []	6	6	6	24	6.5	6.5	16	27.3%	244.3%	66.7%
32	Eliza Valli []	6	6	6	24	6	6	12	25.2%	198.7%	50%
33	Debra Webster []	6	6	6	24	6.1	6.1	18	25.4%	295.5%	75%

Page 1

Figure 18.38 - Teacher Utilization Report

38 - Teacher Course Allocation Report

The purpose of the Teacher Course Allocation Report is to identify teacher allocations and scheduling issues related to a course.

The Teacher Course Allocation Report lists all teachers alphabetically by first name. For each teacher, it shows the total available period load, and lists the category, course ID, number of sections, the period load, the number of teachers, the average period load, and the scheduled period load for each course the teacher is teaching.

Teacher Name - Teacher Name

Course ID - Course ID

Crs # of Sec - Number of sections for the course.

Min # of Sec - Minimum number of sections, the teacher is expected to be scheduled for the course. If this number is not provided by you, then the system computes this number.

Max # of Sec - Maximum number of sections, the teacher is expected to be scheduled for the course. If this number is not provided by you, then the system computes this number.

Opt # of Sec - Optimum number of sections, the teacher is expected to be scheduled for the course. If this number is computed by the system. This number may show fractions when number of sections is not divisible by the number of teachers allocated to the course.

Sched # of Sec - Scheduled number of sections with the teacher.

Crs # of Teachers - Number of teachers, including the teacher listed, that are candidates for teaching the course.

Opt Period Load - Optimum period load is analogous to average hours of instructions, we expect the teacher to teach the course. This number is a better gage than the optimum number of sections, especially when courses do not have the same number of periods of instructions.

Sched Period Load - The actual number of scheduled periods for the teacher and each course. This number may be different for each course, if minimum and maximum number of sections to be taught is provided by you.

Sched Period Load% - Percentage of periods scheduled, relative to optimum. This number may exceed 100%, especially if the optimum number of sections is fractional, (number of sections cannot be divided equally among teachers). The school total shows the average scheduled percentage, relative to optimum.

Tchr Util Pct - Percentage of teacher's utilization for each course, relative to the optimum. Total is the percentage of teacher's utilization for all courses. The school total shows the average utilization for all teachers.

King High School Teacher-Course Allocation Report TCAR 12/13/2012 2:15 PM

Teacher Name	Course ID	Crs #of Sec	Min #of Sec	Max #of Sec	Opt #of Sec	sched #of Sec	Crs #of Tchrs	Opt Period Load	Sched Period Load	Sched Period Load%	Tchr Util Pct
Abel, A	EN11	1	0	0	0	0	43	0	0	0%	0%
	EN112	1	0	0	0	0	43	0	0	0%	0%
	EN21	5	0	0	0.1	0	43	0.1	0	0%	0%
	EN212	1	0	0	0	0	43	0	0	0%	0%
	EN31	1	0	0	0	0	43	0	0	0%	0%
	EN32	3	0	0	0.1	0	43	0.1	0	0%	0%
	EN33	1	0	0	0	0	43	0	0	0%	0%
	EN34	18	0	0	0.4	0	43	0.4	0	0%	0%
	EN40	1	0	0	0	0	43	0	0	0%	0%
	EN43	1	0	0	0	0	43	0	0	0%	0%
	EN44	2	0	0	0	0	43	0	0	0%	0%
	EN45	2	0	0	0	0	43	0	0	0%	0%
	EN46	11	0	0	0.3	0	43	0.3	0	0%	0%
	EN47	6	0	0	0.1	0	43	0.1	0	0%	0%
	EN472	23	0	0	0.5	1	43	0.5	1	187%	4.2%
	EN473	1	0	0	0	0	43	0	0	0%	0%
	EN4732	1	0	0	0	0	43	0	0	0%	0%
	EN50	1	0	0	0	0	43	0	0	0%	0%
	EN51	1	0	0	0	0	43	0	0	0%	0%
	EN52	6	0	0	0.1	0	43	0.1	0	0%	0%
	EN54	1	0	0	0	0	43	0	0	0%	0%
	EN55	3	0	0	0.1	0	43	0.1	0	0%	0%
	EN56	2	0	0	0	0	43	0	0	0%	0%
	EN57	14	0	0	0.3	0	43	0.3	0	0%	0%
	EN60	1	0	0	0	0	43	0	0	0%	0%
	EN62	2	0	0	0	0	43	0	0	0%	0%
	EN67	1	0	0	0	0	43	0	0	0%	0%
	EN68	1	0	0	0	0	43	0	0	0%	0%
	EN74	1	0	0	0	0	43	0	0	0%	0%
	EN751	1	0	0	0	0	43	0	0	0%	0%
	EN752	1	0	0	0	0	43	0	0	0%	0%
	EN80	2	0	0	0	0	43	0	0	0%	0%
	SA41	1	0	0	0	0	199	0	0	0%	0%

Page 1

Figure 18.39 - Teacher-Course Allocation Report

39 - Time Structure Stats Report

The purpose of the Time Structure Stats Report is to list all courses according to course type and time structure requirements.

It is imperative that the number of sections and students course requests, in each group, to be proportional in order to guarantee proper fit. This does not mean the numbers have to be equal. The example below illustrates what we mean by 'fit' Example - Let us assume that we have a simple nx5x1 grid (n periods, 1 term, 5-day cycle). Also assume that we have 3 structures in this school, that is some courses meet 3 times a week, some twice a week, and some once a week. If we had 100 sections in the 1st group (3 times a week), and we had 50 sections of the 2nd group (twice a week), then we need 100 sections of the 3rd group (once a week). To make all the structures fit each other. Having too many if one kind and not enough of the others will result in high conflict rate or section/period imbalance.

Time Patterns - Candidate time patterns are listed under each group. These time patterns are system generated, but may also be customized by users. Time patterns are equally ranked (priority of 5). The Builder selects the best pattern according to a complex algorithm, searching for best fit where students, teachers, and rooms are available, as it builds the master schedule.

NOTE - Please see the end of the generated report for more information.

Course Structure - Course Type (Regular, Lunch, Study Hall) and time structure.

No. of Sections - Number of sections with this type of structure.

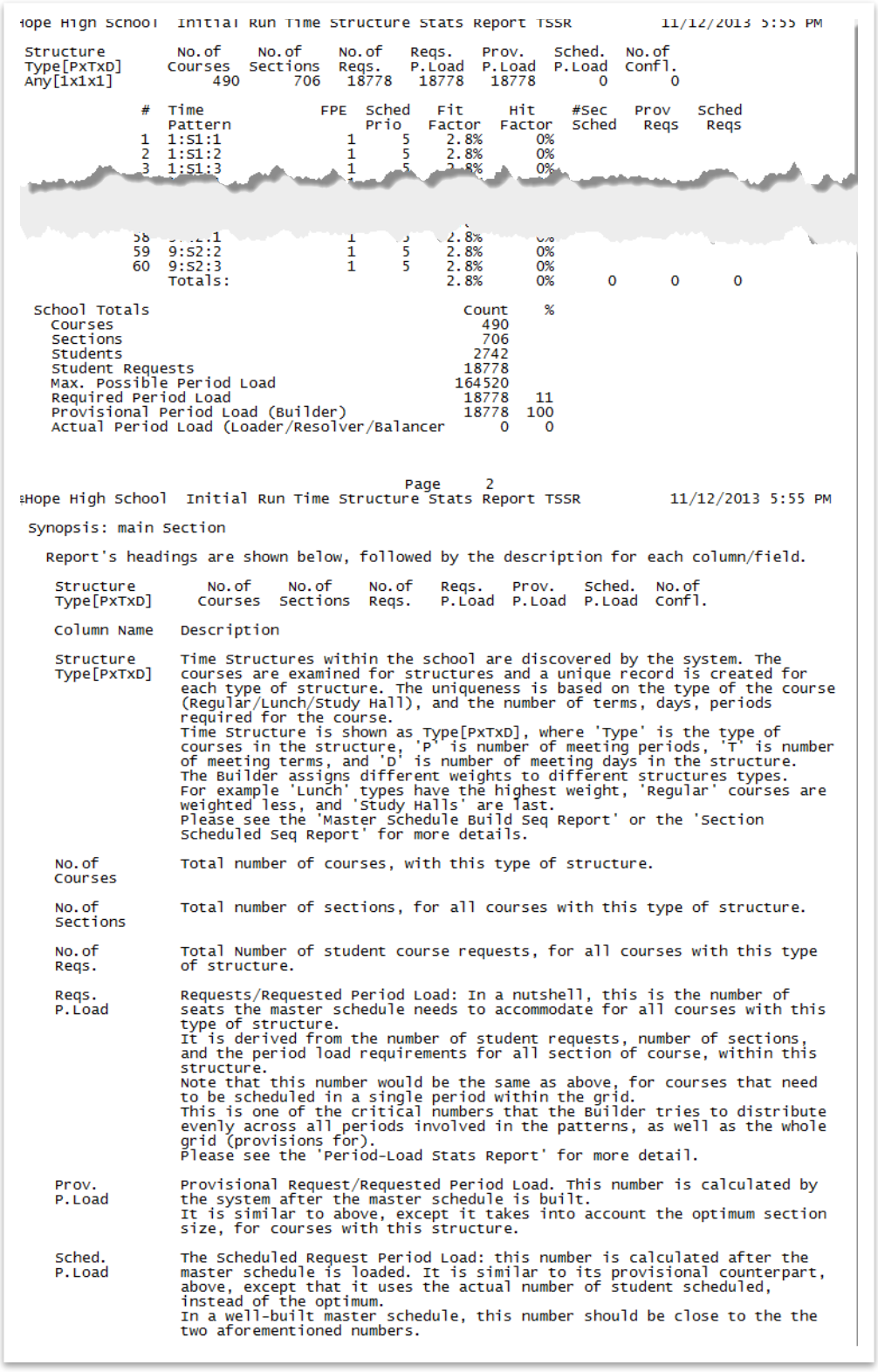
No. of Reqs - Number of student course requests with this type of structure.

Reqs P. Load - Product of students' course requests and sections' period load.

Prov P. Load - Number of sections scheduled with this type of structure multiplied by the section's optimum size.

Sched P. Load - Actual number of students scheduled in courses with this type of structure.

No. of Confl. - Number of conflicts with this type of structure.



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Hope High School  Initial Run Time Structure Stats Report TSSR          11/12/2013 5:55 PM

Structure        No.of    No.of    No.of   Reqs.   Prov.   Sched.  No.of
Type[PxTxD]     Courses  Sections  Reqs.   P.Load  P.Load  P.Load  Confl.
Any[1x1x1]          490       706   18778   18778   18778       0       0

             #  Time              FPE  Sched   Fit     Hit    #Sec   Prov   Sched
                Pattern               Prio   Factor  Factor  Sched   Reqs   Reqs
             1  1:S1:1              1     5    2.8%      0%
             2  1:S1:2              1     5    2.8%      0%
             3  1:S1:3              1     5    2.8%      0%
            58  9:S2:1              1     5    2.8%      0%
            59  9:S2:2              1     5    2.8%      0%
            60  9:S2:3              1     5    2.8%      0%
                Totals:                        2.8%      0%      0      0      0

 School Totals                                    Count    %
   Courses                                          490
   Sections                                         706
   Students                                        2742
   Student Requests                               18778
   Max. Possible Period Load                     164520
   Required Period Load                           18778   11
   Provisional Period Load (Builder)              18778  100
   Actual Period Load (Loader/Resolver/Balancer       0    0


                                        Page     2
Hope High School  Initial Run Time Structure Stats Report TSSR          11/12/2013 5:55 PM

 Synopsis: main Section

   Report's headings are shown below, followed by the description for each column/field.

    Structure        No.of    No.of    No.of   Reqs.   Prov.   Sched.  No.of
    Type[PxTxD]     Courses  Sections  Reqs.   P.Load  P.Load  P.Load  Confl.

    Column Name   Description

    Structure     Time Structures within the school are discovered by the system. The
    Type[PxTxD]   courses are examined for structures and a unique record is created for
                  each type of structure. The uniqueness is based on the type of the course
                  (Regular/Lunch/Study Hall), and the number of terms, days, periods
                  required for the course.
                  Time Structure is shown as Type[PxTxD], where 'Type' is the type of
                  courses in the structure, 'P' is number of meeting periods, 'T' is number
                  of meeting terms, and 'D' is number of meeting days in the structure.
                  The Builder assigns different weights to different structures types.
                  For example 'Lunch' types have the highest weight, 'Regular' courses are
                  weighted less, and 'Study Halls' are last.
                  Please see the 'Master Schedule Build Seq Report' or the 'Section
                  Scheduled Seq Report' for more details.

    No.of         Total number of courses, with this type of structure.
    Courses

    No.of         Total number of sections, for all courses with this type of structure.
    Sections

    No.of         Total Number of student course requests, for all courses with this type
    Reqs.         of structure.

    Reqs.         Requests/Requested Period Load: In a nutshell, this is the number of
    P.Load        seats the master schedule needs to accommodate for all courses with this
                  type of structure.
                  It is derived from the number of student requests, number of sections,
                  and the period load requirements for all section of course, within this
                  structure.
                  Note that this number would be the same as above, for courses that need
                  to be scheduled in a single period within the grid.
                  This is one of the critical numbers that the Builder tries to distribute
                  evenly across all periods involved in the patterns, as well as the whole
                  grid (provisions for).
                  Please see the 'Period-Load Stats Report' for more detail.

    Prov.         Provisional Request/Requested Period Load. This number is calculated by
    P.Load        the system after the master schedule is built.
                  It is similar to above, except it takes into account the optimum section
                  size, for courses with this structure.

