SOFTWARE

# Aeries.net ${ }^{\text {TM }}$ Student Information System <br> Scheduling Groups and Teams <br> July 18, 2010 

## SCHEDULING GROUP FIELDS

There are two Scheduling Group fields when used together will create a scheduling restriction in the SMS table in the same way as the grade range and sex code fields. One SchedGrp field is stored in the STU table and displays at the bottom of the Students form. It also displays on the Class Scheduling form next to the Period and Range fields.


The other SchedGrp field is stored in the SMS table and displays on the Scheduling Master Schedule form. Both are one character in length and can be a letter (A-Z) or number (0-9).


Students are flagged with a specific group and sections are flagged with a matching scheduling group, such as group " $A$ ". When the scheduler runs it only schedules students flagged as group A into sections flagged with a matching scheduling group of "A" or sections that have a blank scheduling group. The scheduler continues to schedule students into groups. All students with a blank Scheduling Group are restricted from sections that have a Scheduling Group.

As an example, a school wants to divide ALL 9th grade students into GROUPS A, B, or C to be "grouped" together into certain classes when the scheduler runs with PE and electives not grouped. The following