    Sched.        The Scheduled Request Period Load: this number is calculated after the
    P.Load        master schedule is loaded. It is similar to its provisional counterpart,
                  above, except that it uses the actual number of student scheduled,
                  instead of the optimum.
                  In a well-built master schedule, this number should be close to the the
                  two aforementioned numbers.
```

Figure 18.40 - Time Structure Stats Report

USING THE MASS SCHEDULING MODULE REPORTS

OSM201– Student Schedule Analysis

The Student Schedule Analysis report lists all scheduled and requested classes for the students in the selected option set. The report also shows any schedule conflicts and the alternate periods available for each class.

Filter the report using the following options:

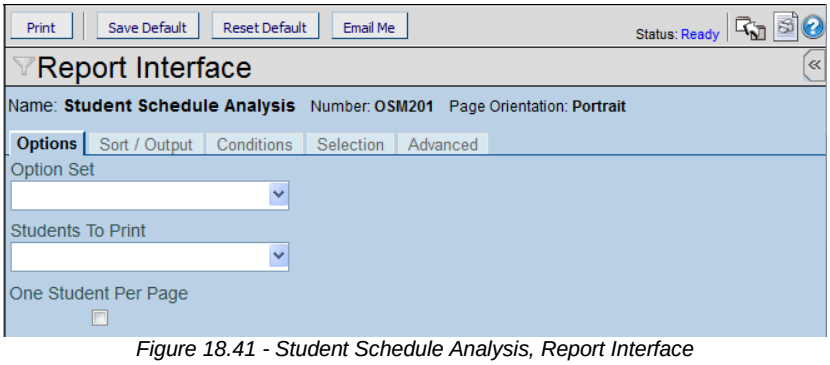
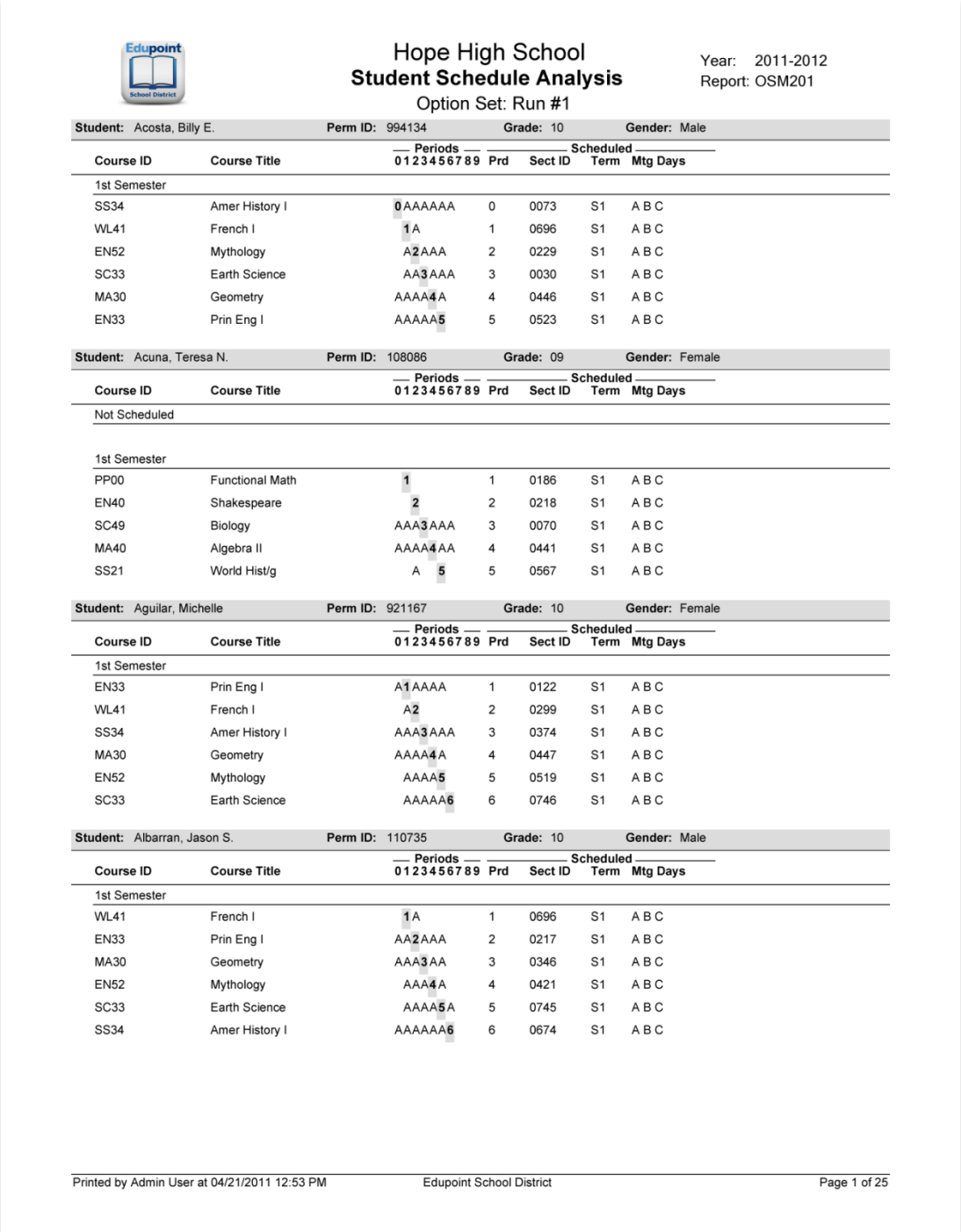


Figure 18.41 - Student Schedule Analysis, Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.
- **Students to Print** - Select the type of student schedules to include in the report. Options include:
  - All Students
  - Conflict Free Only
  - Schedule Conflicts
- **One Student Per Page** – prints each student schedule on a separate page.



Hope High School
Student Schedule Analysis
Option Set: Run #1

Year: 2011-2012
Report: OSM201

Student: Acosta, Billy E. **Perm ID:** 994134 **Grade:** 10 **Gender:** Male

Course ID	Course Title	Periods 0 1 2 3 4 5 6 7 8 9	Prd	Sect ID	Term	Mtg Days
1st Semester						
SS34	Amer History I	**0** A A A A A A	0	0073	S1	A B C
WL41	French I	**1** A	1	0696	S1	A B C
EN52	Mythology	A **2** A A A	2	0229	S1	A B C
SC33	Earth Science	A A **3** A A A	3	0030	S1	A B C
MA30	Geometry	A A A A **4** A	4	0446	S1	A B C
EN33	Prin Eng I	A A A A A **5**	5	0523	S1	A B C

Student: Acuna, Teresa N. **Perm ID:** 108086 **Grade:** 09 **Gender:** Female

Course ID	Course Title	Periods 0 1 2 3 4 5 6 7 8 9	Prd	Sect ID	Term	Mtg Days
Not Scheduled						
1st Semester						
PP00	Functional Math	**1**	1	0186	S1	A B C
EN40	Shakespeare	**2**	2	0218	S1	A B C
SC49	Biology	A A A **3** A A A	3	0070	S1	A B C
MA40	Algebra II	A A A A **4** A A	4	0441	S1	A B C
SS21	World Hist/g	A **5**	5	0567	S1	A B C

Student: Aguilar, Michelle **Perm ID:** 921167 **Grade:** 10 **Gender:** Female

Course ID	Course Title	Periods 0 1 2 3 4 5 6 7 8 9	Prd	Sect ID	Term	Mtg Days
1st Semester						
EN33	Prin Eng I	A **1** A A A A	1	0122	S1	A B C
WL41	French I	A **2**	2	0299	S1	A B C
SS34	Amer History I	A A A **3** A A A	3	0374	S1	A B C
MA30	Geometry	A A A A **4** A	4	0447	S1	A B C
EN52	Mythology	A A A A **5**	5	0519	S1	A B C
SC33	Earth Science	A A A A A **6**	6	0746	S1	A B C

Student: Albarran, Jason S. **Perm ID:** 110735 **Grade:** 10 **Gender:** Male

Course ID	Course Title	Periods 0 1 2 3 4 5 6 7 8 9	Prd	Sect ID	Term	Mtg Days
1st Semester						
WL41	French I	**1** A	1	0696	S1	A B C
EN33	Prin Eng I	A A **2** A A A	2	0217	S1	A B C
MA30	Geometry	A A A **3** A A	3	0346	S1	A B C
EN52	Mythology	A A A **4** A	4	0421	S1	A B C
SC33	Earth Science	A A A A **5** A	5	0745	S1	A B C
SS34	Amer History I	A A A A A **6**	6	0674	S1	A B C

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Figure 18.42 - Student Schedule Analysis

“A” indicates the class is available in the period.

“F” indicates the class is taught in the period but is currently full.

A number indicates the period that would be scheduled for the class.

OSM401 – Schedule Section List by Teacher

The OSM401 report prints a list of the scheduling sections for each teacher showing class loads for each section and a total of the students in those sections.

Filter the report using the following options:

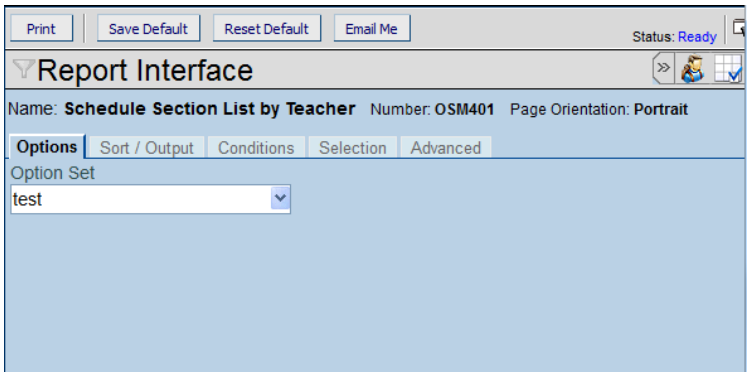

Figure 18.43 - Schedule Section List By Teacher Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.

Hope High School
Schedule Section List by Teacher
Option Set: Run #1

Year: 2011-2012
Report: OSM401

Track:

Staff Name	Term	Per	Sect ID	Track	Mtg Days	Course ID And Title	Credit	Room	Max	Total	Left
Becker A., Allison	S1	1	0001		A B C	SC71 - Chemistry	1.000	104	100	125	-25
								Total:	100	125	-25
Tofft, Robert	YR	1	0002		A B C	SC422 - Life Science	0.500	120	30	0	30
								Total:	30	0	30
Becker A., Allison	S1	2	0003		A B C	SC71 - Chemistry	1.000	104	100	125	-25
		1	0004		A B C	SC71 - Chemistry	1.000	104	100	125	-25
								Total:	200	250	-50
Brown P., Patricia	YR	7	0008		A B C	SS51C - Co-Government	1.000	236	50	0	50
								Total:	50	0	50
Diaz, Joe	YR	7	0010		A B C	FS32C - Co-Persnl Dev.	1.000	CNSL	50	0	50
								Total:	50	0	50
Baniszewski, Nancy	S1	0	0011		A B C	EN57 - American Lit	0.500	229	30	0	30
								Total:	30	0	30
Blasdell W., Wendy	S1	2	0012		A B C	SC70 - Cons Chemistry	0.500	116	30	0	30
		3	0013		A B C	SC50 - Env Science	0.500	124	30	0	30
		4	0014		A B C	SC50 - Env Science	0.500	124	32	0	32
		5	0015		A B C	SC50 - Env Science	0.500	124	32	0	32
		6	0016		A B C	SC70 - Cons Chemistry	0.500	124	30	0	30
								Total:	154	0	154
Chaisson P., Paul	YR	7-8	0018		A B C	TI81 - Ice Welding	1.000	311	15	0	15
								Total:	15	0	15
Brown P., Patricia	YR	7	0019		A B C	SS21CC - Co-World Stdy I	1.000	236	50	0	50
								Total:	50	0	50
Diaz, Joe	YR	7	0020		A B C	PE92C - Co-Bowling 2	1.000	CNSL	50	0	50
								Total:	50	0	50
Brown P., Patricia	S1	5	0021		A B C	SS22 - World History/Geog	1.000	236	50	62	-12
								Total:	50	62	-12
Summers, Kim	S1	0	0022		A B C	EN33 - Prin Eng I	0.500	209	28	5	23
								Total:	28	5	23
Robinson, Robert	S1	0	0024		A B C	EN51 - Lit Explor	0.500	P-21	30	36	-6
								Total:	30	36	-6

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OSM402 – Schedule Section List by Room

The OSM402 report prints a list of the scheduling sections for each room showing class loads for each section and a total of the students in those sections.

Filter the report using the following options:

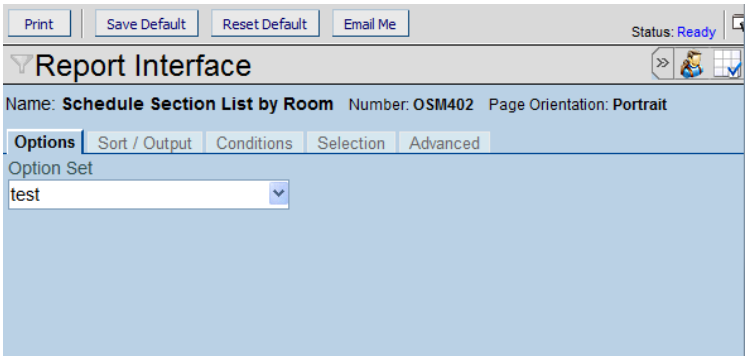
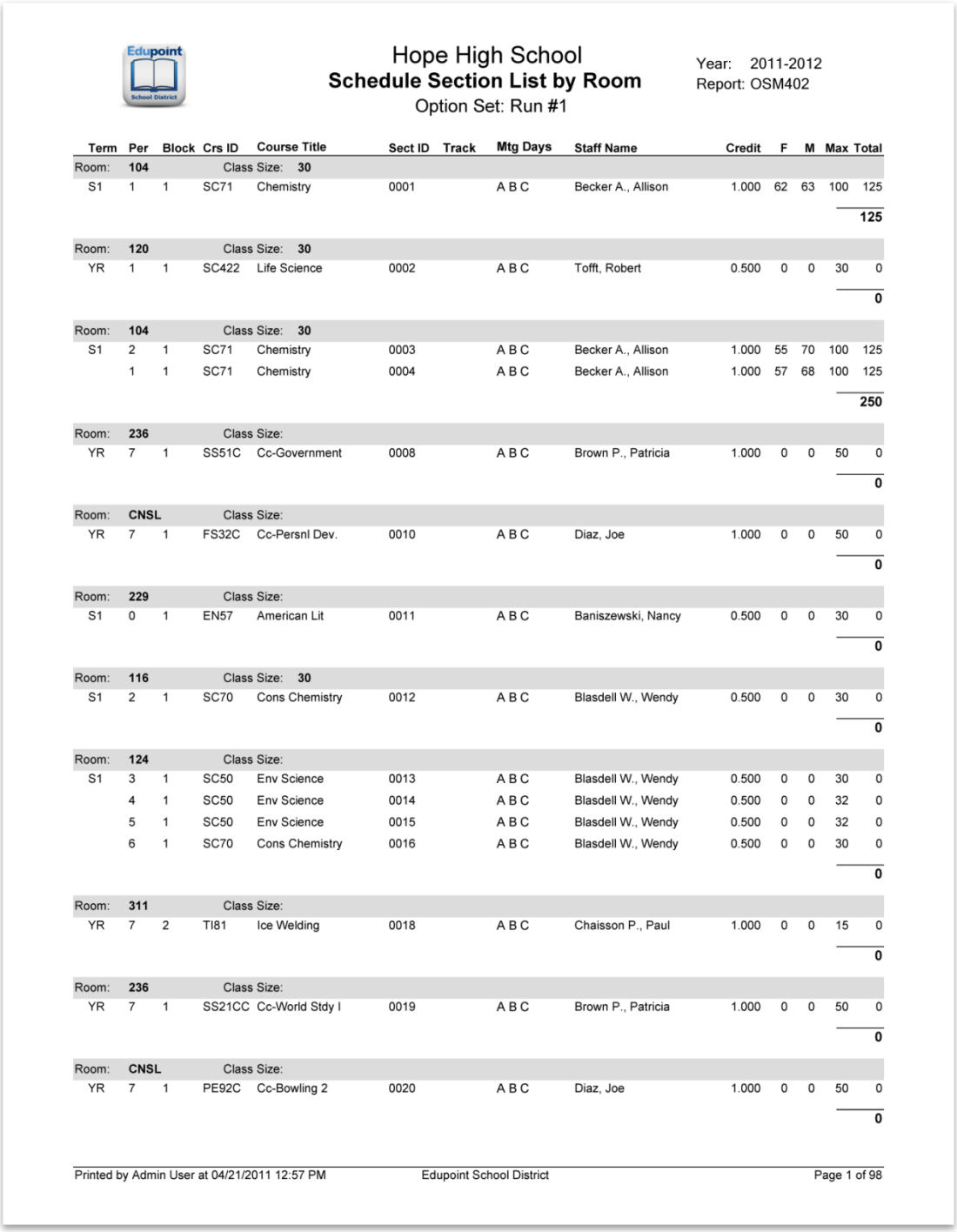


Figure 18.44 - Schedule Section List by Room Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.



Hope High School
Schedule Section List by Room
Option Set: Run #1

Year: 2011-2012
Report: OSM402

Term	Per	Block	Crs ID	Course Title	Sect ID	Track	Mtg Days	Staff Name	Credit	F	M	Max	Total
Room: **104**			Class Size: **30**										
S1	1	1	SC71	Chemistry	0001		A B C	Becker A., Allison	1.000	62	63	100	125
													125
Room: **120**			Class Size: **30**										
YR	1	1	SC422	Life Science	0002		A B C	Tofft, Robert	0.500	0	0	30	0
													0
Room: **104**			Class Size: **30**										
S1	2	1	SC71	Chemistry	0003		A B C	Becker A., Allison	1.000	55	70	100	125
	1	1	SC71	Chemistry	0004		A B C	Becker A., Allison	1.000	57	68	100	125
													250
Room: **236**			Class Size:										
YR	7	1	SS51C	Cc-Government	0008		A B C	Brown P., Patricia	1.000	0	0	50	0
													0
Room: **CNSL**			Class Size:										
YR	7	1	FS32C	Cc-Persnl Dev.	0010		A B C	Diaz, Joe	1.000	0	0	50	0
													0
Room: **229**			Class Size:										
S1	0	1	EN57	American Lit	0011		A B C	Baniszewski, Nancy	0.500	0	0	30	0
													0
Room: **116**			Class Size: **30**										
S1	2	1	SC70	Cons Chemistry	0012		A B C	Blasdell W., Wendy	0.500	0	0	30	0
													0
Room: **124**			Class Size:										
S1	3	1	SC50	Env Science	0013		A B C	Blasdell W., Wendy	0.500	0	0	30	0
	4	1	SC50	Env Science	0014		A B C	Blasdell W., Wendy	0.500	0	0	32	0
	5	1	SC50	Env Science	0015		A B C	Blasdell W., Wendy	0.500	0	0	32	0
	6	1	SC70	Cons Chemistry	0016		A B C	Blasdell W., Wendy	0.500	0	0	30	0
													0
Room: **311**			Class Size:										
YR	7	2	TI81	Ice Welding	0018		A B C	Chaisson P., Paul	1.000	0	0	15	0
													0
Room: **236**			Class Size:										
YR	7	1	SS21CC	Cc-World Stdy I	0019		A B C	Brown P., Patricia	1.000	0	0	50	0
													0
Room: **CNSL**			Class Size:										
YR	7	1	PE92C	Cc-Bowling 2	0020		A B C	Diaz, Joe	1.000	0	0	50	0
													0

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Figure 18.45 - Schedule Section List by Room Report

OSM403 – Schedule Section List by Course

The OSM403 report prints a list of the scheduling sections for each course showing class loads for each section and a total of the students in those sections.

Filter the report using the following options:

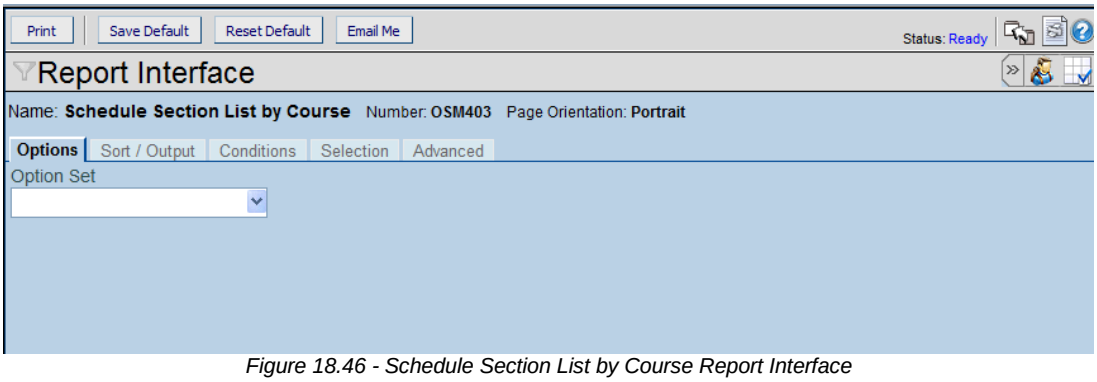
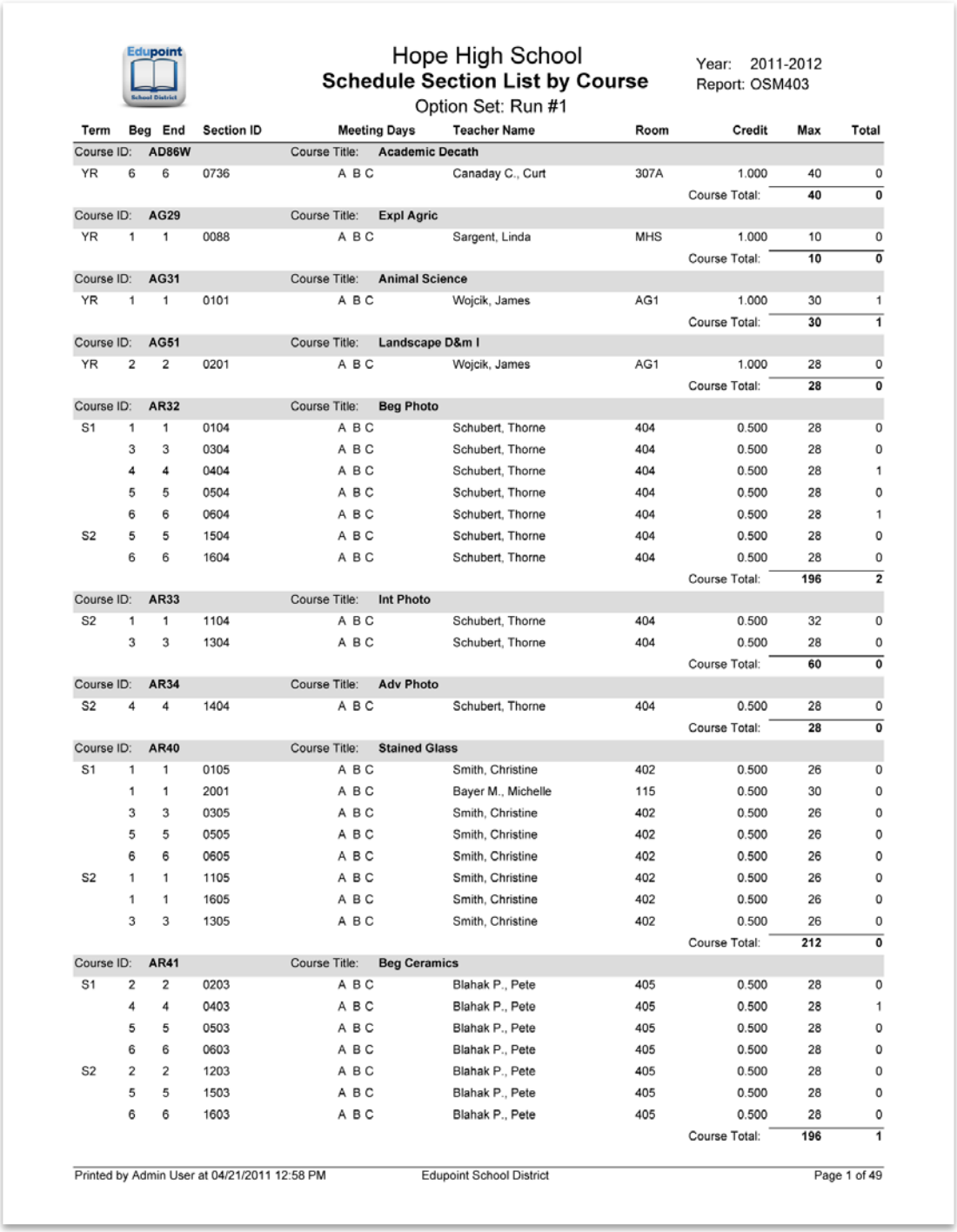


Figure 18.46 - Schedule Section List by Course Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.

This report has a Mandatory Sort Property of Course ID in ascending order.



Hope High School
Schedule Section List by Course
Option Set: Run #1

Year: 2011-2012
Report: OSM403

Term	Beg	End	Section ID	Meeting Days	Teacher Name	Room	Credit	Max	Total
Course ID:	**AD86W**		Course Title:	**Academic Decath**					
YR	6	6	0736	A B C	Canaday C., Curt	307A	1.000	40	0
							Course Total:	**40**	**0**
Course ID:	**AG29**		Course Title:	**Expl Agric**					
YR	1	1	0088	A B C	Sargent, Linda	MHS	1.000	10	0
							Course Total:	**10**	**0**
Course ID:	**AG31**		Course Title:	**Animal Science**					
YR	1	1	0101	A B C	Wojcik, James	AG1	1.000	30	1
							Course Total:	**30**	**1**
Course ID:	**AG51**		Course Title:	**Landscape D&m I**					
YR	2	2	0201	A B C	Wojcik, James	AG1	1.000	28	0
							Course Total:	**28**	**0**
Course ID:	**AR32**		Course Title:	**Beg Photo**					
S1	1	1	0104	A B C	Schubert, Thorne	404	0.500	28	0
	3	3	0304	A B C	Schubert, Thorne	404	0.500	28	0
	4	4	0404	A B C	Schubert, Thorne	404	0.500	28	1
	5	5	0504	A B C	Schubert, Thorne	404	0.500	28	0
	6	6	0604	A B C	Schubert, Thorne	404	0.500	28	1
S2	5	5	1504	A B C	Schubert, Thorne	404	0.500	28	0
	6	6	1604	A B C	Schubert, Thorne	404	0.500	28	0
							Course Total:	**196**	**2**
Course ID:	**AR33**		Course Title:	**Int Photo**					
S2	1	1	1104	A B C	Schubert, Thorne	404	0.500	32	0
	3	3	1304	A B C	Schubert, Thorne	404	0.500	28	0
							Course Total:	**60**	**0**
Course ID:	**AR34**		Course Title:	**Adv Photo**					
S2	4	4	1404	A B C	Schubert, Thorne	404	0.500	28	0
							Course Total:	**28**	**0**
Course ID:	**AR40**		Course Title:	**Stained Glass**					
S1	1	1	0105	A B C	Smith, Christine	402	0.500	26	0
	1	1	2001	A B C	Bayer M., Michelle	115	0.500	30	0
	3	3	0305	A B C	Smith, Christine	402	0.500	26	0
	5	5	0505	A B C	Smith, Christine	402	0.500	26	0
	6	6	0605	A B C	Smith, Christine	402	0.500	26	0
S2	1	1	1105	A B C	Smith, Christine	402	0.500	26	0
	1	1	1605	A B C	Smith, Christine	402	0.500	26	0
	3	3	1305	A B C	Smith, Christine	402	0.500	26	0
							Course Total:	**212**	**0**
Course ID:	**AR41**		Course Title:	**Beg Ceramics**					
S1	2	2	0203	A B C	Blahak P., Pete	405	0.500	28	0
	4	4	0403	A B C	Blahak P., Pete	405	0.500	28	1
	5	5	0503	A B C	Blahak P., Pete	405	0.500	28	0
	6	6	0603	A B C	Blahak P., Pete	405	0.500	28	0
S2	2	2	1203	A B C	Blahak P., Pete	405	0.500	28	0
	5	5	1503	A B C	Blahak P., Pete	405	0.500	28	0
	6	6	1603	A B C	Blahak P., Pete	405	0.500	28	0
							Course Total:	**196**	**1**

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Figure 18.47 - Schedule Section List by Course

OSM404 – Class Analysis by Period and Course

The OSM404 report prints a section-by-section analysis of scheduling results for a particular option set. The report shows actual count results of an option set scheduling run along with average requests per section.

Filter the report using the following options:

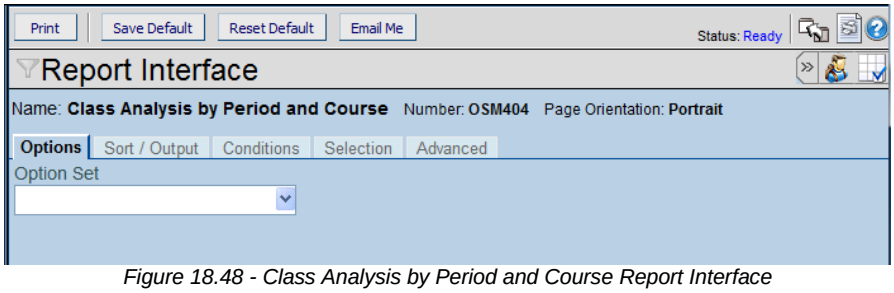
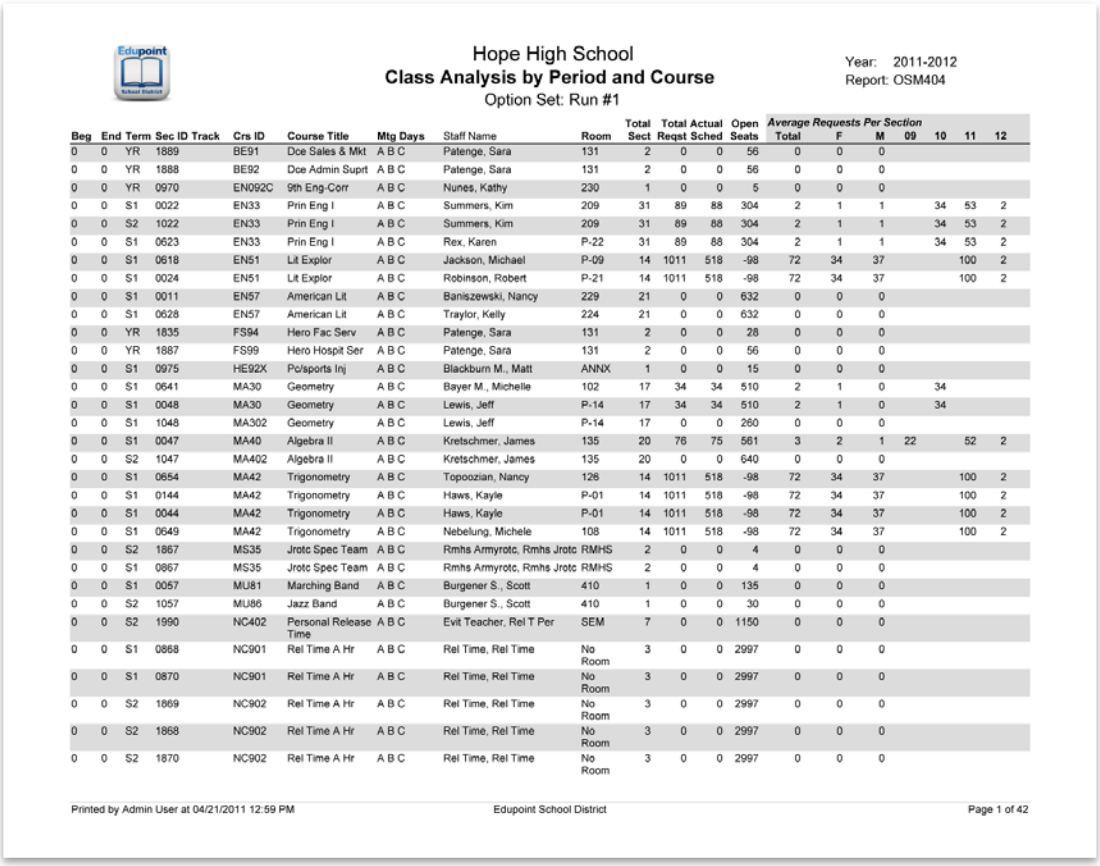


Figure 18.48 - Class Analysis by Period and Course Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.



Hope High School
Class Analysis by Period and Course
Option Set: Run #1

Year: 2011-2012
Report: OSM404

Beg	End	Term	Sec ID	Track	Crs ID	Course Title	Mtg Days	Staff Name	Room	Total Sect	Total Reqst	Actual Sched	Open Seats	Average Requests Per Section Total	F	M	09	10	11	12
0	0	YR	1889		BE91	Dce Sales & Mkt	A B C	Patenge, Sara	131	2	0	0	56	0	0	0				
0	0	YR	1888		BE92	Dce Admin Suprt	A B C	Patenge, Sara	131	2	0	0	56	0	0	0				
0	0	YR	0970		EN092C	9th Eng-Corr	A B C	Nunes, Kathy	230	1	0	0	5	0	0	0				
0	0	S1	0022		EN33	Prin Eng I	A B C	Summers, Kim	209	31	89	88	304	2	1	1		34	53	2
0	0	S2	1022		EN33	Prin Eng I	A B C	Summers, Kim	209	31	89	88	304	2	1	1		34	53	2
0	0	S1	0623		EN33	Prin Eng I	A B C	Rex, Karen	P-22	31	89	88	304	2	1	1		34	53	2
0	0	S1	0618		EN51	Lit Explor	A B C	Jackson, Michael	P-09	14	1011	518	-98	72	34	37			100	2
0	0	S1	0024		EN51	Lit Explor	A B C	Robinson, Robert	P-21	14	1011	518	-98	72	34	37			100	2
0	0	S1	0011		EN57	American Lit	A B C	Baniszewski, Nancy	229	21	0	0	632	0	0	0				
0	0	S1	0628		EN57	American Lit	A B C	Traylor, Kelly	224	21	0	0	632	0	0	0				
0	0	YR	1835		FS94	Hero Fac Serv	A B C	Patenge, Sara	131	2	0	0	28	0	0	0				
0	0	YR	1887		FS99	Hero Hospit Ser	A B C	Patenge, Sara	131	2	0	0	56	0	0	0				
0	0	S1	0975		HE92X	Pc/sports Inj	A B C	Blackburn M., Matt	ANNX	1	0	0	15	0	0	0				
0	0	S1	0641		MA30	Geometry	A B C	Bayer M., Michelle	102	17	34	34	510	2	1	0		34		
0	0	S1	0048		MA30	Geometry	A B C	Lewis, Jeff	P-14	17	34	34	510	2	1	0		34		
0	0	S1	1048		MA302	Geometry	A B C	Lewis, Jeff	P-14	17	0	0	260	0	0	0				
0	0	S1	0047		MA40	Algebra II	A B C	Kretschmer, James	135	20	76	75	561	3	2	1	22		52	2
0	0	S2	1047		MA402	Algebra II	A B C	Kretschmer, James	135	20	0	0	640	0	0	0				
0	0	S1	0654		MA42	Trigonometry	A B C	Topoozian, Nancy	126	14	1011	518	-98	72	34	37			100	2
0	0	S1	0144		MA42	Trigonometry	A B C	Haws, Kayle	P-01	14	1011	518	-98	72	34	37			100	2
0	0	S1	0044		MA42	Trigonometry	A B C	Haws, Kayle	P-01	14	1011	518	-98	72	34	37			100	2
0	0	S1	0649		MA42	Trigonometry	A B C	Nebelung, Michele	108	14	1011	518	-98	72	34	37			100	2
0	0	S2	1867		MS35	Jrotc Spec Team	A B C	Rmhs Armyrotc, Rmhs Jrotc	RMHS	2	0	0	4	0	0	0				
0	0	S1	0867		MS35	Jrotc Spec Team	A B C	Rmhs Armyrotc, Rmhs Jrotc	RMHS	2	0	0	4	0	0	0				
0	0	S1	0057		MU81	Marching Band	A B C	Burgener S., Scott	410	1	0	0	135	0	0	0				
0	0	S2	1057		MU86	Jazz Band	A B C	Burgener S., Scott	410	1	0	0	30	0	0	0				
0	0	S2	1990		NC402	Personal Release Time	A B C	Evit Teacher, Rel T Per	SEM	7	0	0	1150	0	0	0				
0	0	S1	0868		NC901	Rel Time A Hr	A B C	Rel Time, Rel Time	No Room	3	0	0	2997	0	0	0				
0	0	S1	0870		NC901	Rel Time A Hr	A B C	Rel Time, Rel Time	No Room	3	0	0	2997	0	0	0				
0	0	S2	1869		NC902	Rel Time A Hr	A B C	Rel Time, Rel Time	No Room	3	0	0	2997	0	0	0				
0	0	S2	1868		NC902	Rel Time A Hr	A B C	Rel Time, Rel Time	No Room	3	0	0	2997	0	0	0				
0	0	S2	1870		NC902	Rel Time A Hr	A B C	Rel Time, Rel Time	No Room	3	0	0	2997	0	0	0				

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Figure 18.49 - Class Analysis by Period and Course

OSM405 – Schedule Section List

The OSM405 report prints a scheduling section list from a particular scheduling option set.

Filter the report using the following options:

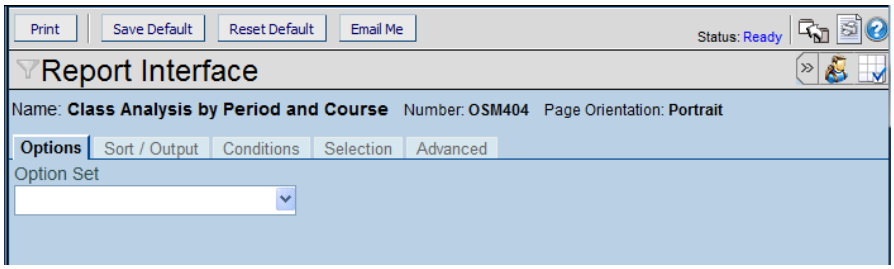
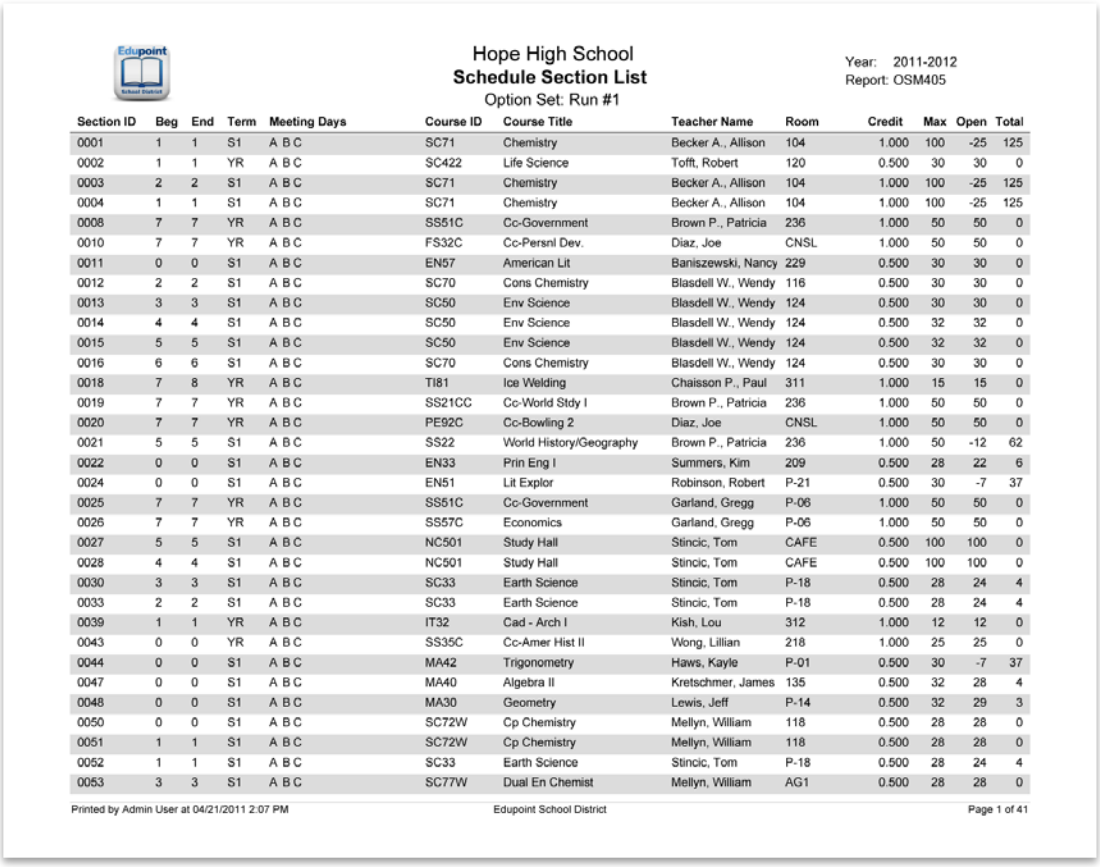


Figure 18.50 - Schedule Section List Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.

This report has a Mandatory Sort Property of Section ID in ascending order.



Hope High School
Schedule Section List
Option Set: Run #1

Year: 2011-2012
Report: OSM405

Section ID	Beg	End	Term	Meeting Days	Course ID	Course Title	Teacher Name	Room	Credit	Max	Open	Total
0001	1	1	S1	A B C	SC71	Chemistry	Becker A., Allison	104	1.000	100	-25	125
0002	1	1	YR	A B C	SC422	Life Science	Tofft, Robert	120	0.500	30	30	0
0003	2	2	S1	A B C	SC71	Chemistry	Becker A., Allison	104	1.000	100	-25	125
0004	1	1	S1	A B C	SC71	Chemistry	Becker A., Allison	104	1.000	100	-25	125
0008	7	7	YR	A B C	SS51C	Cc-Government	Brown P., Patricia	236	1.000	50	50	0
0010	7	7	YR	A B C	FS32C	Cc-Persnl Dev.	Diaz, Joe	CNSL	1.000	50	50	0
0011	0	0	S1	A B C	EN57	American Lit	Baniszewski, Nancy	229	0.500	30	30	0
0012	2	2	S1	A B C	SC70	Cons Chemistry	Blasdell W., Wendy	116	0.500	30	30	0
0013	3	3	S1	A B C	SC50	Env Science	Blasdell W., Wendy	124	0.500	30	30	0
0014	4	4	S1	A B C	SC50	Env Science	Blasdell W., Wendy	124	0.500	32	32	0
0015	5	5	S1	A B C	SC50	Env Science	Blasdell W., Wendy	124	0.500	32	32	0
0016	6	6	S1	A B C	SC70	Cons Chemistry	Blasdell W., Wendy	124	0.500	30	30	0
0018	7	8	YR	A B C	TI81	Ice Welding	Chaisson P., Paul	311	1.000	15	15	0
0019	7	7	YR	A B C	SS21CC	Cc-World Stdy I	Brown P., Patricia	236	1.000	50	50	0
0020	7	7	YR	A B C	PE92C	Cc-Bowling 2	Diaz, Joe	CNSL	1.000	50	50	0
0021	5	5	S1	A B C	SS22	World History/Geography	Brown P., Patricia	236	1.000	50	-12	62
0022	0	0	S1	A B C	EN33	Prin Eng I	Summers, Kim	209	0.500	28	22	6
0024	0	0	S1	A B C	EN51	Lit Explor	Robinson, Robert	P-21	0.500	30	-7	37
0025	7	7	YR	A B C	SS51C	Cc-Government	Garland, Gregg	P-06	1.000	50	50	0
0026	7	7	YR	A B C	SS57C	Economics	Garland, Gregg	P-06	1.000	50	50	0
0027	5	5	S1	A B C	NC501	Study Hall	Stincic, Tom	CAFE	0.500	100	100	0
0028	4	4	S1	A B C	NC501	Study Hall	Stincic, Tom	CAFE	0.500	100	100	0
0030	3	3	S1	A B C	SC33	Earth Science	Stincic, Tom	P-18	0.500	28	24	4
0033	2	2	S1	A B C	SC33	Earth Science	Stincic, Tom	P-18	0.500	28	24	4
0039	1	1	YR	A B C	IT32	Cad - Arch I	Kish, Lou	312	1.000	12	12	0
0043	0	0	YR	A B C	SS35C	Cc-Amer Hist II	Wong, Lillian	218	1.000	25	25	0
0044	0	0	S1	A B C	MA42	Trigonometry	Haws, Kayle	P-01	0.500	30	-7	37
0047	0	0	S1	A B C	MA40	Algebra II	Kretschmer, James	135	0.500	32	28	4
0048	0	0	S1	A B C	MA30	Geometry	Lewis, Jeff	P-14	0.500	32	29	3
0050	0	0	S1	A B C	SC72W	Cp Chemistry	Mellyn, William	118	0.500	28	28	0
0051	1	1	S1	A B C	SC72W	Cp Chemistry	Mellyn, William	118	0.500	28	28	0
0052	1	1	S1	A B C	SC33	Earth Science	Stincic, Tom	P-18	0.500	28	24	4
0053	3	3	S1	A B C	SC77W	Dual En Chemist	Mellyn, William	AG1	0.500	28	28	0

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Figure 18.51 - Schedule Section List

OSM406 – Schedule Open Periods

The Schedule Open Periods report displays any periods not scheduled for a student in the selected option set by period number. All students display in alphabetical order by last name.

Filter the report using the following options:

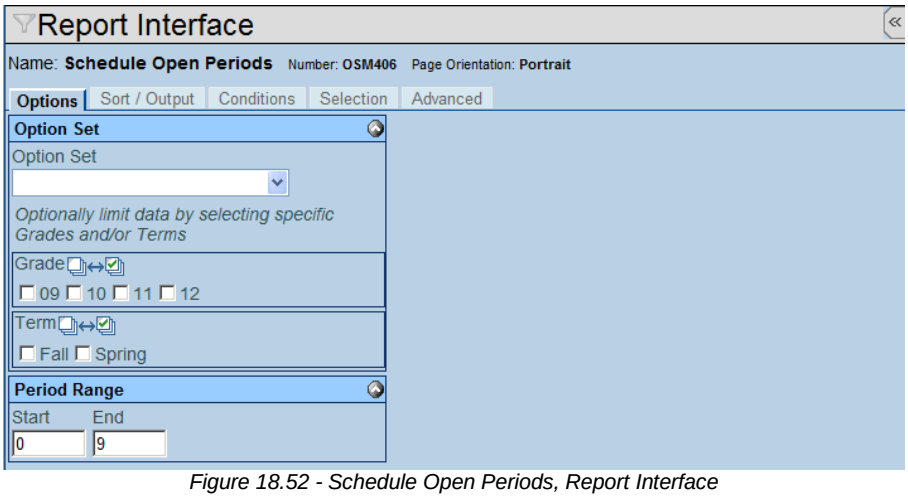
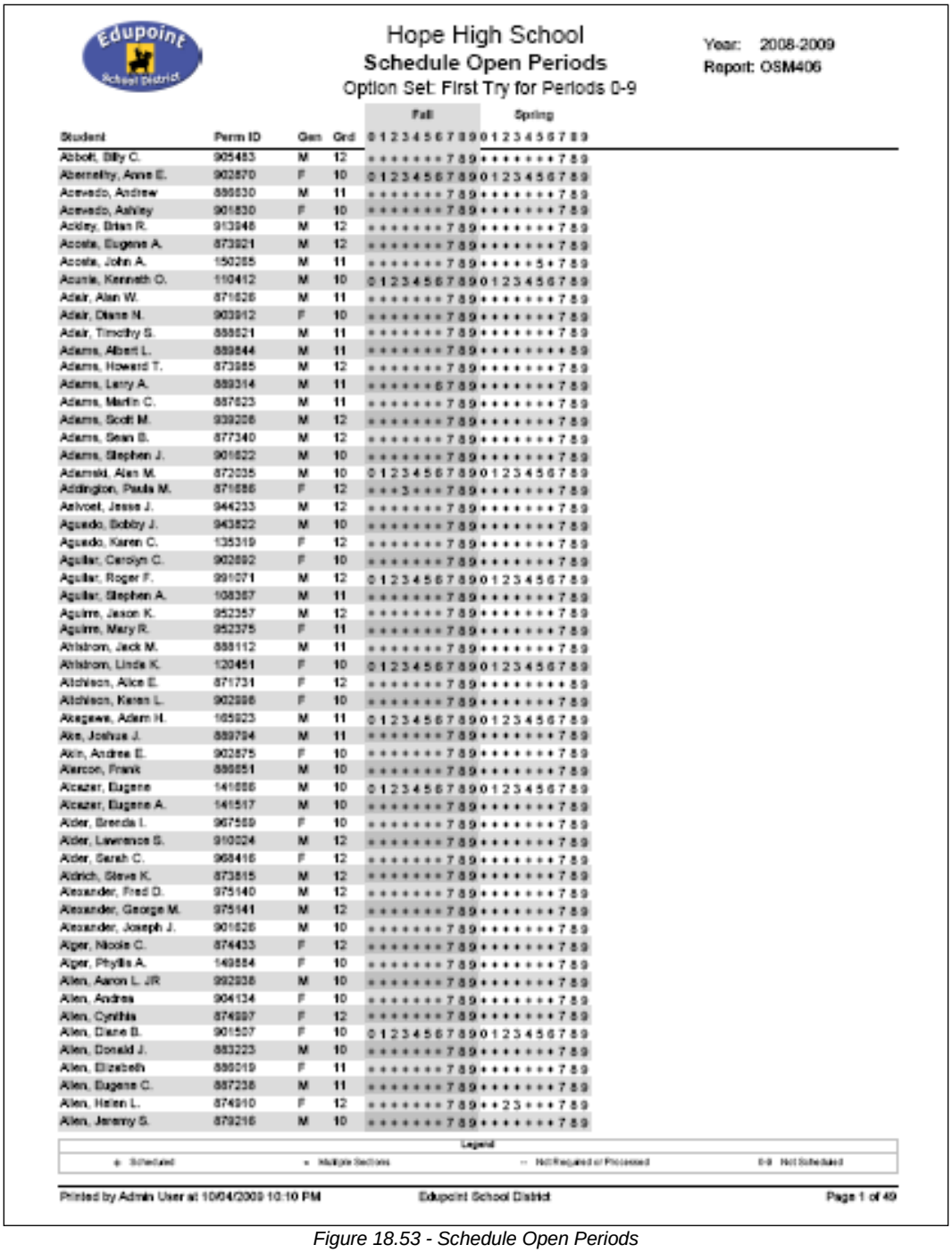


Figure 18.52 - Schedule Open Periods, Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.
- **Grade** – select the grades to include in the report.
- **Term** – select the term to include in the report.
- **Period Range** – select the periods to include in the report.



Hope High School
Schedule Open Periods
Option Set: First Try for Periods 0-9

Year: 2008-2009
Report: OSM406

Student	Perm ID	Gen	Grd	Fall 0 1 2 3 4 5 6 7 8 9	Spring 0 1 2 3 4 5 6 7 8 9
Abbott, Billy C.	905483	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Abernethy, Anne E.	902870	F	10	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
Acevedo, Andrew	886830	M	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Acevedo, Ashley	901830	F	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Ackley, Brian R.	913946	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Acosta, Eugene A.	873821	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Acosta, John A.	150285	M	11	+ + + + + + + 7 8 9	+ + + + + 5 + 7 8 9
Acuna, Kenneth O.	110412	M	10	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
Adair, Alan W.	871626	M	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Adair, Diana N.	903912	F	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Adair, Timothy S.	886821	M	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Adams, Albert L.	889844	M	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Adams, Howard T.	873885	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Adams, Larry A.	889314	M	11	+ + + + + + 7 8 9	+ + + + + + + 7 8 9
Adams, Martin C.	887823	M	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Adams, Scott M.	939206	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Adams, Sean B.	877340	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Adams, Stephen J.	901822	M	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Adamski, Alan M.	872035	M	10	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
Addington, Paula M.	871886	F	12	+ + + 3 + + + 7 8 9	+ + + + + + + 7 8 9
Ashcet, Jesse J.	944233	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Aguado, Bobby J.	943822	M	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Aguado, Karen C.	135319	F	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Aguilar, Carolyn C.	902892	F	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Aguilar, Roger F.	991071	M	12	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
Aguilar, Stephen A.	108387	M	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Aguirre, Jason K.	952357	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Aguirre, Mary R.	952375	F	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Ahlstrom, Jack M.	888112	M	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Ahlstrom, Linda K.	120451	F	10	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
Aitchison, Alice E.	871731	F	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Aitchison, Karen L.	902886	F	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Akegawa, Adam H.	165823	M	11	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
Ake, Joshua J.	889794	M	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Akin, Andrea E.	902875	F	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alarcon, Frank	886851	M	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alcazar, Eugene	141886	M	10	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
Alcazar, Eugene A.	141517	M	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alder, Brenda I.	967569	F	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alder, Lawrence S.	910024	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alder, Sarah C.	968416	F	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Aldrich, Steve K.	873815	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alexander, Fred D.	975140	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alexander, George M.	975141	M	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alexander, Joseph J.	901826	M	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alger, Nicole C.	874433	F	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Alger, Phyllis A.	149884	F	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Allen, Aaron L. JR	992936	M	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Allen, Andrea	904134	F	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Allen, Cynthia	874997	F	12	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Allen, Diane B.	901507	F	10	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
Allen, Donald J.	883223	M	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Allen, Elizabeth	886019	F	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Allen, Eugene C.	887238	M	11	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9
Allen, Helen L.	874910	F	12	+ + + + + + + 7 8 9	+ + 2 3 + + + 7 8 9
Allen, Jeremy S.	879216	M	10	+ + + + + + + 7 8 9	+ + + + + + + 7 8 9

Legend
+ Scheduled * Multiple Sections -- Not Required or Processed 0-9 Not Scheduled

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Figure 18.53 - Schedule Open Periods

If a period displays a “+” (plus) sign, a class has been scheduled for the student.

OSM407 – Course Request Conflict Listing

The OSM407 report prints all conflicts for each course that has student requests.

Filter the report using the following options:

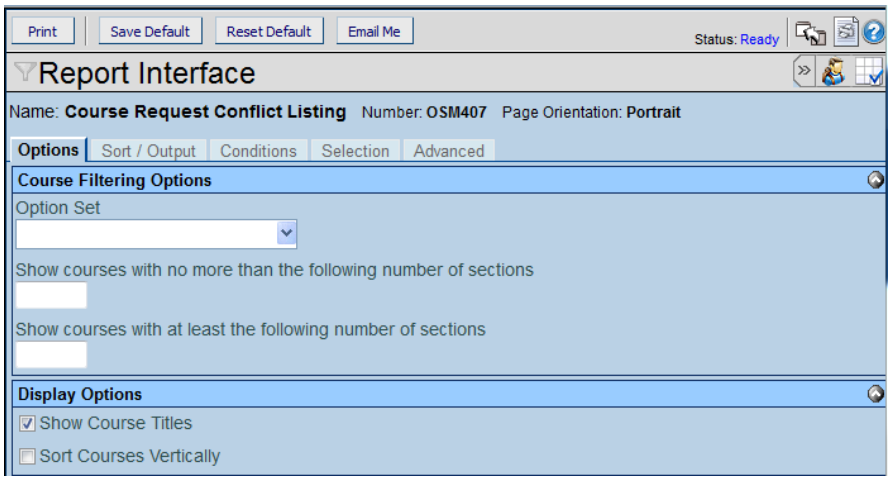
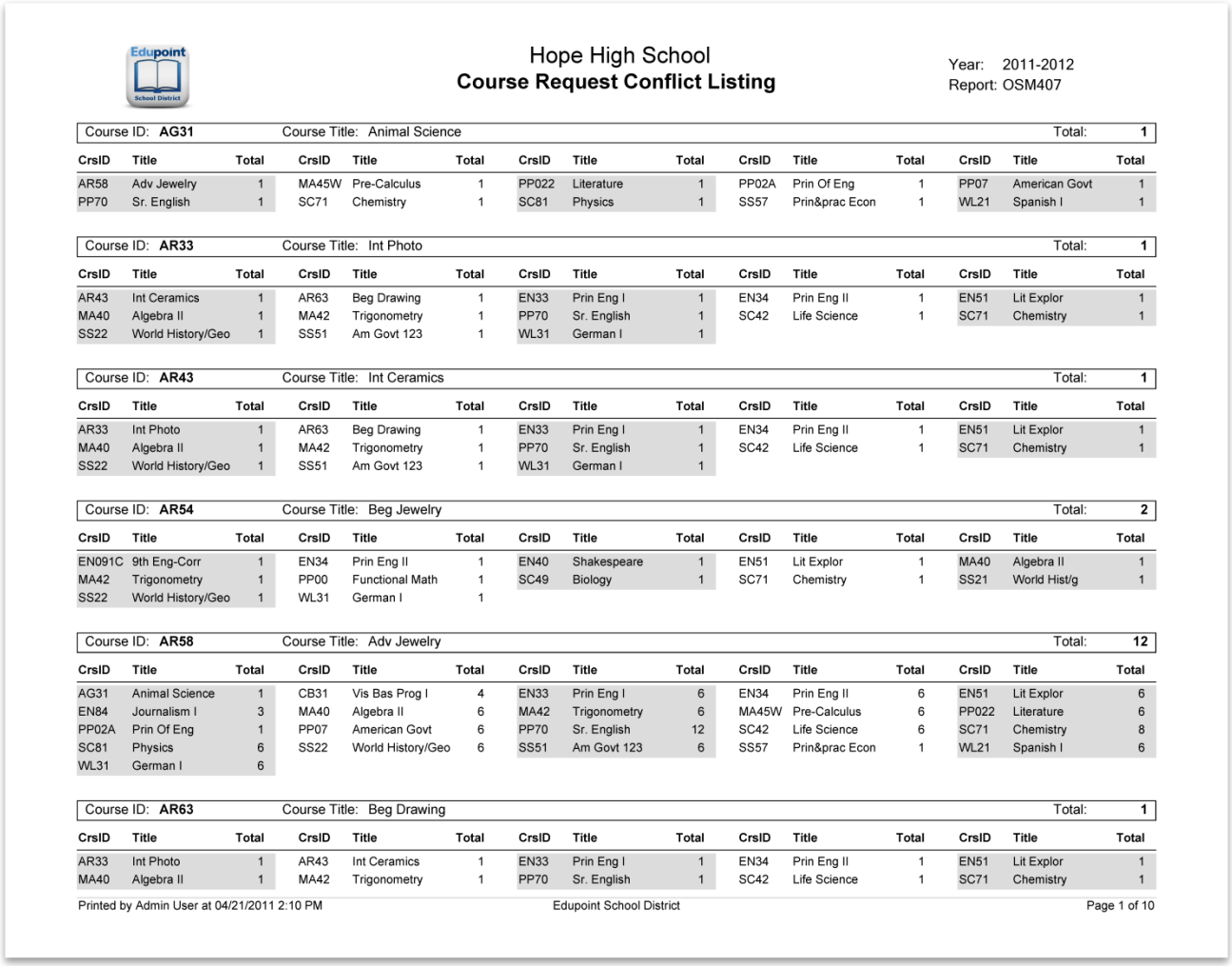


Figure 18.54 - Schedule Open Periods, Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.
- **Show courses with no more than the following number of sections** – limits the courses displayed.
- **Show courses with at least the following number of sections** – limits the courses displayed.

- **Show Course Titles** - shows course names along with course identifiers.
- **Sort Courses Vertically** – displays the courses vertically across the page.



Hope High School
Course Request Conflict Listing

Year: 2011-2012
Report: OSM407

Course ID: **AG31** Course Title: Animal Science Total: **1**

CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total
AR58	Adv Jewelry	1	MA45W	Pre-Calculus	1	PP022	Literature	1	PP02A	Prin Of Eng	1	PP07	American Govt	1
PP70	Sr. English	1	SC71	Chemistry	1	SC81	Physics	1	SS57	Prin&prac Econ	1	WL21	Spanish I	1

Course ID: **AR33** Course Title: Int Photo Total: **1**

CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total
AR43	Int Ceramics	1	AR63	Beg Drawing	1	EN33	Prin Eng I	1	EN34	Prin Eng II	1	EN51	Lit Explor	1
MA40	Algebra II	1	MA42	Trigonometry	1	PP70	Sr. English	1	SC42	Life Science	1	SC71	Chemistry	1
SS22	World History/Geo	1	SS51	Am Govt 123	1	WL31	German I	1						

Course ID: **AR43** Course Title: Int Ceramics Total: **1**

CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total
AR33	Int Photo	1	AR63	Beg Drawing	1	EN33	Prin Eng I	1	EN34	Prin Eng II	1	EN51	Lit Explor	1
MA40	Algebra II	1	MA42	Trigonometry	1	PP70	Sr. English	1	SC42	Life Science	1	SC71	Chemistry	1
SS22	World History/Geo	1	SS51	Am Govt 123	1	WL31	German I	1						

Course ID: **AR54** Course Title: Beg Jewelry Total: **2**

CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total
EN091C	9th Eng-Corr	1	EN34	Prin Eng II	1	EN40	Shakespeare	1	EN51	Lit Explor	1	MA40	Algebra II	1
MA42	Trigonometry	1	PP00	Functional Math	1	SC49	Biology	1	SC71	Chemistry	1	SS21	World Hist/g	1
SS22	World History/Geo	1	WL31	German I	1									

Course ID: **AR58** Course Title: Adv Jewelry Total: **12**

CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total
AG31	Animal Science	1	CB31	Vis Bas Prog I	4	EN33	Prin Eng I	6	EN34	Prin Eng II	6	EN51	Lit Explor	6
EN84	Journalism I	3	MA40	Algebra II	6	MA42	Trigonometry	6	MA45W	Pre-Calculus	6	PP022	Literature	6
PP02A	Prin Of Eng	1	PP07	American Govt	6	PP70	Sr. English	12	SC42	Life Science	6	SC71	Chemistry	8
SC81	Physics	6	SS22	World History/Geo	6	SS51	Am Govt 123	6	SS57	Prin&prac Econ	1	WL21	Spanish I	6
WL31	German I	6												

Course ID: **AR63** Course Title: Beg Drawing Total: **1**

CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total	CrsID	Title	Total
AR33	Int Photo	1	AR43	Int Ceramics	1	EN33	Prin Eng I	1	EN34	Prin Eng II	1	EN51	Lit Explor	1
MA40	Algebra II	1	MA42	Trigonometry	1	PP70	Sr. English	1	SC42	Life Science	1	SC71	Chemistry	1

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Figure 18.55 - Course Request Conflict Listing

OSM408 – Class Analysis by Course and Section

The Class Analysis by Course and Section report lists each course and shows the sections scheduled for the course. For each section and course, the report lists the number of students scheduled both overall and by gender, the total number of spaces available, the number of requests, and the average number of students scheduled in a section.

Filter the report using the following options:

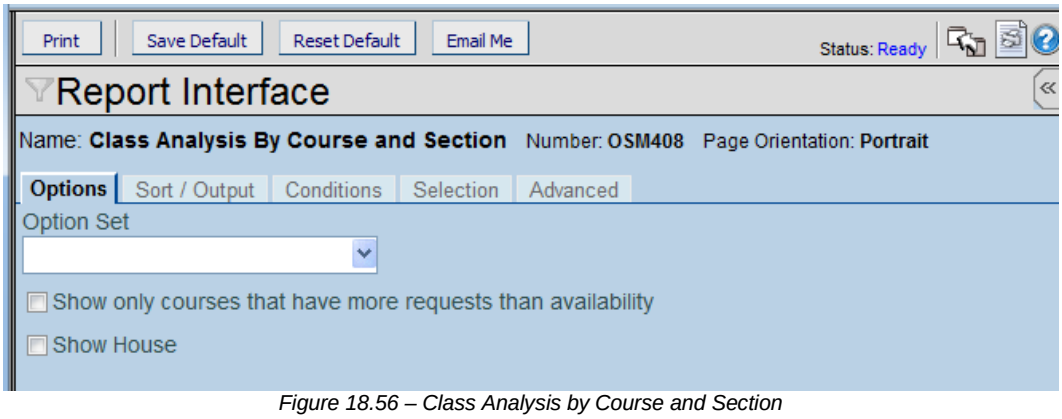
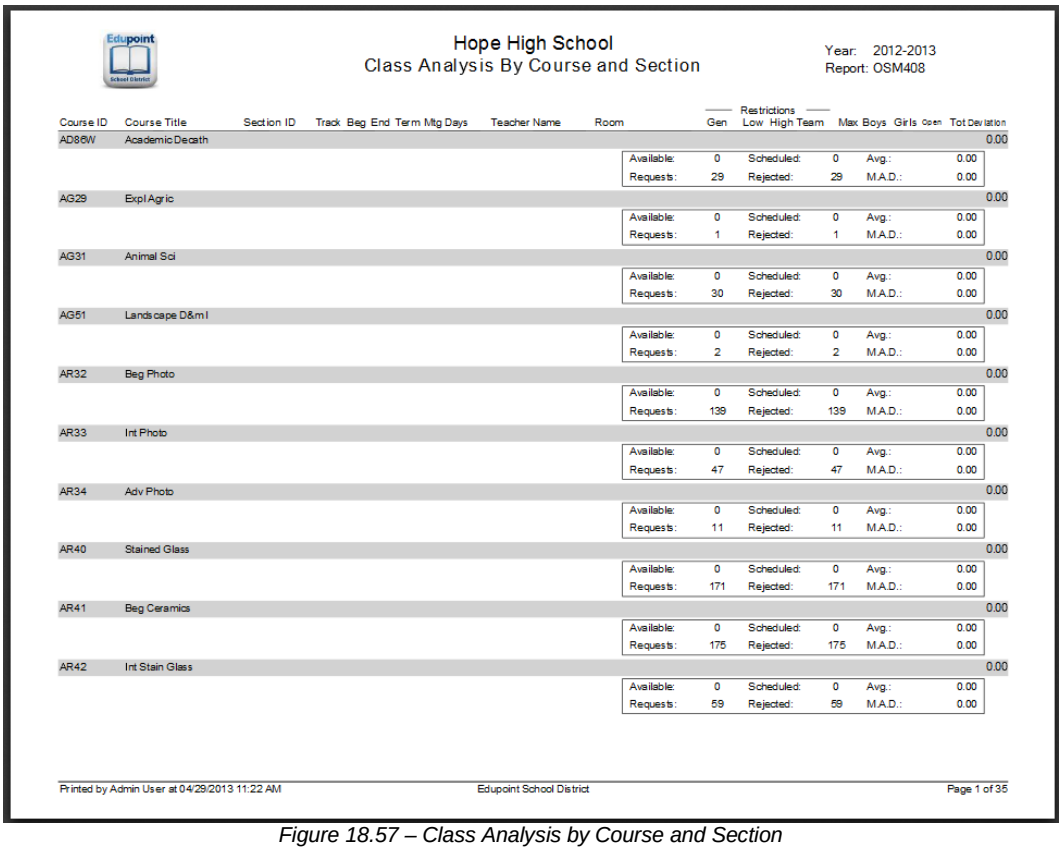


Figure 18.56 – Class Analysis by Course and Section

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.
- **Show only courses that have more requests than availability** – only displays courses have more student requests than seats/sections available.
- **Show House** – displays any house assignments.



Hope High School
Class Analysis By Course and Section

Year: 2012-2013
Report: OSM408

Course ID	Course Title	Section ID	Track	Beg	End	Term	Mtg Days	Teacher Name	Room	Restrictions Gen	Restrictions Low	Restrictions High	Restrictions Team	Max	Boys	Girls	Open	Tot Deviation
AD86W	Academic Decath																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	29	Rejected:	29	M.A.D.:	0.00				
AG29	Expl Agric																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	1	Rejected:	1	M.A.D.:	0.00				
AG31	Animal Sci																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	30	Rejected:	30	M.A.D.:	0.00				
AG51	Landscape D&mI																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	2	Rejected:	2	M.A.D.:	0.00				
AR32	Beg Photo																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	139	Rejected:	139	M.A.D.:	0.00				
AR33	Int Photo																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	47	Rejected:	47	M.A.D.:	0.00				
AR34	Adv Photo																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	11	Rejected:	11	M.A.D.:	0.00				
AR40	Stained Glass																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	171	Rejected:	171	M.A.D.:	0.00				
AR41	Beg Ceramics																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	175	Rejected:	175	M.A.D.:	0.00				
AR42	Int Stain Glass																	0.00
									Available:	0	Scheduled:	0	Avg.:	0.00				
									Requests:	59	Rejected:	59	M.A.D.:	0.00				

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Figure 18.57 – Class Analysis by Course and Section

OSM409 – Student Course Request Verification Listing

The OSM409 report prints a list of course requests by student.

Filter the report using the following options:

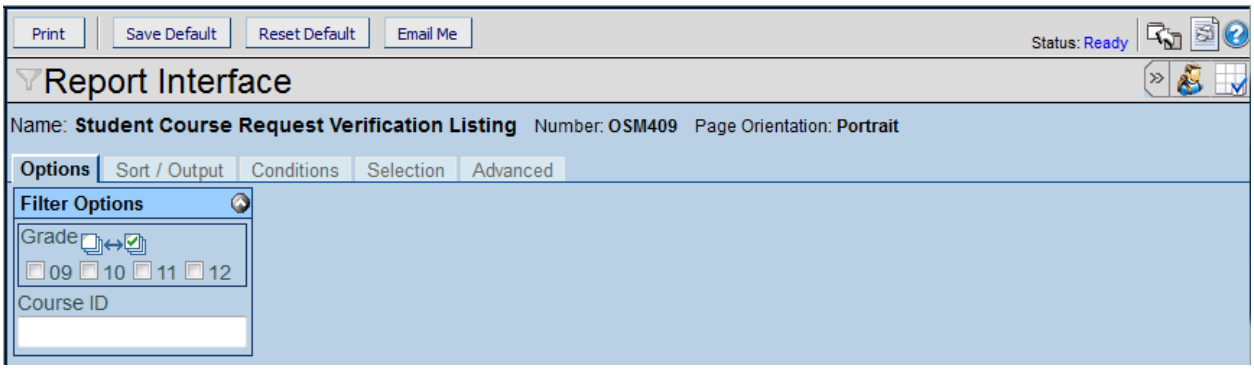
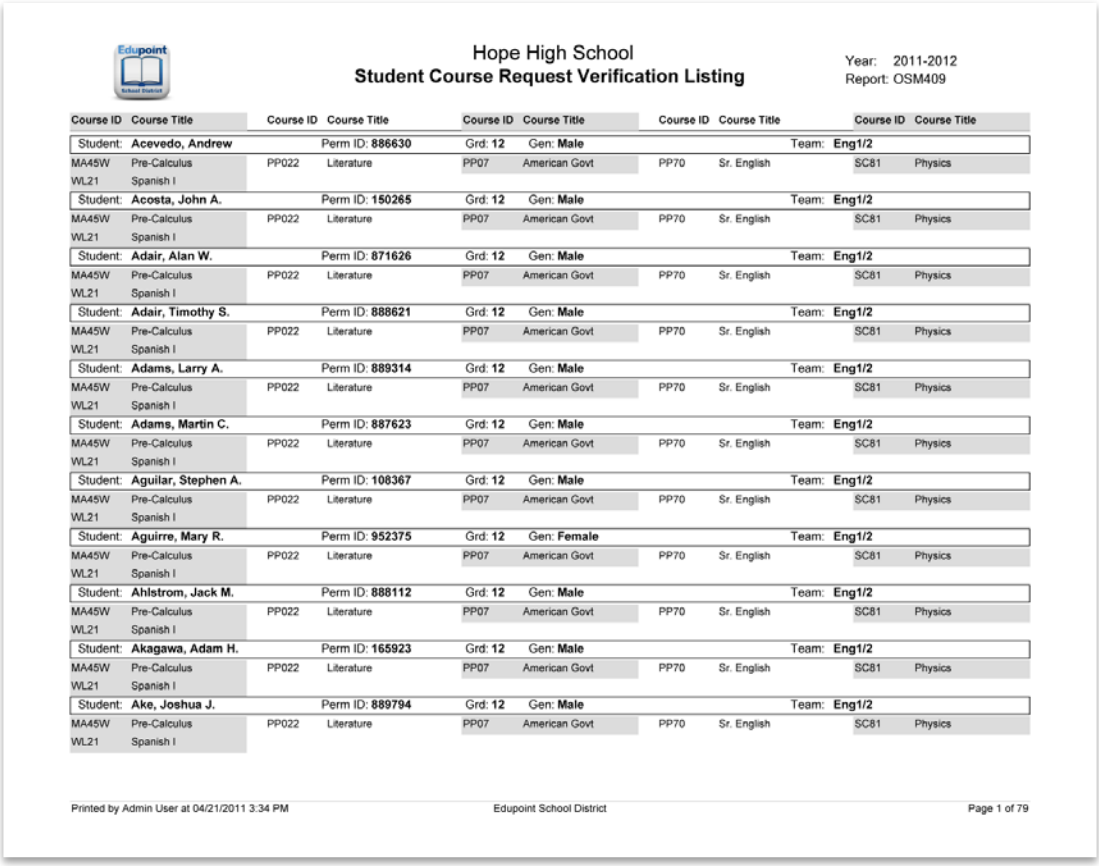


Figure 18.58 - Student Course Request Verification Listing Report Interface

- **Grade** – select the grades to include in the report.
- **Course ID** – filter the report to include students in the selected course.



Hope High School
Student Course Request Verification Listing
Year: 2011-2012
Report: OSM409

Course ID	Course Title	Course ID	Course Title	Course ID	Course Title	Course ID	Course Title	Course ID	Course Title
Student: **Acevedo, Andrew**			Perm ID: **886630**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Acosta, John A.**			Perm ID: **150265**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Adair, Alan W.**			Perm ID: **871626**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Adair, Timothy S.**			Perm ID: **888621**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Adams, Larry A.**			Perm ID: **889314**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Adams, Martin C.**			Perm ID: **887623**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Aguilar, Stephen A.**			Perm ID: **108367**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Aguirre, Mary R.**			Perm ID: **952375**	Grd: **12**	Gen: **Female**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Ahlstrom, Jack M.**			Perm ID: **888112**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Akagawa, Adam H.**			Perm ID: **165923**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								
Student: **Ake, Joshua J.**			Perm ID: **889794**	Grd: **12**	Gen: **Male**			Team: **Eng1/2**	
MA45W	Pre-Calculus	PP022	Literature	PP07	American Govt	PP70	Sr. English	SC81	Physics
WL21	Spanish I								

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Figure 18.59 - Student Course Request Verification Listing

OSM411 – Class List

The OSM411 produces a class list by section ID for a particular option set. The report includes section data and student names. Optionally, the report may produce student's permanent ID number, state ID number, gender, grade, ethnic code, birth date, enter date for class, home language, and phone number.

Filter the report using the following options:

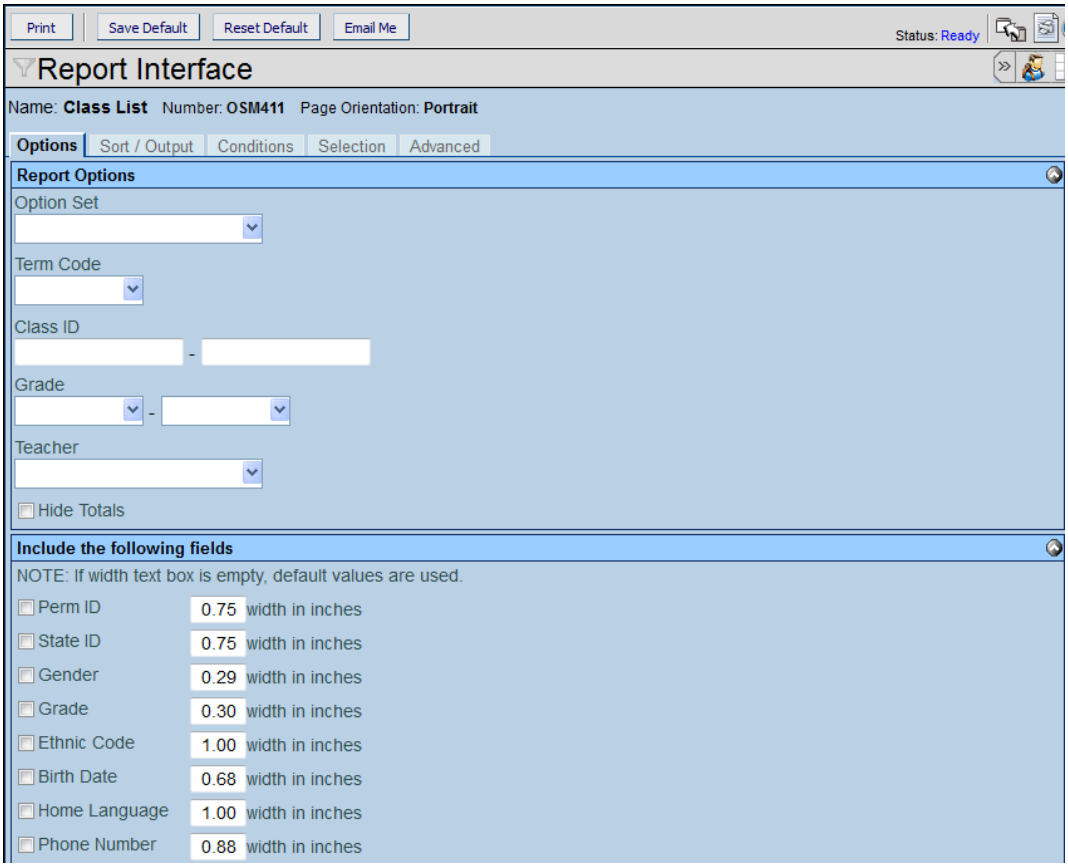
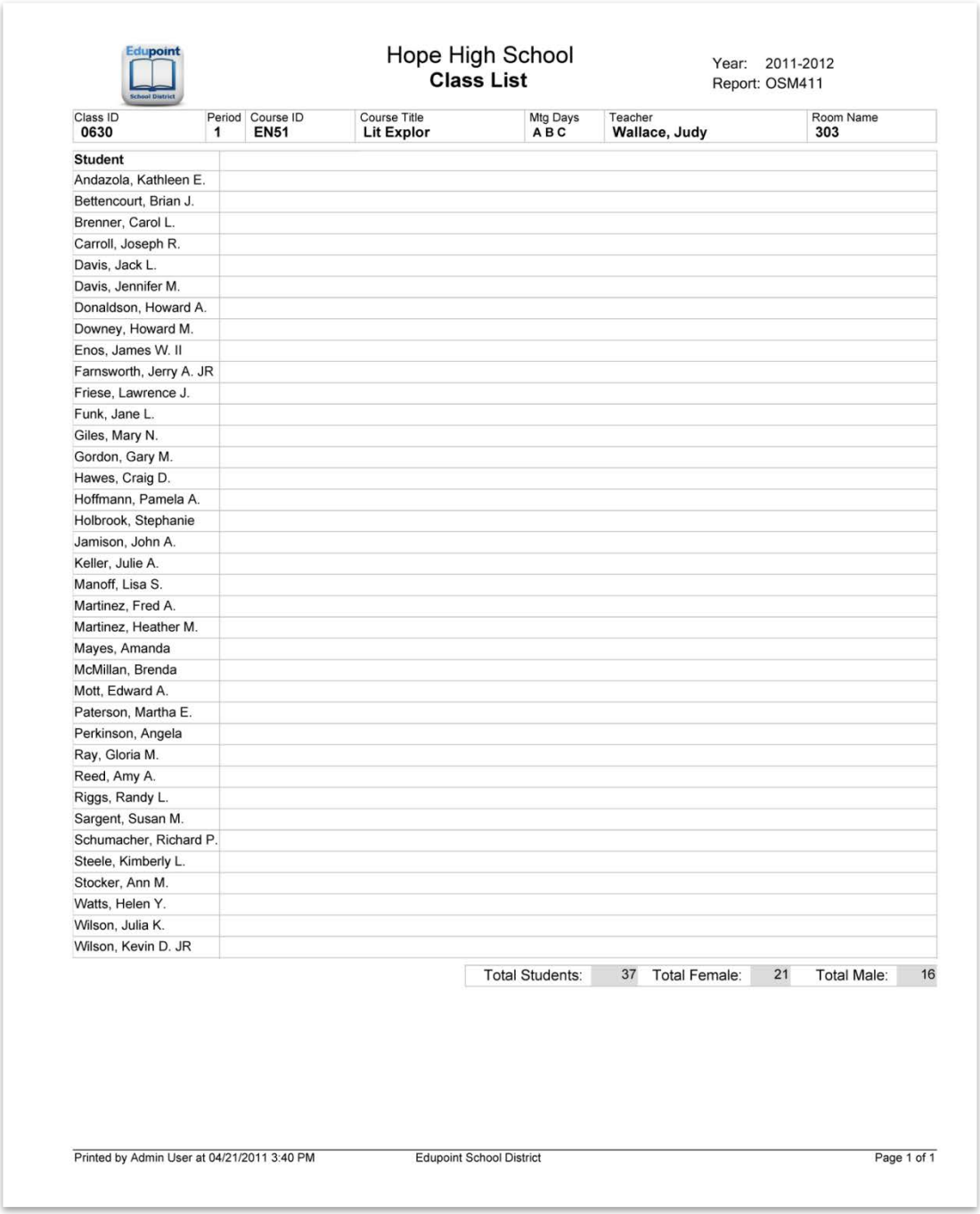


Figure 18.60 - Class List

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.

- **Term Code** - Filter report output for a specific term.
- **Class ID** - Filter report output for a specific section number or range of section numbers.
- **Grade** - Filter report output to include just the selected grade or grade range.
- **Teacher** - Filter report output to include just the selected teacher.
- **Hide Totals** - The report may be produced without student totals.
- **Include the following fields** - Option to include Perm ID, State ID, Gender, Grade, Ethnic Code, Birth Date, Enter Date, Home Language, and Phone number.



Hope High School
Class List

Year: 2011-2012
Report: OSM411

Class ID	Period	Course ID	Course Title	Mtg Days	Teacher	Room Name
0630	1	EN51	Lit Explor	A B C	Wallace, Judy	303

Student
Andazola, Kathleen E.
Bettencourt, Brian J.
Brenner, Carol L.
Carroll, Joseph R.
Davis, Jack L.
Davis, Jennifer M.
Donaldson, Howard A.
Downey, Howard M.
Enos, James W. II
Farnsworth, Jerry A. JR
Friese, Lawrence J.
Funk, Jane L.
Giles, Mary N.
Gordon, Gary M.
Hawes, Craig D.
Hoffmann, Pamela A.
Holbrook, Stephanie
Jamison, John A.
Keller, Julie A.
Manoff, Lisa S.
Martinez, Fred A.
Martinez, Heather M.
Mayes, Amanda
McMillan, Brenda
Mott, Edward A.
Paterson, Martha E.
Perkinson, Angela
Ray, Gloria M.
Reed, Amy A.
Riggs, Randy L.
Sargent, Susan M.
Schumacher, Richard P.
Steele, Kimberly L.
Stocker, Ann M.
Watts, Helen Y.
Wilson, Julia K.
Wilson, Kevin D. JR

Total Students: 37 Total Female: 21 Total Male: 16

Printed by Admin User at 04/21/2011 3:40 PM Edupoint School District Page 1 of 1

Figure 18.61 - Class List

OSM414 - Master Schedule by Department

The OSM414 report prints all of the sections in the Master Schedule on a grid sorted by Department.

Filter the report using the following options:

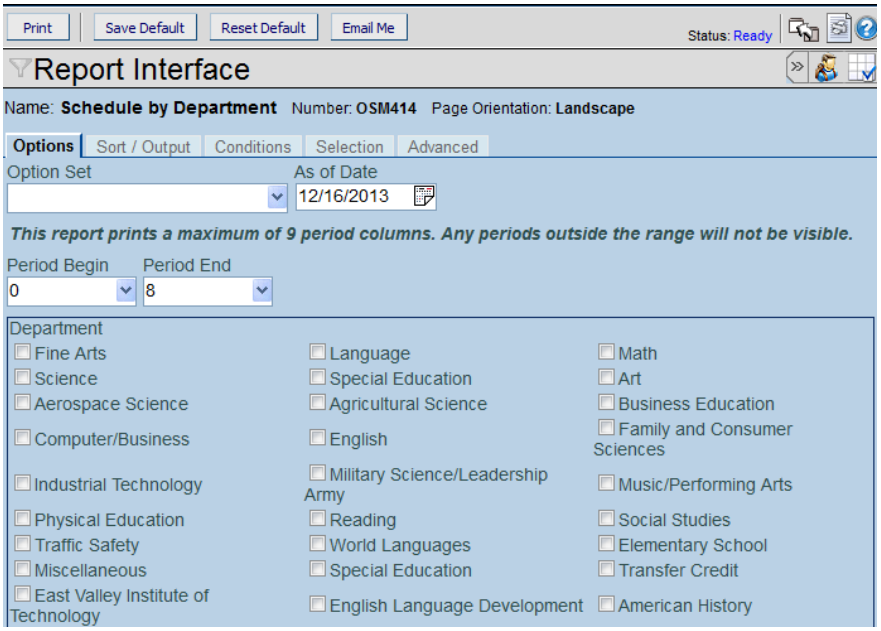
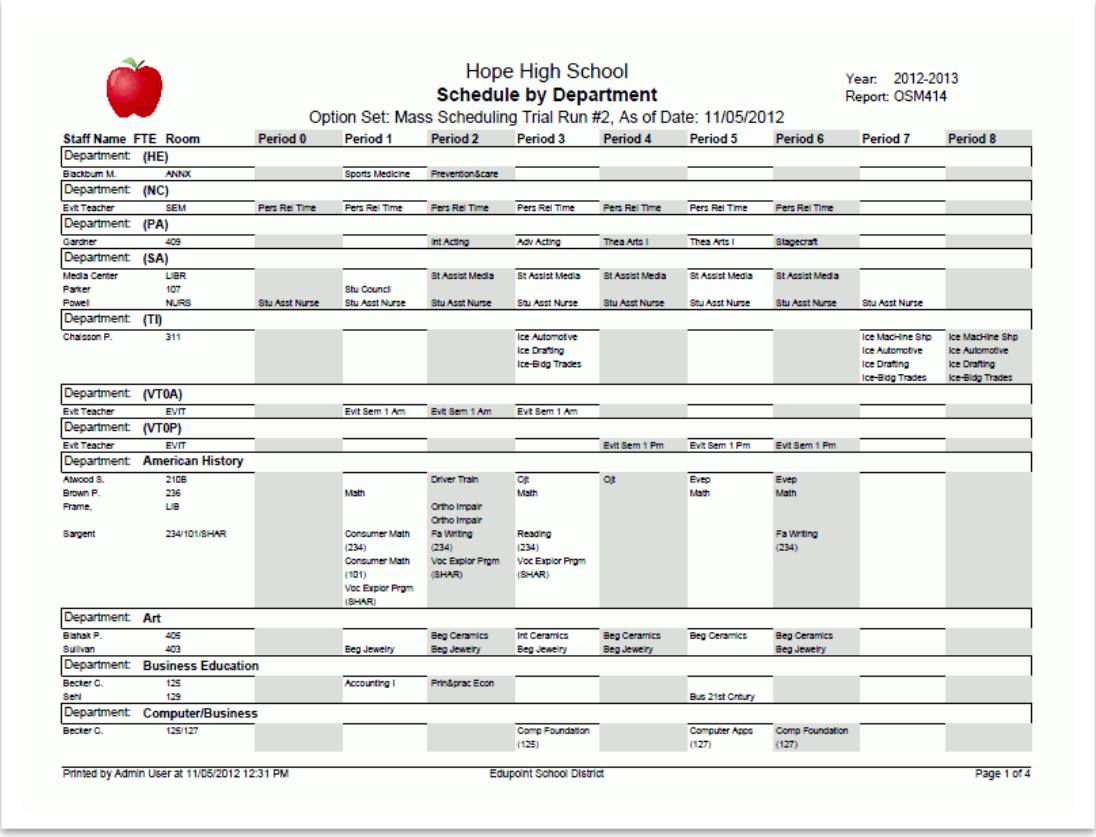


Figure 18.62 - Schedule by Department Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.
- **As of Date** - Report prints sections as they were on the date entered.
- **Period Begin/End Range** - Filters output by a period or a period range.
- **Department** - Select only those departments to be included in the report output or leave blank to include all reports.



Hope High School
Schedule by Department
Option Set: Mass Scheduling Trial Run #2, As of Date: 11/05/2012

Year: 2012-2013
Report: OSM414

Staff Name	FTE	Room	Period 0	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8
Department: (HE)											
Blackburn M.		ANNX		Sports Medicine	Prevention&care						
Department: (NC)											
Evit Teacher		SEM	Pers Rel Time	Pers Rel Time	Pers Rel Time	Pers Rel Time	Pers Rel Time	Pers Rel Time	Pers Rel Time		
Department: (PA)											
Gardner		409			Int Acting	Adv Acting	Thea Arts I	Thea Arts I	Stagecraft		
Department: (SA)											
Media Center		LIBR			St Assist Media	St Assist Media	St Assist Media	St Assist Media	St Assist Media		
Parker		107		Stu Council							
Powell		NURS	Stu Asst Nurse	Stu Asst Nurse	Stu Asst Nurse	Stu Asst Nurse	Stu Asst Nurse	Stu Asst Nurse	Stu Asst Nurse	Stu Asst Nurse	
Department: (TI)											
Chaisson P.		311				Ice Automotive Ice Drafting Ice-Bldg Trades				Ice MacHine Shp Ice Automotive Ice Drafting Ice-Bldg Trades	Ice MacHine Shp Ice Automotive Ice Drafting Ice-Bldg Trades
Department: (VT0A)											
Evit Teacher		EVIT		Evit Sem 1 Am	Evit Sem 1 Am	Evit Sem 1 Am					
Department: (VT0P)											
Evit Teacher		EVIT					Evit Sem 1 Pm	Evit Sem 1 Pm	Evit Sem 1 Pm		
Department: American History											
Atwood S.		210B			Driver Train	Ojt	Ojt	Evep	Evep		
Brown P.		236		Math		Math		Math	Math		
Frame,		LIB			Ortho Impair						
					Ortho Impair						
Sargent		234/101/SHAR		Consumer Math (234)	Fa Writing (234)	Reading (234)			Fa Writing (234)		
				Consumer Math (101)	Voc Explor Prgm (SHAR)	Voc Explor Prgm (SHAR)					
				Voc Explor Prgm (SHAR)							
Department: Art											
Blahak P.		405			Beg Ceramics	Int Ceramics	Beg Ceramics	Beg Ceramics	Beg Ceramics		
Sullivan		403		Beg Jewelry	Beg Jewelry	Beg Jewelry	Beg Jewelry		Beg Jewelry		
Department: Business Education											
Becker C.		125		Accounting I	Prin&prac Econ						
Sehl		129						Bus 21st Cntury			
Department: Computer/Business											
Becker C.		125/127				Comp Foundation (125)		Computer Apps (127)	Comp Foundation (127)		

Printed by Admin User at 11/05/2012 12:31 PM Edupoint School District Page 1 of 4

Figure 18.63 - Schedule by Department Report

OSM415 - Master Schedule by Room

The OSM415 report prints all of the sections in the Master Schedule on a grid sorted by Room.

Filter the report using the following options:

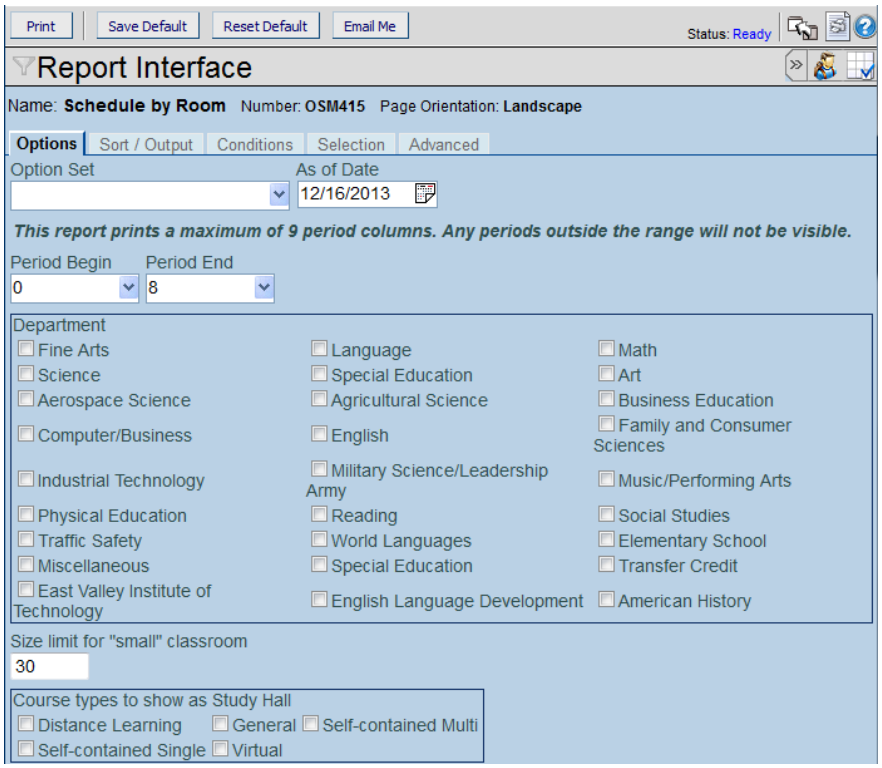
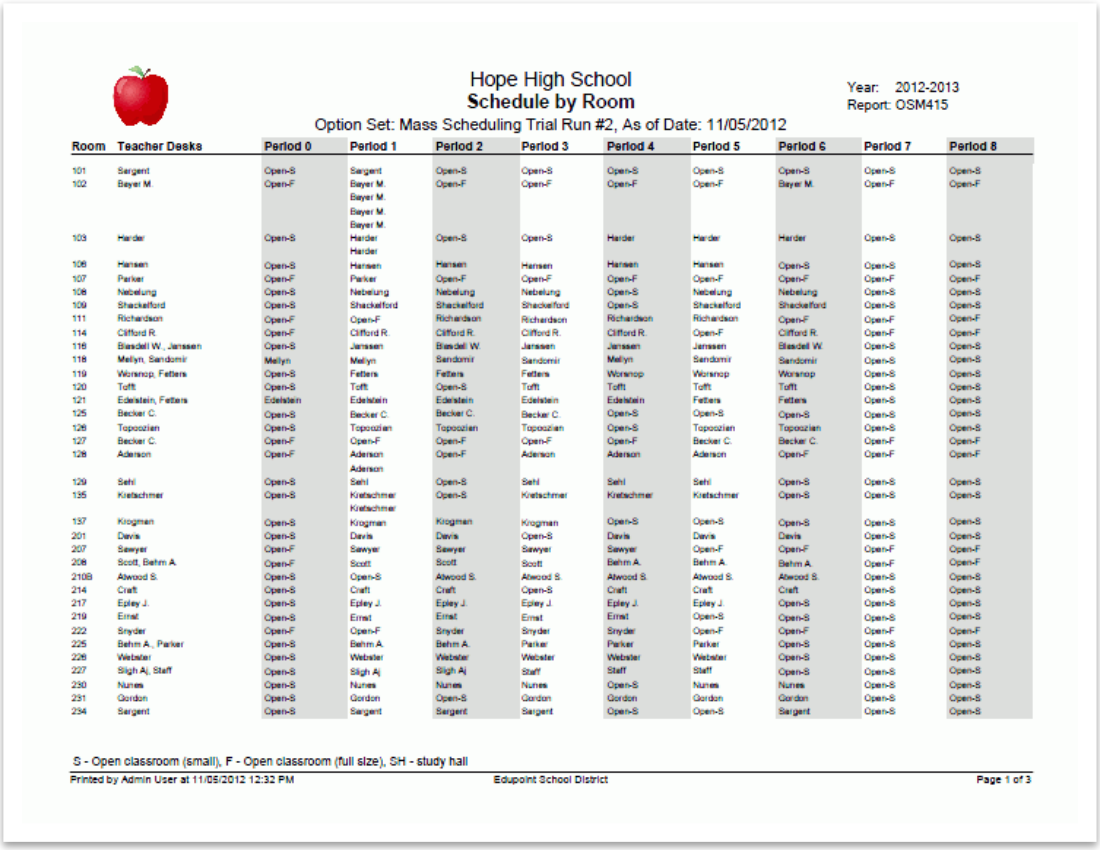


Figure 18.64 - Schedule by Room

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.

- **As of Date** - Report prints sections as they were on the date entered.
- **Period Begin/End Range** - Filters output by a period or a period range.
- **Department** - Select only those departments to be included in the report output or leave blank to include all reports.
- **Size limit for "small" classroom** - Enter the class size limit of classrooms that should be identified as "small" on the report. Those classrooms with class size limits above the number entered will be identified as "full size" on the report.
- **Course types to show as Study Hall** – Select the Course Type the report displays as Study Hall.



Hope High School
Schedule by Room
Year: 2012-2013
Report: OSM415
Option Set: Mass Scheduling Trial Run #2, As of Date: 11/05/2012

Room	Teacher Desks	Period 0	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8
101	Sergent	Open-S	Sergent	Open-S	Open-S	Open-S	Open-S	Open-S	Open-S	Open-S
102	Beyer M.	Open-F	Beyer M. Beyer M. Beyer M. Beyer M.	Open-F	Open-F	Open-F	Open-F	Beyer M.	Open-F	Open-F
103	Harder	Open-S	Harder Harder	Open-S	Open-S	Harder	Harder	Harder	Open-S	Open-S
106	Hansen	Open-S	Hansen	Hansen	Hansen	Hansen	Hansen	Open-S	Open-S	Open-S
107	Parker	Open-F	Parker	Open-F	Open-F	Open-F	Open-F	Open-F	Open-F	Open-F
108	Nebelung	Open-S	Nebelung	Nebelung	Nebelung	Open-S	Nebelung	Nebelung	Open-S	Open-S
109	Shackelford	Open-S	Shackelford	Shackelford	Shackelford	Open-S	Shackelford	Shackelford	Open-S	Open-S
111	Richardson	Open-F	Open-F	Richardson	Richardson	Richardson	Richardson	Open-F	Open-F	Open-F
114	Clifford R.	Open-F	Clifford R.	Clifford R.	Clifford R.	Clifford R.	Open-F	Clifford R.	Open-F	Open-F
116	Biesdell W., Janssen	Open-S	Janssen	Biesdell W.	Janssen	Janssen	Janssen	Biesdell W.	Open-S	Open-S
118	Mellyn, Sandomir	Mellyn	Mellyn	Sandomir	Sandomir	Mellyn	Sandomir	Sandomir	Open-S	Open-S
119	Worsnop, Fetters	Open-S	Fetters	Fetters	Fetters	Worsnop	Worsnop	Worsnop	Open-S	Open-S
120	Tofft	Open-S	Tofft	Open-S	Tofft	Tofft	Tofft	Tofft	Open-S	Open-S
121	Edelstein, Fetters	Edelstein	Edelstein	Edelstein	Edelstein	Edelstein	Fetters	Fetters	Open-S	Open-S
125	Becker C.	Open-S	Becker C.	Becker C.	Becker C.	Open-S	Open-S	Open-S	Open-S	Open-S
126	Topoozian	Open-S	Topoozian	Topoozian	Topoozian	Open-S	Topoozian	Topoozian	Open-S	Open-S
127	Becker C.	Open-F	Open-F	Open-F	Open-F	Open-F	Becker C.	Becker C.	Open-F	Open-F
128	Aderson	Open-F	Aderson Aderson	Open-F	Aderson	Aderson	Aderson	Open-F	Open-F	Open-F
129	Sehl	Open-S	Sehl	Open-S	Sehl	Sehl	Sehl	Open-S	Open-S	Open-S
135	Kretschmer	Open-S	Kretschmer Kretschmer	Open-S	Kretschmer	Kretschmer	Kretschmer	Open-S	Open-S	Open-S
137	Krogman	Open-S	Krogman	Krogman	Krogman	Open-S	Open-S	Open-S	Open-S	Open-S
201	Davis	Open-S	Davis	Davis	Open-S	Davis	Davis	Davis	Open-S	Open-S
207	Sawyer	Open-F	Sawyer	Sawyer	Sawyer	Sawyer	Open-F	Open-F	Open-F	Open-F
208	Scott, Behm A.	Open-F	Scott	Scott	Scott	Behm A.	Behm A.	Behm A.	Open-F	Open-F
210B	Atwood S.	Open-S	Open-S	Atwood S.	Atwood S.	Atwood S.	Atwood S.	Atwood S.	Open-S	Open-S
214	Craft	Open-S	Craft	Craft	Open-S	Craft	Craft	Craft	Open-S	Open-S
217	Epley J.	Open-S	Epley J.	Epley J.	Epley J.	Epley J.	Epley J.	Open-S	Open-S	Open-S
219	Ernst	Open-S	Ernst	Ernst	Ernst	Ernst	Open-S	Open-S	Open-S	Open-S
222	Snyder	Open-F	Open-F	Snyder	Snyder	Snyder	Open-F	Open-F	Open-F	Open-F
225	Behm A., Parker	Open-S	Behm A.	Behm A.	Parker	Parker	Parker	Open-S	Open-S	Open-S
226	Webster	Open-S	Webster	Webster	Webster	Webster	Webster	Open-S	Open-S	Open-S
227	Sligh Aj, Staff	Open-S	Sligh Aj	Sligh Aj	Staff	Staff	Staff	Open-S	Open-S	Open-S
230	Nunes	Open-S	Nunes	Nunes	Nunes	Open-S	Nunes	Nunes	Open-S	Open-S
231	Gordon	Open-S	Gordon	Open-S	Gordon	Gordon	Gordon	Gordon	Open-S	Open-S
234	Sergent	Open-S	Sergent	Sergent	Sergent	Open-S	Open-S	Sergent	Open-S	Open-S

S - Open classroom (small), F - Open classroom (full size), SH - study hall

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Figure 18.65 - Schedule by Room Report

OSM416 – Sections Needed by Requests

The OSM416 report prints the number of sections needed based on the total number of course requests and the maximum and optimum number of students per section as entered on the District Course and/or School Course screens.

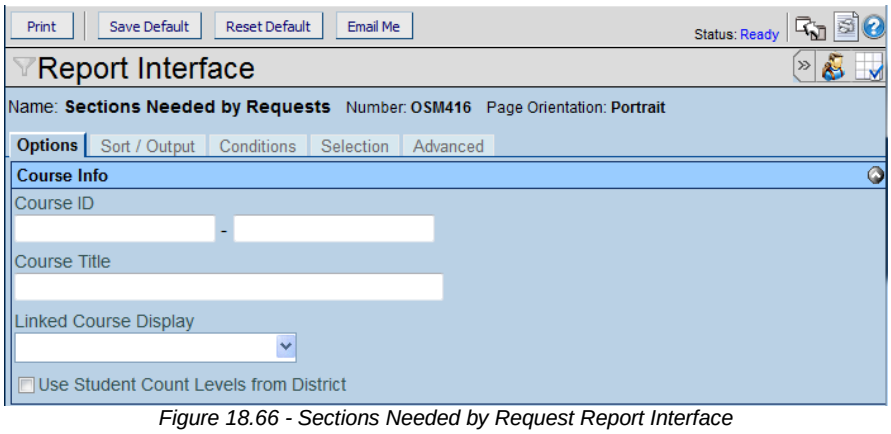
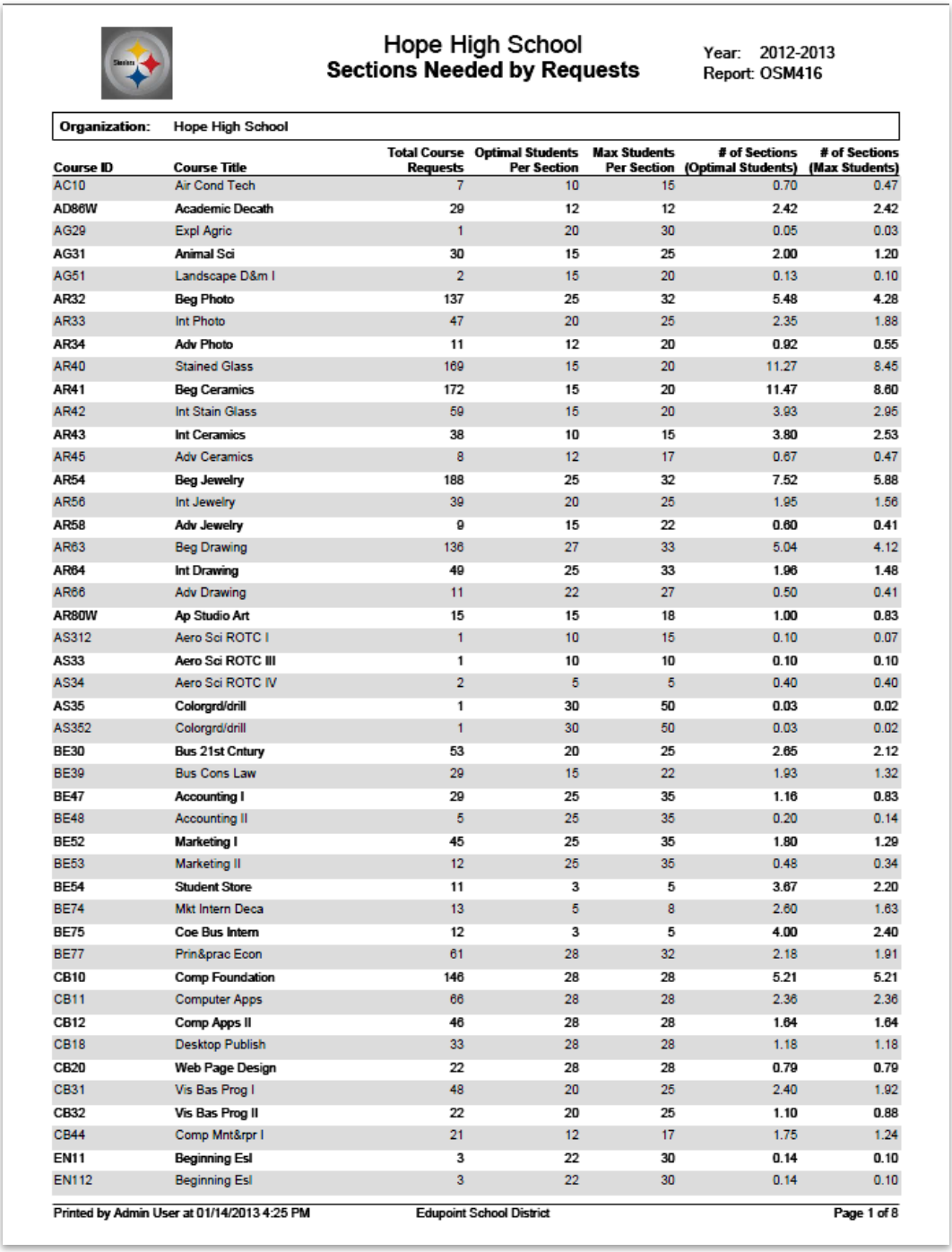


Figure 18.66 - Sections Needed by Request Report Interface

Filter the report using the following options:

- **Course ID** - Enter a range of course ids to print results for.
- **Course Title** - Enter the course title for which the report should print results.
- **Linked Course Display** - Display the linked courses together.
    - **None** – Do not display the linked courses (default)
    - **Primary Linked Only** – List only the primary course from each link.
    - **All Linked** – List all of the linked courses.
- **Use Student Count Levels from District** - only use the maximum and optimum size numbers from the district in the report results. The report first looks to the school course for the optimum and maximum size and then looks to the district course if the fields are blank on school course. This option bypasses the school course and only looks at the numbers from district course.



Hope High School
Sections Needed by Requests

Year: 2012-2013
Report: OSM416

Organization: Hope High School

Course ID	Course Title	Total Course Requests	Optimal Students Per Section	Max Students Per Section	# of Sections (Optimal Students)	# of Sections (Max Students)
AC10	Air Cond Tech	7	10	15	0.70	0.47
AD86W	Academic Decath	29	12	12	2.42	2.42
AG29	Expl Agric	1	20	30	0.05	0.03
AG31	Animal Sci	30	15	25	2.00	1.20
AG51	Landscape D&m I	2	15	20	0.13	0.10
AR32	Beg Photo	137	25	32	5.48	4.28
AR33	Int Photo	47	20	25	2.35	1.88
AR34	Adv Photo	11	12	20	0.92	0.55
AR40	Stained Glass	169	15	20	11.27	8.45
AR41	Beg Ceramics	172	15	20	11.47	8.60
AR42	Int Stain Glass	59	15	20	3.93	2.95
AR43	Int Ceramics	38	10	15	3.80	2.53
AR45	Adv Ceramics	8	12	17	0.67	0.47
AR54	Beg Jewelry	188	25	32	7.52	5.88
AR56	Int Jewelry	39	20	25	1.95	1.56
AR58	Adv Jewelry	9	15	22	0.60	0.41
AR63	Beg Drawing	136	27	33	5.04	4.12
AR64	Int Drawing	49	25	33	1.96	1.48
AR66	Adv Drawing	11	22	27	0.50	0.41
AR80W	Ap Studio Art	15	15	18	1.00	0.83
AS312	Aero Sci ROTC I	1	10	15	0.10	0.07
AS33	Aero Sci ROTC III	1	10	10	0.10	0.10
AS34	Aero Sci ROTC IV	2	5	5	0.40	0.40
AS35	Colorgrd/drill	1	30	50	0.03	0.02
AS352	Colorgrd/drill	1	30	50	0.03	0.02
BE30	Bus 21st Cntury	53	20	25	2.65	2.12
BE39	Bus Cons Law	29	15	22	1.93	1.32
BE47	Accounting I	29	25	35	1.16	0.83
BE48	Accounting II	5	25	35	0.20	0.14
BE52	Marketing I	45	25	35	1.80	1.29
BE53	Marketing II	12	25	35	0.48	0.34
BE54	Student Store	11	3	5	3.67	2.20
BE74	Mkt Intern Deca	13	5	8	2.60	1.63
BE75	Coe Bus Intern	12	3	5	4.00	2.40
BE77	Prin&prac Econ	61	28	32	2.18	1.91
CB10	Comp Foundation	146	28	28	5.21	5.21
CB11	Computer Apps	66	28	28	2.36	2.36
CB12	Comp Apps II	46	28	28	1.64	1.64
CB18	Desktop Publish	33	28	28	1.18	1.18
CB20	Web Page Design	22	28	28	0.79	0.79
CB31	Vis Bas Prog I	48	20	25	2.40	1.92
CB32	Vis Bas Prog II	22	20	25	1.10	0.88
CB44	Comp Mnt&rpr I	21	12	17	1.75	1.24
EN11	Beginning Esl	3	22	30	0.14	0.10
EN112	Beginning Esl	3	22	30	0.14	0.10

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Figure 18.67 - Sections Needed by Requests

OSM417 - Department Section List

The OSM417 report prints the departments with the list of sections assigned to them along with the teacher and class size information.

Filter the report using the following options:

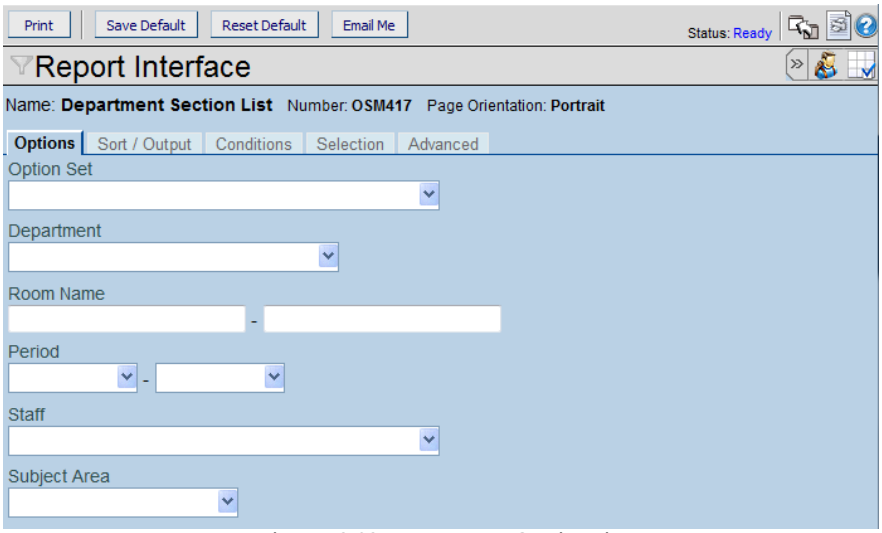
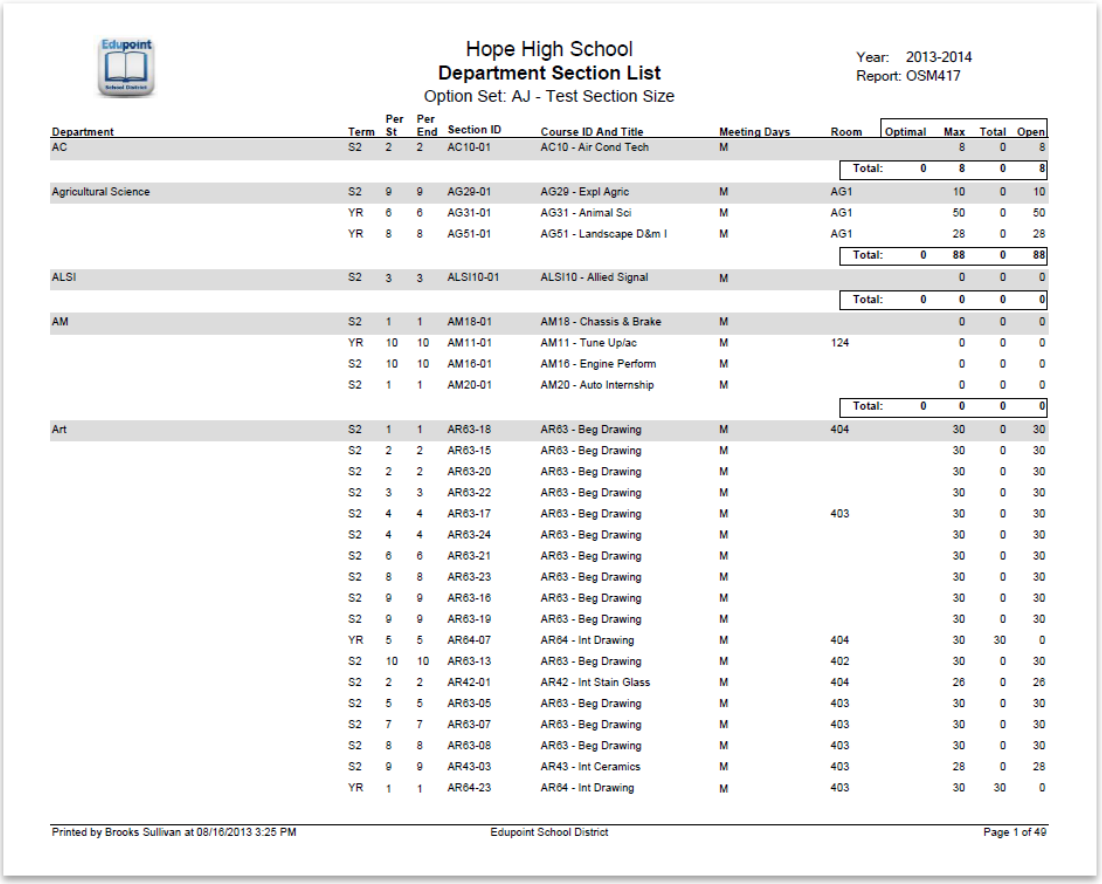


Figure 18.68 - Department Section List

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.

- **Department** - Filter the report to show one department.
- **Room Name** - Filter the report to show a particular range of room names.
- **Period** - Filter the report to show a period range.
- **Staff** - Filter the report to show a certain staff member.
- **Subject Area** - Filter the report to show a particular subject area.



Hope High School
Department Section List
Option Set: AJ - Test Section Size

Year: 2013-2014
Report: OSM417

Department	Term	Per St	Per End	Section ID	Course ID And Title	Meeting Days	Room	Optimal	Max	Total	Open
AC	S2	2	2	AC10-01	AC10 - Air Cond Tech	M			8	0	8
							Total:	0	8	0	8
Agricultural Science	S2	9	9	AG29-01	AG29 - Expl Agric	M	AG1		10	0	10
	YR	6	6	AG31-01	AG31 - Animal Sci	M	AG1		50	0	50
	YR	8	8	AG51-01	AG51 - Landscape D&m I	M	AG1		28	0	28
							Total:	0	88	0	88
ALSI	S2	3	3	ALSI10-01	ALSI10 - Allied Signal	M			0	0	0
							Total:	0	0	0	0
AM	S2	1	1	AM18-01	AM18 - Chassis & Brake	M			0	0	0
	YR	10	10	AM11-01	AM11 - Tune Up/ac	M	124		0	0	0
	S2	10	10	AM16-01	AM16 - Engine Perform	M			0	0	0
	S2	1	1	AM20-01	AM20 - Auto Internship	M			0	0	0
							Total:	0	0	0	0
Art	S2	1	1	AR63-18	AR63 - Beg Drawing	M	404		30	0	30
	S2	2	2	AR63-15	AR63 - Beg Drawing	M			30	0	30
	S2	2	2	AR63-20	AR63 - Beg Drawing	M			30	0	30
	S2	3	3	AR63-22	AR63 - Beg Drawing	M			30	0	30
	S2	4	4	AR63-17	AR63 - Beg Drawing	M	403		30	0	30
	S2	4	4	AR63-24	AR63 - Beg Drawing	M			30	0	30
	S2	6	6	AR63-21	AR63 - Beg Drawing	M			30	0	30
	S2	8	8	AR63-23	AR63 - Beg Drawing	M			30	0	30
	S2	9	9	AR63-16	AR63 - Beg Drawing	M			30	0	30
	S2	9	9	AR63-19	AR63 - Beg Drawing	M			30	0	30
	YR	5	5	AR64-07	AR64 - Int Drawing	M	404		30	30	0
	S2	10	10	AR63-13	AR63 - Beg Drawing	M	402		30	0	30
	S2	2	2	AR42-01	AR42 - Int Stain Glass	M	404		26	0	26
	S2	5	5	AR63-05	AR63 - Beg Drawing	M	403		30	0	30
	S2	7	7	AR63-07	AR63 - Beg Drawing	M	403		30	0	30
	S2	8	8	AR63-08	AR63 - Beg Drawing	M	403		30	0	30
	S2	9	9	AR43-03	AR43 - Int Ceramics	M	403		28	0	28
	YR	1	1	AR64-23	AR64 - Int Drawing	M	403		30	30	0

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Figure 18.69 - Department Section List

OSM418 - Room Section List

The OSM418 report prints the rooms with the list of sections assigned to them along with the teacher and class size information.

Filter the report using the following options:

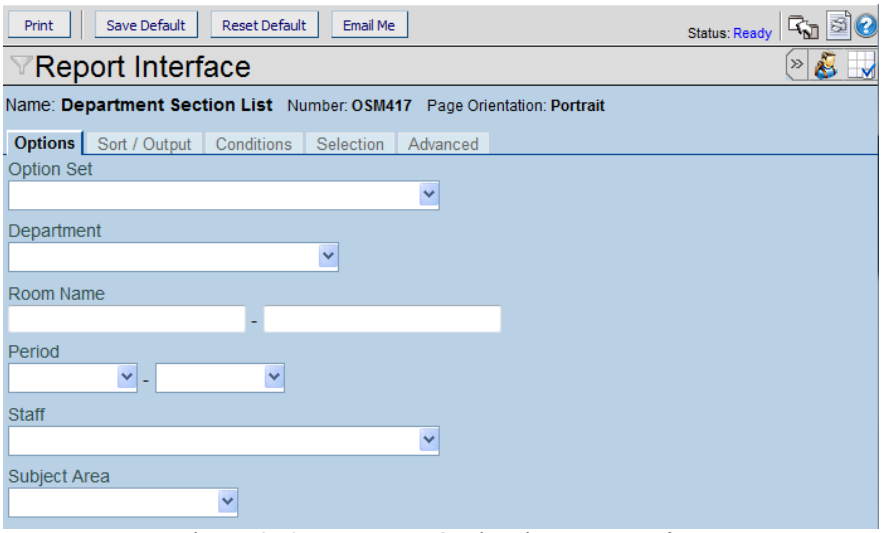
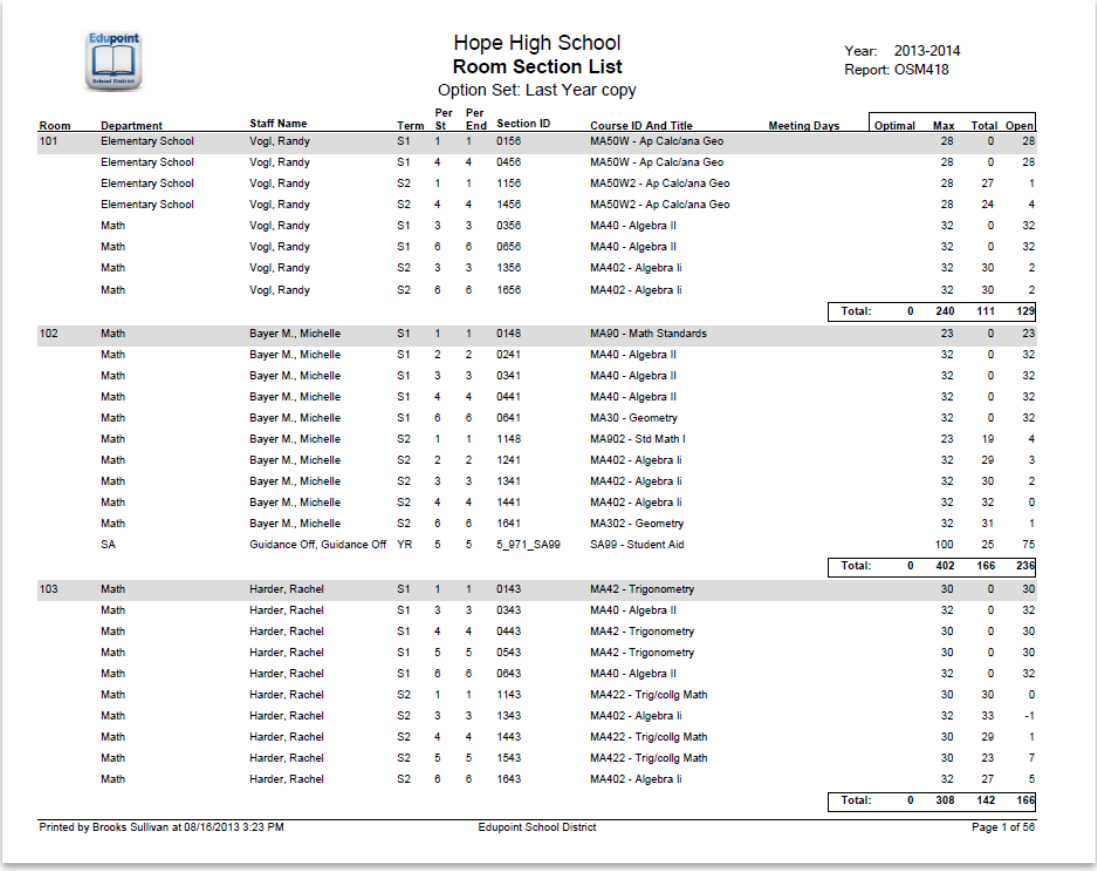


Figure 18.70 - Department Section List Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.

- **Department** - Filter the report to show one department.
- **Room Name** - Filter the report to show a particular range of room names.
- **Period** - Filter the report to show a period range.
- **Staff** - Filter the report to show a certain staff member.
- **Subject Area** - Filter the report to show a particular subject area.



Hope High School
Room Section List
Option Set: Last Year copy

Year: 2013-2014
Report: OSM418

Room	Department	Staff Name	Term	Per St	Per End	Section ID	Course ID And Title	Meeting Days	Optimal	Max	Total	Open
101	Elementary School	Vogl, Randy	S1	1	1	0156	MA50W - Ap Calc/ana Geo			28	0	28
	Elementary School	Vogl, Randy	S1	4	4	0456	MA50W - Ap Calc/ana Geo			28	0	28
	Elementary School	Vogl, Randy	S2	1	1	1156	MA50W2 - Ap Calc/ana Geo			28	27	1
	Elementary School	Vogl, Randy	S2	4	4	1456	MA50W2 - Ap Calc/ana Geo			28	24	4
	Math	Vogl, Randy	S1	3	3	0356	MA40 - Algebra II			32	0	32
	Math	Vogl, Randy	S1	6	6	0656	MA40 - Algebra II			32	0	32
	Math	Vogl, Randy	S2	3	3	1356	MA402 - Algebra Ii			32	30	2
	Math	Vogl, Randy	S2	6	6	1656	MA402 - Algebra Ii			32	30	2
								Total:	0	240	111	129
102	Math	Bayer M., Michelle	S1	1	1	0148	MA90 - Math Standards			23	0	23
	Math	Bayer M., Michelle	S1	2	2	0241	MA40 - Algebra II			32	0	32
	Math	Bayer M., Michelle	S1	3	3	0341	MA40 - Algebra II			32	0	32
	Math	Bayer M., Michelle	S1	4	4	0441	MA40 - Algebra II			32	0	32
	Math	Bayer M., Michelle	S1	6	6	0641	MA30 - Geometry			32	0	32
	Math	Bayer M., Michelle	S2	1	1	1148	MA902 - Std Math I			23	19	4
	Math	Bayer M., Michelle	S2	2	2	1241	MA402 - Algebra Ii			32	29	3
	Math	Bayer M., Michelle	S2	3	3	1341	MA402 - Algebra Ii			32	30	2
	Math	Bayer M., Michelle	S2	4	4	1441	MA402 - Algebra Ii			32	32	0
	Math	Bayer M., Michelle	S2	6	6	1641	MA302 - Geometry			32	31	1
	SA	Guidance Off, Guidance Off	YR	5	5	5_971_SA99	SA99 - Student Aid			100	25	75
								Total:	0	402	166	236
103	Math	Harder, Rachel	S1	1	1	0143	MA42 - Trigonometry			30	0	30
	Math	Harder, Rachel	S1	3	3	0343	MA40 - Algebra II			32	0	32
	Math	Harder, Rachel	S1	4	4	0443	MA42 - Trigonometry			30	0	30
	Math	Harder, Rachel	S1	5	5	0543	MA42 - Trigonometry			30	0	30
	Math	Harder, Rachel	S1	6	6	0643	MA40 - Algebra II			32	0	32
	Math	Harder, Rachel	S2	1	1	1143	MA422 - Trig/collg Math			30	30	0
	Math	Harder, Rachel	S2	3	3	1343	MA402 - Algebra Ii			32	33	-1
	Math	Harder, Rachel	S2	4	4	1443	MA422 - Trig/collg Math			30	29	1
	Math	Harder, Rachel	S2	5	5	1543	MA422 - Trig/collg Math			30	23	7
	Math	Harder, Rachel	S2	6	6	1643	MA402 - Algebra Ii			32	27	5
								Total:	0	308	142	166

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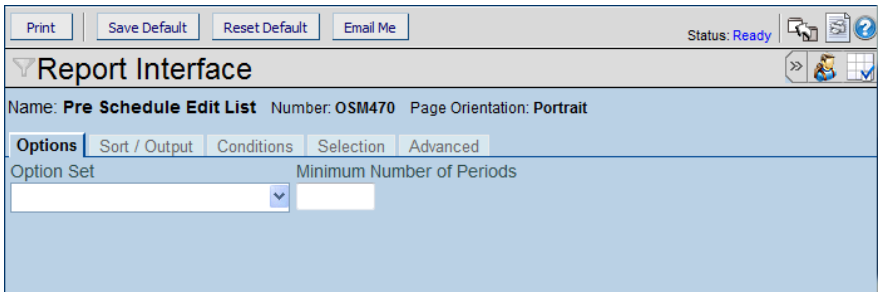
Figure 18.71 - Room Section List

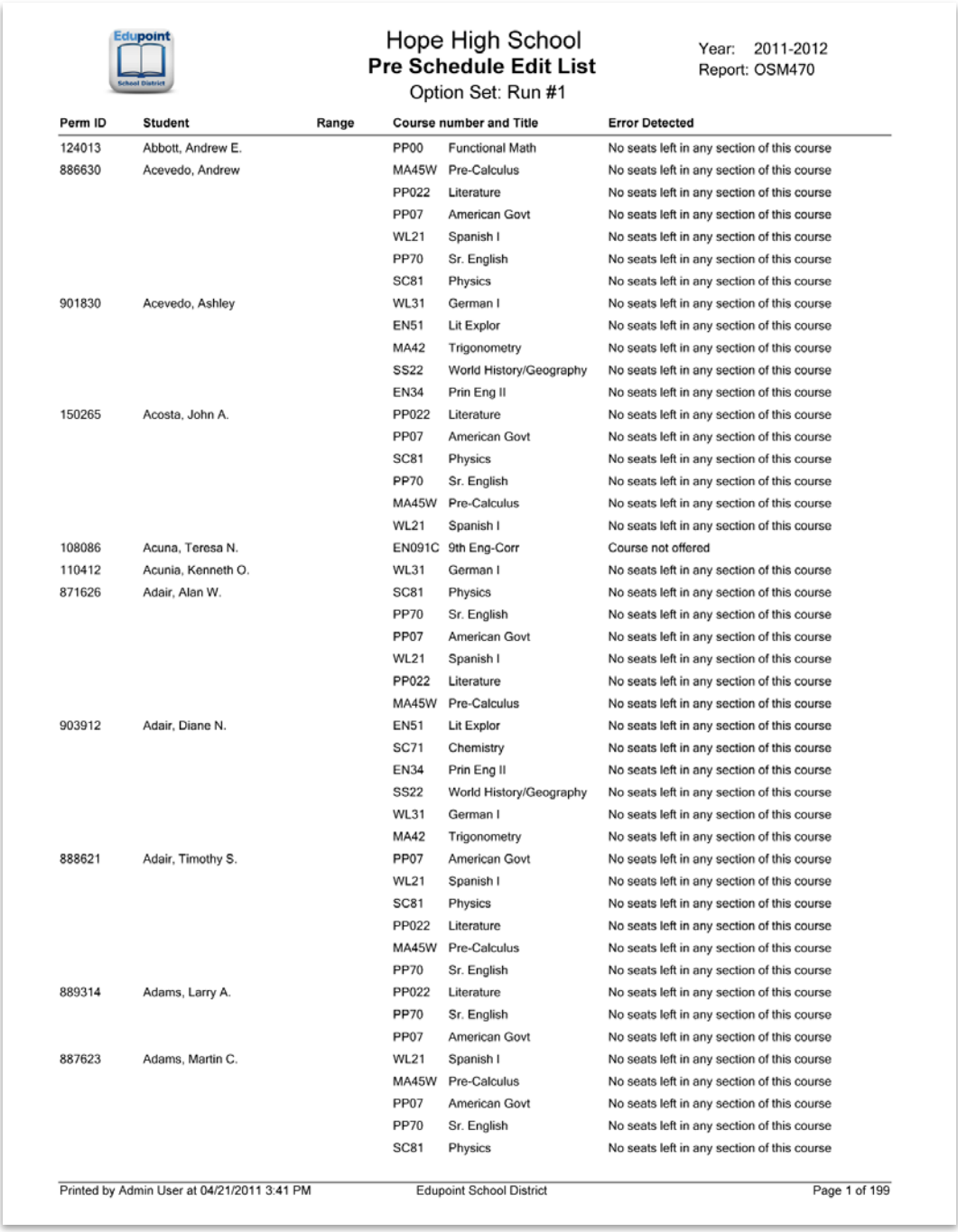
OSM470 – Pre Schedule Edit List

The OSM470 report prints a list of students who have a problem with their course requests.

Filter the report using the following options:



- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.
- **Minimum Number of Periods** - Filter report output to include only students with a minimum number or course requests.



Hope High School
Pre Schedule Edit List
Option Set: Run #1

Year: 2011-2012
Report: OSM470

Perm ID	Student	Range	Course number and Title		Error Detected
124013	Abbott, Andrew E.		PP00	Functional Math	No seats left in any section of this course
886630	Acevedo, Andrew		MA45W	Pre-Calculus	No seats left in any section of this course
			PP022	Literature	No seats left in any section of this course
			PP07	American Govt	No seats left in any section of this course
			WL21	Spanish I	No seats left in any section of this course
			PP70	Sr. English	No seats left in any section of this course
			SC81	Physics	No seats left in any section of this course
901830	Acevedo, Ashley		WL31	German I	No seats left in any section of this course
			EN51	Lit Explor	No seats left in any section of this course
			MA42	Trigonometry	No seats left in any section of this course
			SS22	World History/Geography	No seats left in any section of this course
			EN34	Prin Eng II	No seats left in any section of this course
150265	Acosta, John A.		PP022	Literature	No seats left in any section of this course
			PP07	American Govt	No seats left in any section of this course
			SC81	Physics	No seats left in any section of this course
			PP70	Sr. English	No seats left in any section of this course
			MA45W	Pre-Calculus	No seats left in any section of this course
			WL21	Spanish I	No seats left in any section of this course
108086	Acuna, Teresa N.		EN091C	9th Eng-Corr	Course not offered
110412	Acunia, Kenneth O.		WL31	German I	No seats left in any section of this course
871626	Adair, Alan W.		SC81	Physics	No seats left in any section of this course
			PP70	Sr. English	No seats left in any section of this course
			PP07	American Govt	No seats left in any section of this course
			WL21	Spanish I	No seats left in any section of this course
			PP022	Literature	No seats left in any section of this course
			MA45W	Pre-Calculus	No seats left in any section of this course
903912	Adair, Diane N.		EN51	Lit Explor	No seats left in any section of this course
			SC71	Chemistry	No seats left in any section of this course
			EN34	Prin Eng II	No seats left in any section of this course
			SS22	World History/Geography	No seats left in any section of this course
			WL31	German I	No seats left in any section of this course
			MA42	Trigonometry	No seats left in any section of this course
888621	Adair, Timothy S.		PP07	American Govt	No seats left in any section of this course
			WL21	Spanish I	No seats left in any section of this course
			SC81	Physics	No seats left in any section of this course
			PP022	Literature	No seats left in any section of this course
			MA45W	Pre-Calculus	No seats left in any section of this course
			PP70	Sr. English	No seats left in any section of this course
889314	Adams, Larry A.		PP022	Literature	No seats left in any section of this course
			PP70	Sr. English	No seats left in any section of this course
			PP07	American Govt	No seats left in any section of this course
887623	Adams, Martin C.		WL21	Spanish I	No seats left in any section of this course
			MA45W	Pre-Calculus	No seats left in any section of this course
			PP07	American Govt	No seats left in any section of this course
			PP70	Sr. English	No seats left in any section of this course
			SC81	Physics	No seats left in any section of this course

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Figure 18.72 - Pre Schedule Edit List

OSM601 – Class Request Totals

The OSM601 report prints course request totals sorted by department.

Filter the report using the following options:

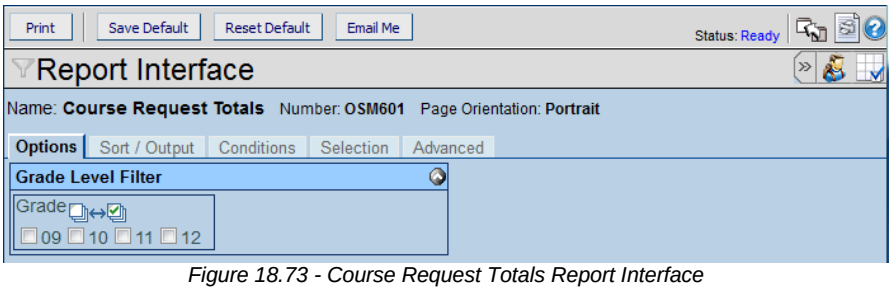
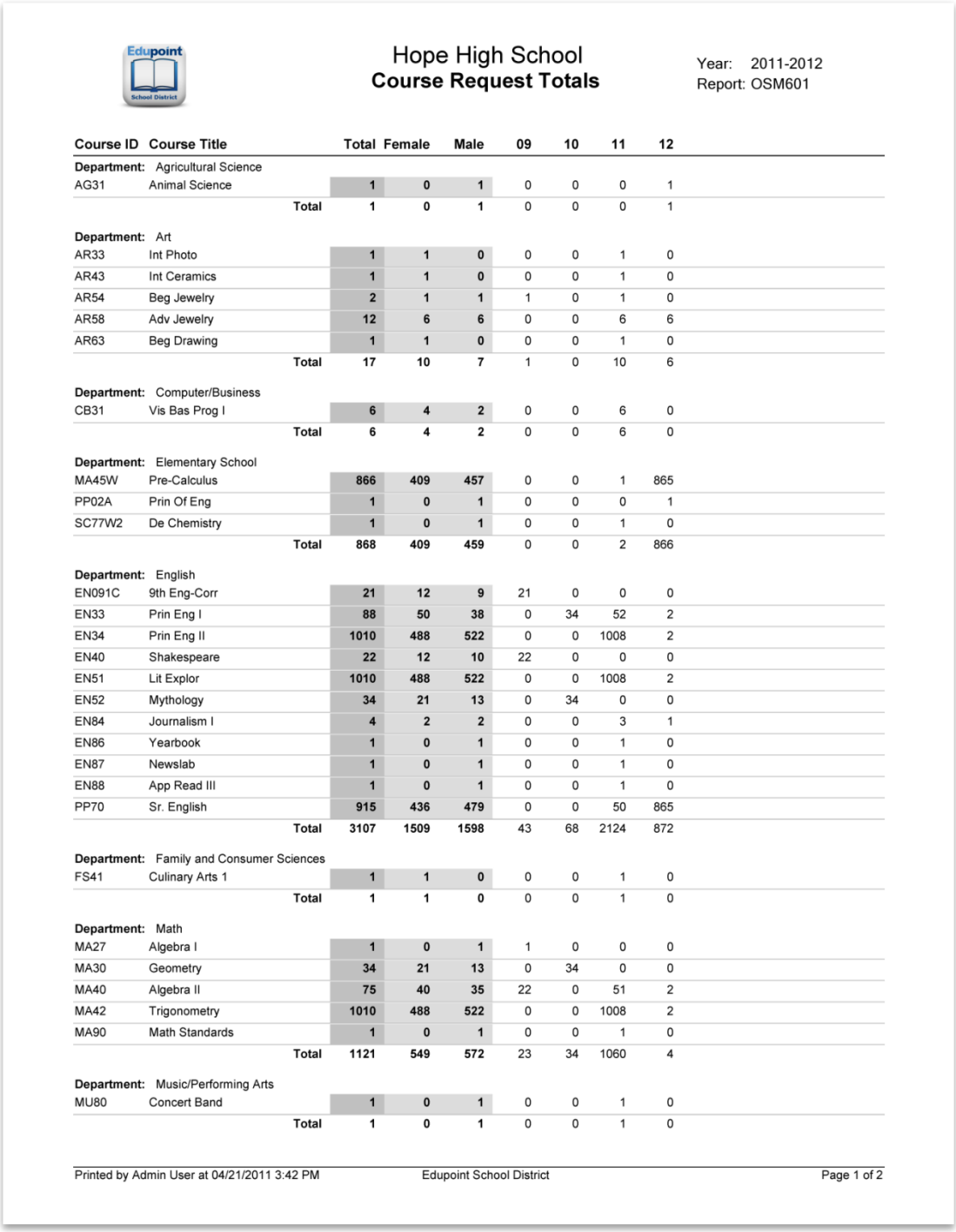


Figure 18.73 - Course Request Totals Report Interface

- **Grade** - Filter report output to include just the selected grade or grade range.



Hope High School
Course Request Totals

Year: 2011-2012
Report: OSM601

Course ID	Course Title	Total	Female	Male	09	10	11	12
Department:	Agricultural Science							
AG31	Animal Science	1	0	1	0	0	0	1
	Total	1	0	1	0	0	0	1
Department:	Art							
AR33	Int Photo	1	1	0	0	0	1	0
AR43	Int Ceramics	1	1	0	0	0	1	0
AR54	Beg Jewelry	2	1	1	1	0	1	0
AR58	Adv Jewelry	12	6	6	0	0	6	6
AR63	Beg Drawing	1	1	0	0	0	1	0
	Total	17	10	7	1	0	10	6
Department:	Computer/Business							
CB31	Vis Bas Prog I	6	4	2	0	0	6	0
	Total	6	4	2	0	0	6	0
Department:	Elementary School							
MA45W	Pre-Calculus	866	409	457	0	0	1	865
PP02A	Prin Of Eng	1	0	1	0	0	0	1
SC77W2	De Chemistry	1	0	1	0	0	1	0
	Total	868	409	459	0	0	2	866
Department:	English							
EN091C	9th Eng-Corr	21	12	9	21	0	0	0
EN33	Prin Eng I	88	50	38	0	34	52	2
EN34	Prin Eng II	1010	488	522	0	0	1008	2
EN40	Shakespeare	22	12	10	22	0	0	0
EN51	Lit Explor	1010	488	522	0	0	1008	2
EN52	Mythology	34	21	13	0	34	0	0
EN84	Journalism I	4	2	2	0	0	3	1
EN86	Yearbook	1	0	1	0	0	1	0
EN87	Newslab	1	0	1	0	0	1	0
EN88	App Read III	1	0	1	0	0	1	0
PP70	Sr. English	915	436	479	0	0	50	865
	Total	3107	1509	1598	43	68	2124	872
Department:	Family and Consumer Sciences							
FS41	Culinary Arts 1	1	1	0	0	0	1	0
	Total	1	1	0	0	0	1	0
Department:	Math							
MA27	Algebra I	1	0	1	1	0	0	0
MA30	Geometry	34	21	13	0	34	0	0
MA40	Algebra II	75	40	35	22	0	51	2
MA42	Trigonometry	1010	488	522	0	0	1008	2
MA90	Math Standards	1	0	1	0	0	1	0
	Total	1121	549	572	23	34	1060	4
Department:	Music/Performing Arts							
MU80	Concert Band	1	0	1	0	0	1	0
	Total	1	0	1	0	0	1	0

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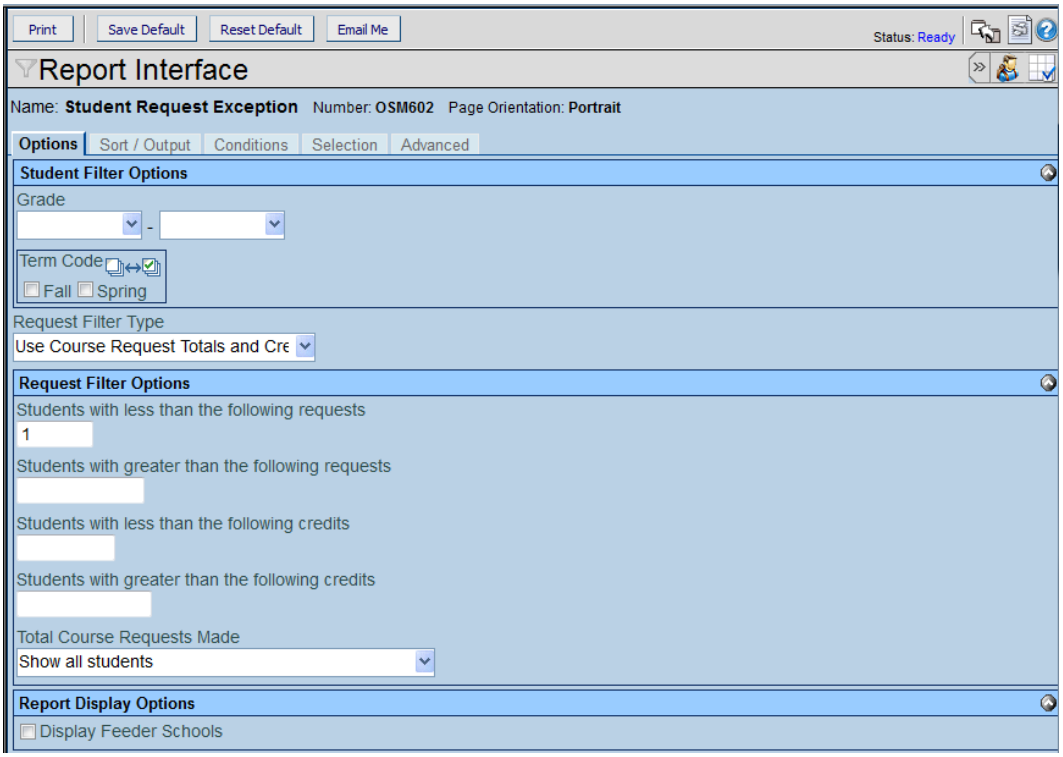
Figure 18.74 - Course Request Totals

OSM602 – Student Request Exception

The OSM602 report prints a list of students with less than a specified number of course requests or credits and with greater than a specified number of course requests or credits.

Filter the report using the following options:

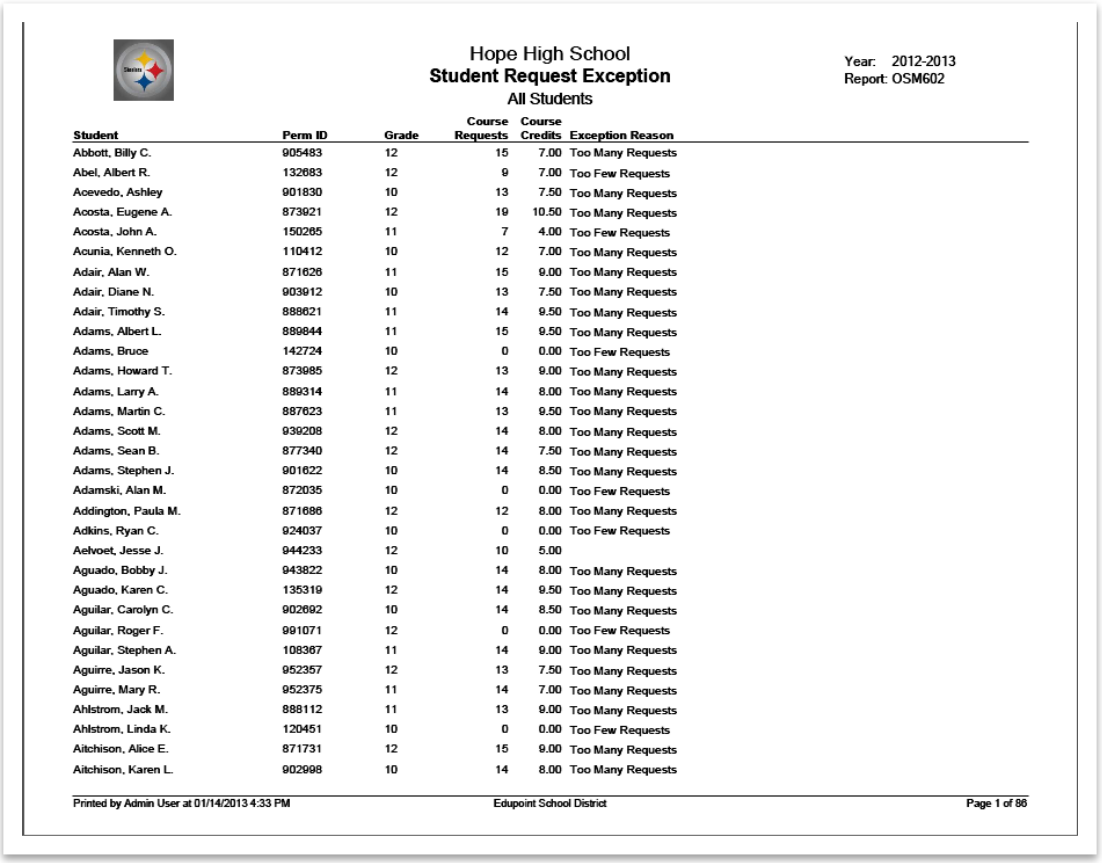


- **Grade** - Enter a grade range to print results for. Blank prints for all grade levels taught at the school.
- **Term Code** - Select the term code to print results. Selecting "None" prints for all term codes listed.
- **Request Filter Type:**
    - **Use Course Request Totals and Credit** - Filters the report based on student course request paramters. Parameters include:
        - **Students with less than the following requests** -
        - **Students with greather than the following requests** -
        - **Students with less than the following credits** -
        - **Students with greater than the following credits** -
        - **Total Course Requests Made dropdown**:
            - **Show all students**
            - **Show students with the correct number of requests only**

- **Show students with too few or too many requests only**
- **Show students with too few requests only**
- **Show students with too many requests only**

- **Use Period Range** - Filters the report based on the specified period range.
  i. **Number of Periods** – filters by the selected period range..

- **Display Feeder School**s - displays the last school of attendance. If the student is new to the district the feeder school column is blank.



Hope High School
Student Request Exception
All Students

Year: 2012-2013
Report: OSM602

Student	Perm ID	Grade	Course Requests	Course Credits	Exception Reason
Abbott, Billy C.	905483	12	15	7.00	Too Many Requests
Abel, Albert R.	132683	12	9	7.00	Too Few Requests
Acevedo, Ashley	901830	10	13	7.50	Too Many Requests
Acosta, Eugene A.	873921	12	19	10.50	Too Many Requests
Acosta, John A.	150265	11	7	4.00	Too Few Requests
Acunia, Kenneth O.	110412	10	12	7.00	Too Many Requests
Adair, Alan W.	871626	11	15	9.00	Too Many Requests
Adair, Diane N.	903912	10	13	7.50	Too Many Requests
Adair, Timothy S.	888621	11	14	9.50	Too Many Requests
Adams, Albert L.	889844	11	15	9.50	Too Many Requests
Adams, Bruce	142724	10	0	0.00	Too Few Requests
Adams, Howard T.	873985	12	13	9.00	Too Many Requests
Adams, Larry A.	889314	11	14	8.00	Too Many Requests
Adams, Martin C.	887623	11	13	9.50	Too Many Requests
Adams, Scott M.	939208	12	14	8.00	Too Many Requests
Adams, Sean B.	877340	12	14	7.50	Too Many Requests
Adams, Stephen J.	901622	10	14	8.50	Too Many Requests
Adamski, Alan M.	872035	10	0	0.00	Too Few Requests
Addington, Paula M.	871686	12	12	8.00	Too Many Requests
Adkins, Ryan C.	924037	10	0	0.00	Too Few Requests
Aelvoet, Jesse J.	944233	12	10	5.00	
Aguado, Bobby J.	943822	10	14	8.00	Too Many Requests
Aguado, Karen C.	135319	12	14	9.50	Too Many Requests
Aguilar, Carolyn C.	902692	10	14	8.50	Too Many Requests
Aguilar, Roger F.	991071	12	0	0.00	Too Few Requests
Aguilar, Stephen A.	108367	11	14	9.00	Too Many Requests
Aguirre, Jason K.	952357	12	13	7.50	Too Many Requests
Aguirre, Mary R.	952375	11	14	7.00	Too Many Requests
Ahlstrom, Jack M.	888112	11	13	9.00	Too Many Requests
Ahlstrom, Linda K.	120451	10	0	0.00	Too Few Requests
Aitchison, Alice E.	871731	12	15	9.00	Too Many Requests
Aitchison, Karen L.	902998	10	14	8.00	Too Many Requests

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Figure 18.75 - Student Request Exception Report

OSM603 – Open Periods by Grade and Period

The OSM603 report prints the total number of students for each term, rotation day (if applicable) and period that have an open period in their schedule.

Filter the report using the following options:

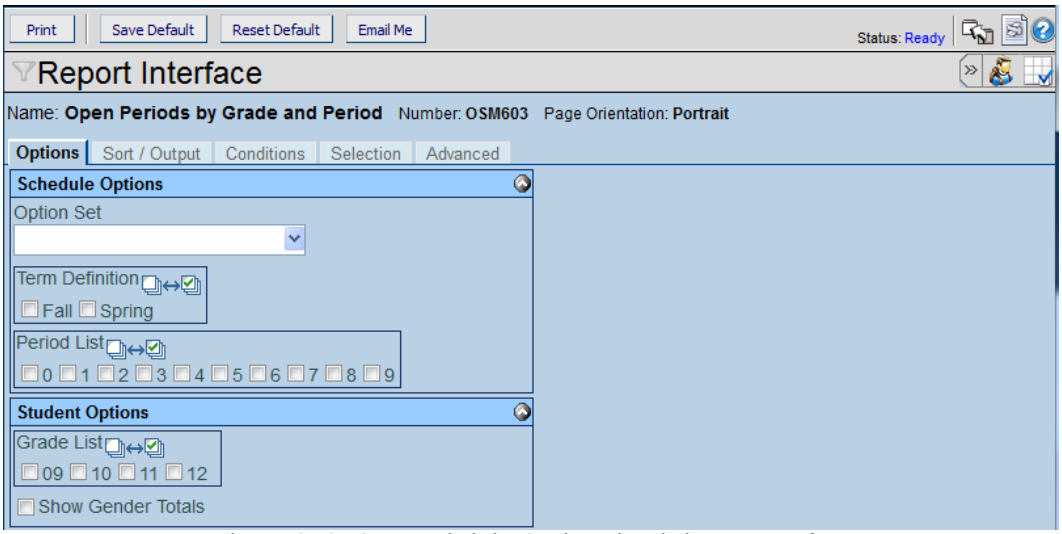
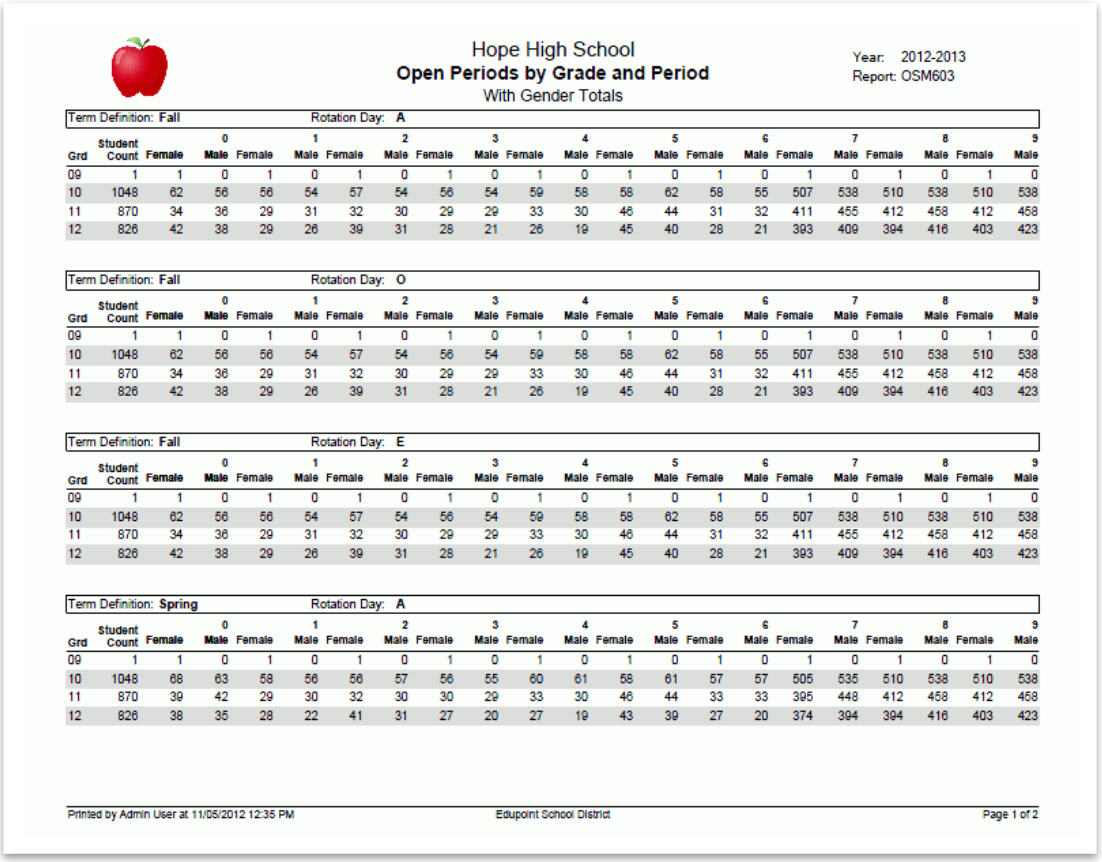


Figure 18.76 - Open Periods by Grade and Period Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.

- **Term Definition** - Select which term to run or leave blank to print for all terms. The terms listed are the same terms setup on the School Setup screen – Term Definition grid.
- **Period List** - Filters output by a period or selection of periods. Leave blank to include all periods on the report.
- **Grade List** - Filters output by a grade level or selection of grade levels. Leave blank to include all grade levels on the report.
- **Show Gender Totals** - Select the checkbox in order to see totals by gender for each grade level.



Hope High School
Open Periods by Grade and Period
With Gender Totals

Year: 2012-2013
Report: OSM603

Term Definition: **Fall** Rotation Day: **A**

Grd	Student Count	Female	0 Male	0 Female	1 Male	1 Female	2 Male	2 Female	3 Male	3 Female	4 Male	4 Female	5 Male	5 Female	6 Male	6 Female	7 Male	7 Female	8 Male	8 Female	9 Male
09	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
10	1048	62	56	56	54	57	54	56	54	59	58	58	62	58	55	507	538	510	538	510	538
11	870	34	36	29	31	32	30	29	29	33	30	46	44	31	32	411	455	412	458	412	458
12	826	42	38	29	26	39	31	28	21	26	19	45	40	28	21	393	409	394	416	403	423

Term Definition: **Fall** Rotation Day: **O**

Grd	Student Count	Female	0 Male	0 Female	1 Male	1 Female	2 Male	2 Female	3 Male	3 Female	4 Male	4 Female	5 Male	5 Female	6 Male	6 Female	7 Male	7 Female	8 Male	8 Female	9 Male
09	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
10	1048	62	56	56	54	57	54	56	54	59	58	58	62	58	55	507	538	510	538	510	538
11	870	34	36	29	31	32	30	29	29	33	30	46	44	31	32	411	455	412	458	412	458
12	826	42	38	29	26	39	31	28	21	26	19	45	40	28	21	393	409	394	416	403	423

Term Definition: **Fall** Rotation Day: **E**

Grd	Student Count	Female	0 Male	0 Female	1 Male	1 Female	2 Male	2 Female	3 Male	3 Female	4 Male	4 Female	5 Male	5 Female	6 Male	6 Female	7 Male	7 Female	8 Male	8 Female	9 Male
09	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
10	1048	62	56	56	54	57	54	56	54	59	58	58	62	58	55	507	538	510	538	510	538
11	870	34	36	29	31	32	30	29	29	33	30	46	44	31	32	411	455	412	458	412	458
12	826	42	38	29	26	39	31	28	21	26	19	45	40	28	21	393	409	394	416	403	423

Term Definition: **Spring** Rotation Day: **A**

Grd	Student Count	Female	0 Male	0 Female	1 Male	1 Female	2 Male	2 Female	3 Male	3 Female	4 Male	4 Female	5 Male	5 Female	6 Male	6 Female	7 Male	7 Female	8 Male	8 Female	9 Male
09	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
10	1048	68	63	58	56	56	57	56	55	60	61	58	61	57	57	505	535	510	538	510	538
11	870	39	42	29	30	32	30	30	29	33	30	46	44	33	33	395	448	412	458	412	458
12	826	38	35	28	22	41	31	27	20	27	19	43	39	27	20	374	394	394	416	403	423

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Figure 18.77 - Open Periods by Grade and Period Report

OSM604 – Seat Totals By Department

The OSM604 report prints the total number of seats available and the total number of students in sections for each period in the day sorted by term and department.

Filter the report using the following options:

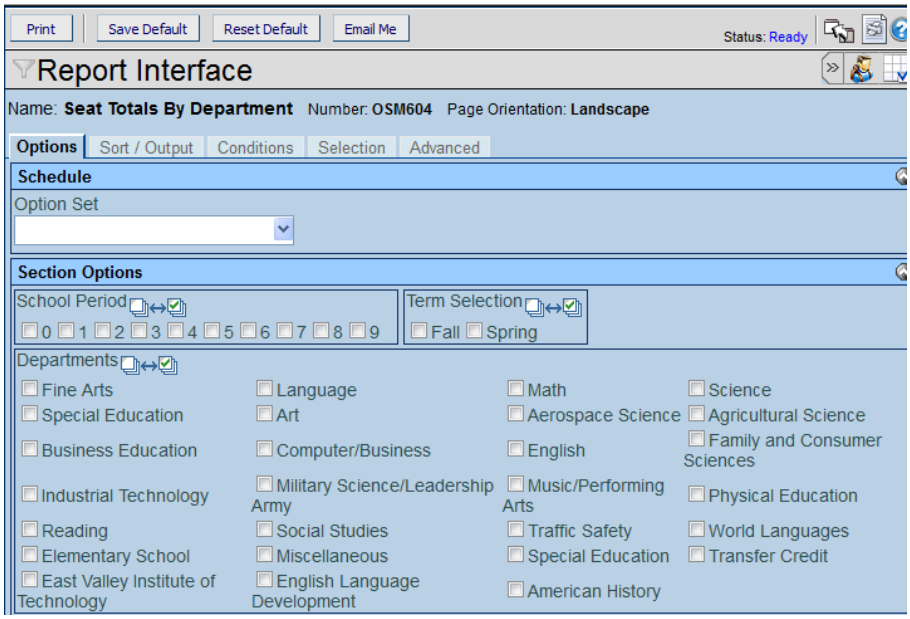
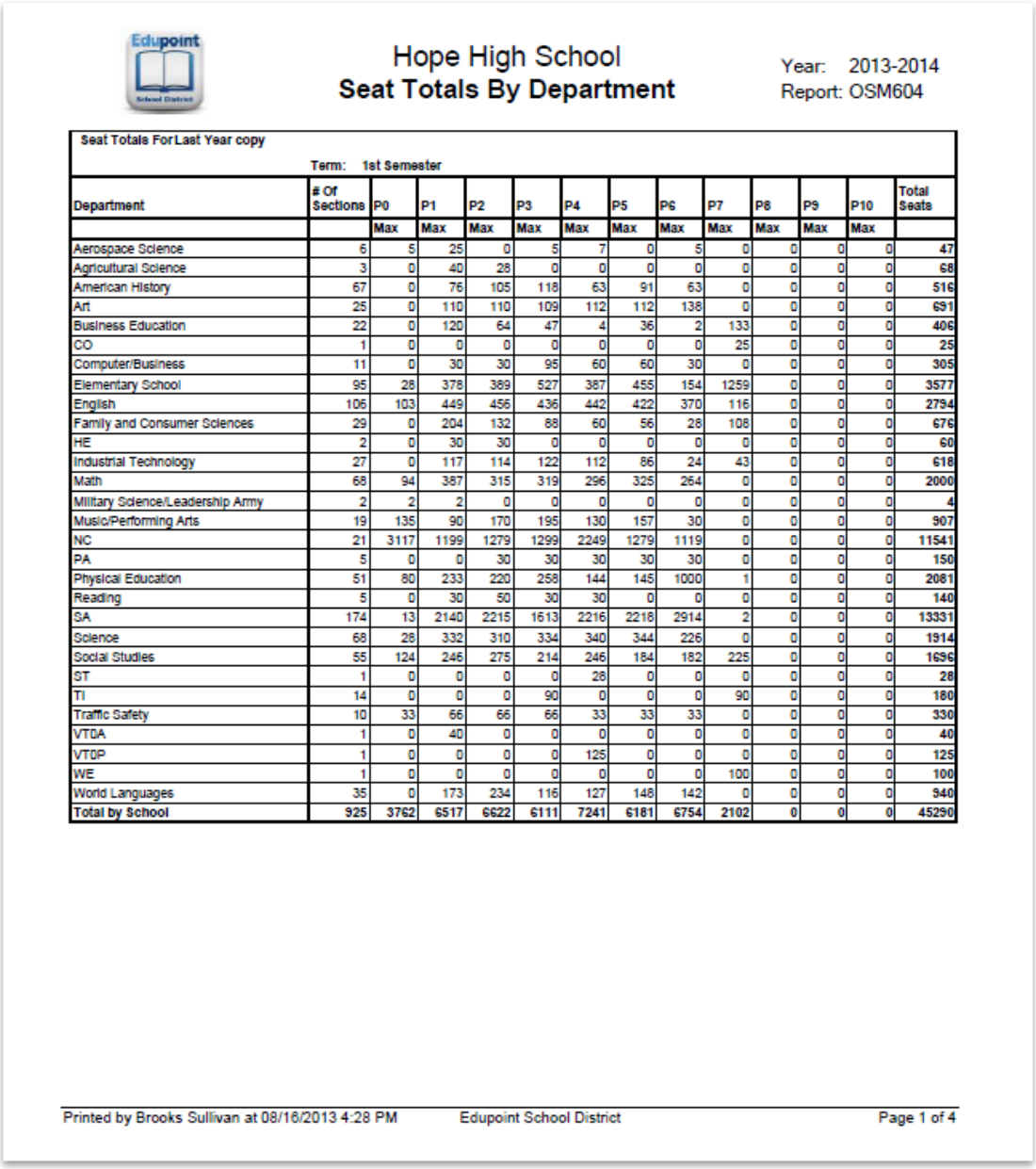


Figure 18.78 - Seat Totals by Department Report Interface

- **Option Set** – select the option set to include in the report. Only option sets for the year and school in focus are available.

- **School Period** - Select periods to run or leave blank to print totals for all periods.
- **Term Selection** - Select which term to run or leave blank to print for all terms. The terms listed are the same terms setup on the School Setup screen – Term Definition grid.
- **Departments** - Select which departments to run. All of the sections for courses of the selected departments will print. Leave blank to see totals for all departments.



Hope High School
Seat Totals By Department

Year: 2013-2014
Report: OSM604

Seat Totals For Last Year copy

Term: 1st Semester

Department	# Of Sections	P0	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total Seats
		Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	
Aerospace Science	6	5	25	0	5	7	0	5	0	0	0	0	47
Agricultural Science	3	0	40	28	0	0	0	0	0	0	0	0	68
American History	67	0	76	105	118	63	91	63	0	0	0	0	516
Art	25	0	110	110	109	112	112	138	0	0	0	0	691
Business Education	22	0	120	64	47	4	36	2	133	0	0	0	406
CO	1	0	0	0	0	0	0	0	25	0	0	0	25
Computer/Business	11	0	30	30	95	60	60	30	0	0	0	0	305
Elementary School	95	28	378	389	527	387	455	154	1259	0	0	0	3577
English	106	103	449	456	436	442	422	370	116	0	0	0	2794
Family and Consumer Sciences	29	0	204	132	88	60	56	28	108	0	0	0	676
HE	2	0	30	30	0	0	0	0	0	0	0	0	60
Industrial Technology	27	0	117	114	122	112	86	24	43	0	0	0	618
Math	68	94	387	315	319	296	325	264	0	0	0	0	2000
Military Science/Leadership Army	2	2	2	0	0	0	0	0	0	0	0	0	4
Music/Performing Arts	19	135	90	170	195	130	157	30	0	0	0	0	907
NC	21	3117	1199	1279	1299	2249	1279	1119	0	0	0	0	11541
PA	5	0	0	30	30	30	30	30	0	0	0	0	150
Physical Education	51	80	233	220	258	144	145	1000	1	0	0	0	2081
Reading	5	0	30	50	30	30	0	0	0	0	0	0	140
SA	174	13	2140	2215	1613	2216	2218	2914	2	0	0	0	13331
Science	68	28	332	310	334	340	344	226	0	0	0	0	1914
Social Studies	55	124	246	275	214	246	184	182	225	0	0	0	1696
ST	1	0	0	0	0	28	0	0	0	0	0	0	28
TI	14	0	0	0	90	0	0	0	90	0	0	0	180
Traffic Safety	10	33	66	66	66	33	33	33	0	0	0	0	330
VTOA	1	0	40	0	0	0	0	0	0	0	0	0	40
VTOP	1	0	0	0	0	125	0	0	0	0	0	0	125
WE	1	0	0	0	0	0	0	0	100	0	0	0	100
World Languages	35	0	173	234	116	127	148	142	0	0	0	0	940
Total by School	**925**	**3762**	**6517**	**6622**	**6111**	**7241**	**6181**	**6754**	**2102**	**0**	**0**	**0**	**45290**

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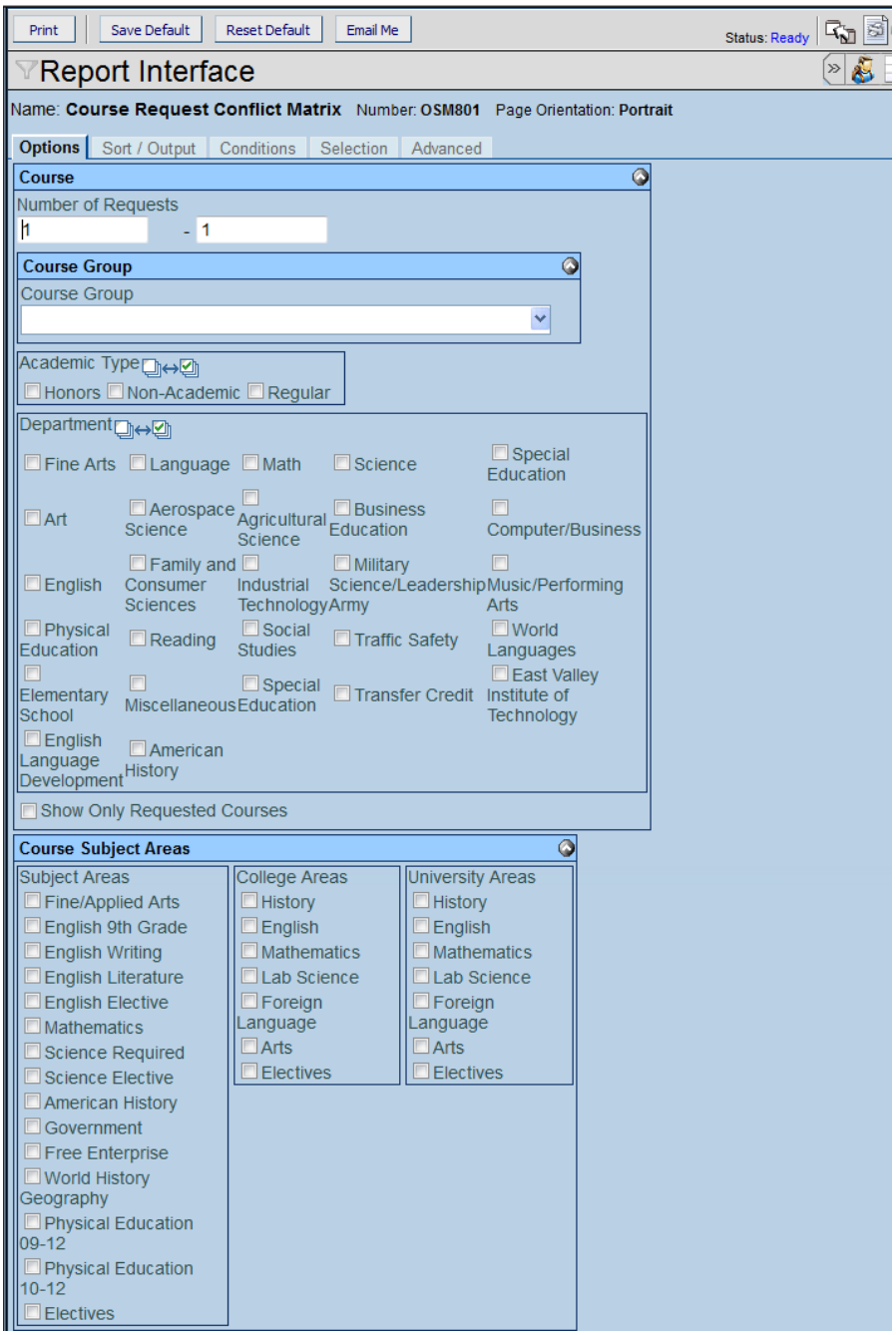
Figure 18.79 - Seat Totals By Department

OSM801 – Student Request Exception

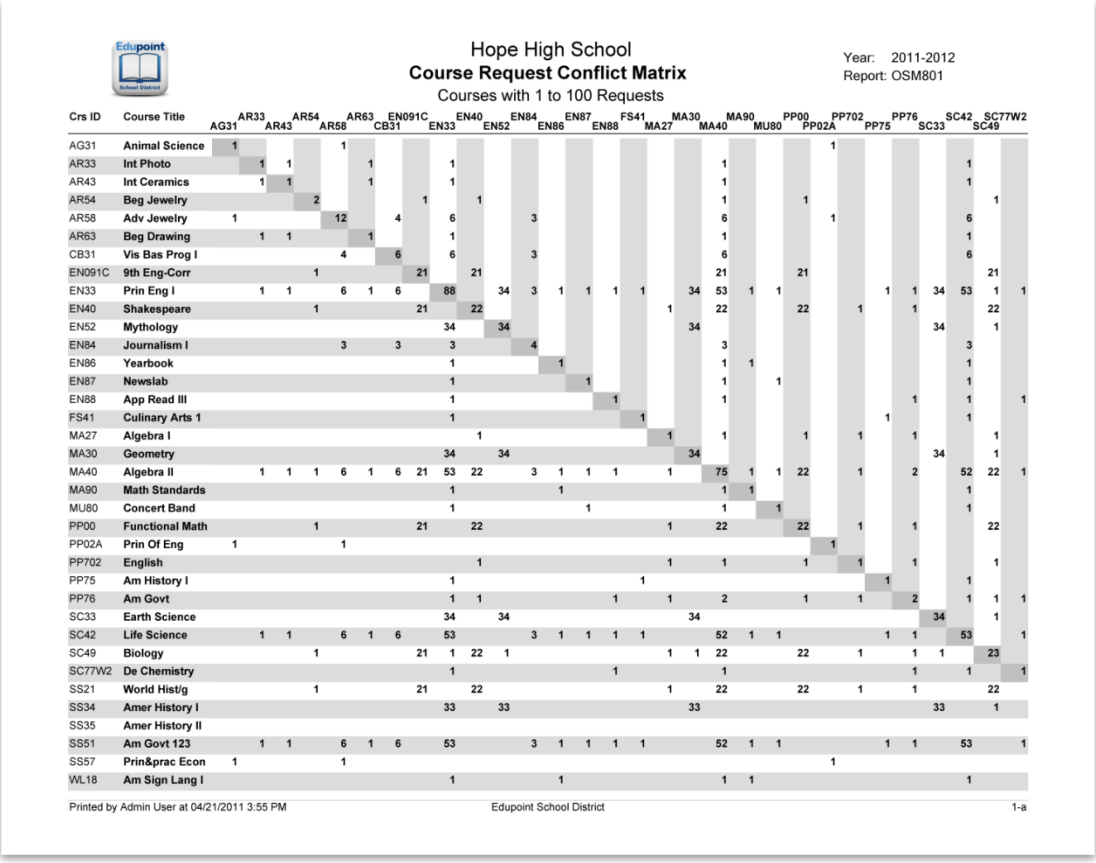
The OSM801 report prints a traditional conflict matrix.

Filter the report using the following options:



- **Number of requests** - displays courses falling within a number range of requests.
- **Course Group** - displays only those courses within a particular course.
- **Academic Type** - shows courses of a particular range of academic types.

- **Department** - shows courses of a particular range of departments.
- **Show only requested courses** - displays only courses that have actually been requested by students.
- **Subject Areas** - displays only courses falling within a range of subject areas.
- **College Areas** - displays only courses falling within a range of college areas.
- **University Areas** - reports only courses falling within a range of university areas.



Hope High School
Course Request Conflict Matrix
Courses with 1 to 100 Requests

Year: 2011-2012
Report: OSM801

Crs ID	Course Title	AG31	AR33	AR43	AR54	AR58	AR63	CB31	EN091C	EN33	EN40	EN52	EN84	EN86	EN87	EN88	FS41	MA27	MA30	MA40	MA90	MU80	PP00	PP02A	PP702	PP75	PP76	SC33	SC42	SC49	SC77W2
AG31	Animal Science	1				1														1					1						
AR33	Int Photo		1	1			1			1										1									1		
AR43	Int Ceramics		1	1			1			1										1									1		
AR54	Beg Jewelry				2				1		1									1			1							1	
AR58	Adv Jewelry	1				12		4		6			3							6				1					6		
AR63	Beg Drawing		1	1			1			1										1									1		
CB31	Vis Bas Prog I					4		6		6			3							6									6		
EN091C	9th Eng-Corr				1				21		21									21			21							21	
EN33	Prin Eng I		1	1		6	1	6		88		34	3	1	1	1	1		34	53	1	1				1	1	34	53	1	1
EN40	Shakespeare				1				21		22							1		22			22		1		1			22	
EN52	Mythology									34		34							34									34		1	
EN84	Journalism I					3		3		3			4							3										3	
EN86	Yearbook									1				1						1	1									1	
EN87	Newslab									1					1					1		1								1	
EN88	App Read III									1						1				1							1			1	1
FS41	Culinary Arts 1									1							1									1				1	
MA27	Algebra I										1							1		1			1		1		1			1	
MA30	Geometry									34		34							34									34		1	
MA40	Algebra II		1	1	1	6	1	6	21	53	22		3	1	1	1		1		75	1	1	22		1		2		52	22	1
MA90	Math Standards									1				1						1	1									1	
MU80	Concert Band									1					1					1		1								1	
PP00	Functional Math				1				21		22							1		22			22		1		1			22	
PP02A	Prin Of Eng	1				1																		1							
PP702	English										1							1		1			1		1		1			1	
PP75	Am History I									1							1									1					
PP76	Am Govt									1	1					1		1		2			1		1		2			1	1	1
SC33	Earth Science									34		34							34									34		1	
SC42	Life Science		1	1		6	1	6		53			3	1	1	1	1			52	1	1				1	1		53		1
SC49	Biology				1				21	1	22	1						1	1	22			22		1		1	1		23	
SC77W2	De Chemistry									1						1				1							1		1		1
SS21	World Hist/g				1				21		22							1		22			22		1		1			22	
SS34	Amer History I									33		33							33									33		1	
SS35	Amer History II																														
SS51	Am Govt 123		1	1		6	1	6		53			3	1	1	1	1			52	1	1				1	1		53		1
SS57	Prin&prac Econ	1				1																		1							
WL18	Am Sign Lang I									1				1						1	1								1		

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Figure 18.80 - Course Request Conflict Matrix

STU205 – Student Course Request Profile

The STU205 report prints a course request profile of an individual student or students.

Filter the report using the following options:

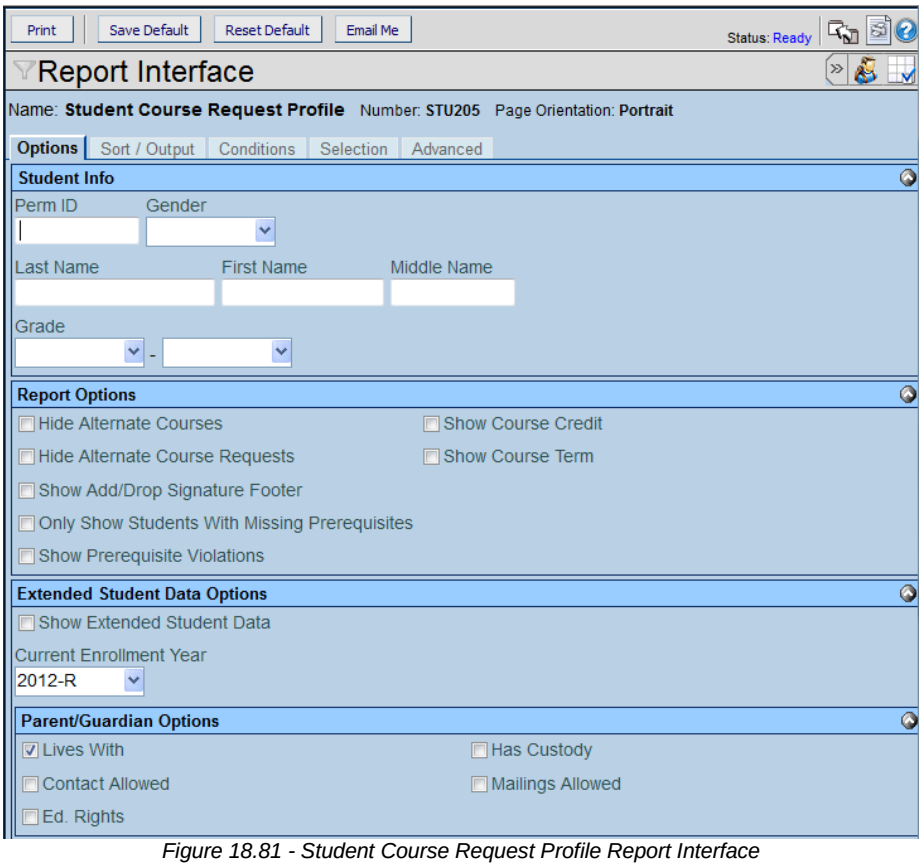
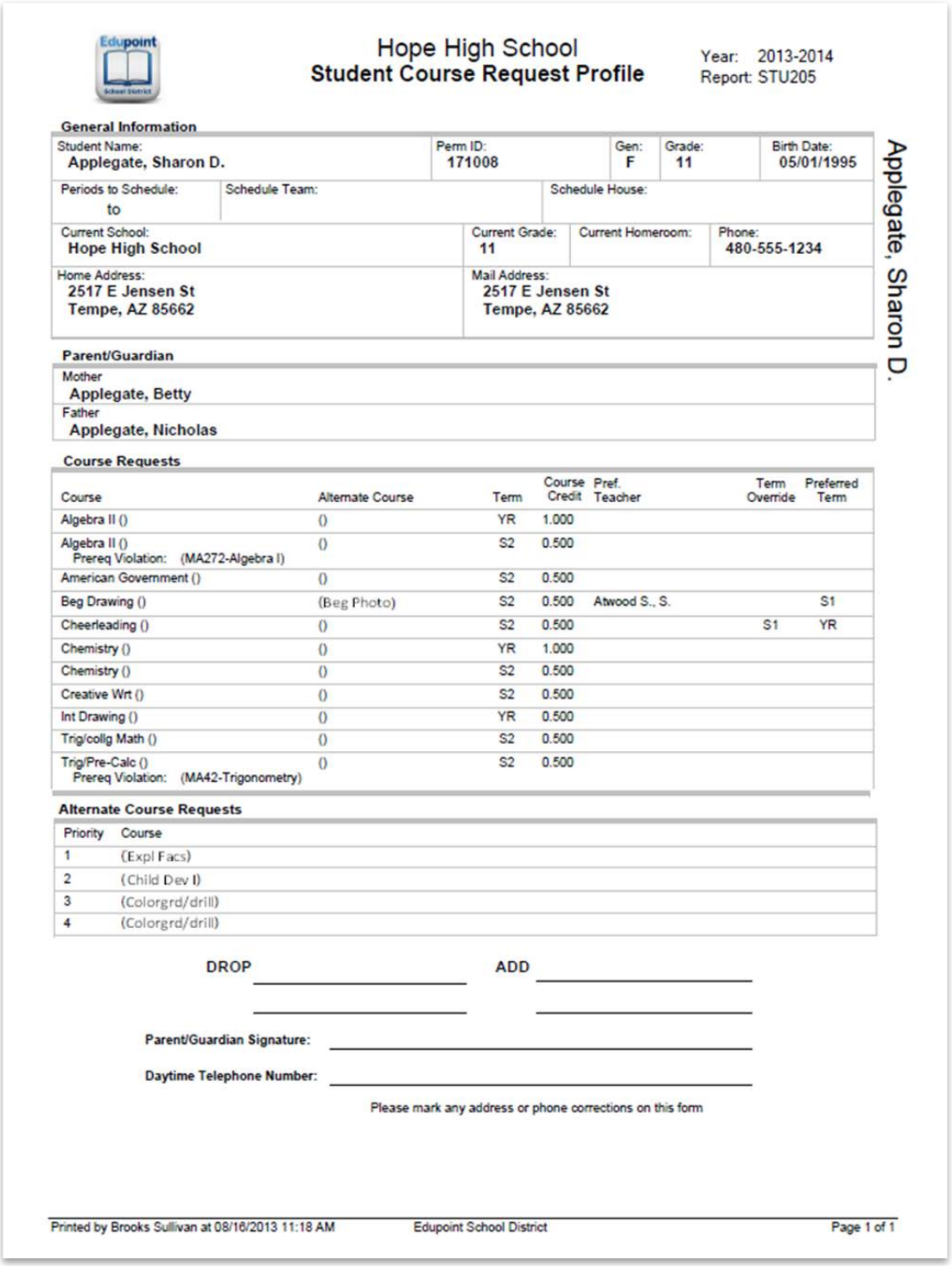


Figure 18.81 - Student Course Request Profile Report Interface

- **Student Info** - Filter report output to include the specified student information.
- **Report Options** - Check the report options to display or not display. If Show Prerequisite Violations is checked and the Master Schedule Builder option set has the option 'Run Prerequisite Check' selected, the scheduling run stops If there are violations. The report displays the violations.
- **Extended Student Data/ Parent/Guardian Options** - Check Show Extended Student Data to display home and mail addresses and to display a Parent/Guardian Options selected.



Hope High School
Student Course Request Profile

Year: 2013-2014
Report: STU205

Applegate, Sharon D.

General Information

Student Name:	Perm ID:	Gen:	Grade:	Birth Date:
Applegate, Sharon D.	171008	F	11	05/01/1995

Periods to Schedule:	Schedule Team:	Schedule House:
to		

Current School:	Current Grade:	Current Homeroom:	Phone:
Hope High School	11		480-555-1234

Home Address:	Mail Address:
2517 E Jensen St Tempe, AZ 85662	2517 E Jensen St Tempe, AZ 85662

Parent/Guardian

Mother
Applegate, Betty

Father
Applegate, Nicholas

Course Requests

Course	Alternate Course	Term	Course Credit	Pref. Teacher	Term Override	Preferred Term
Algebra II ()	()	YR	1.000			
Algebra II () Prereq Violation: (MA272-Algebra I)	()	S2	0.500			
American Government ()	()	S2	0.500			
Beg Drawing ()	(Beg Photo)	S2	0.500	Atwood S., S.		S1
Cheerleading ()	()	S2	0.500		S1	YR
Chemistry ()	()	YR	1.000			
Chemistry ()	()	S2	0.500			
Creative Wrt ()	()	S2	0.500			
Int Drawing ()	()	YR	0.500			
Trig/collg Math ()	()	S2	0.500			
Trig/Pre-Calc () Prereq Violation: (MA42-Trigonometry)	()	S2	0.500			

Alternate Course Requests

Priority	Course
1	(Expl Facs)
2	(Child Dev I)
3	(Colorgrd/drill)
4	(Colorgrd/drill)

DROP _____ **ADD** _____

_____ _____

Parent/Guardian Signature: _____

Daytime Telephone Number: _____

Please mark any address or phone corrections on this form

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Figure 18.82 - Student Course Request Profile

Chapter Nineteen: INDEX

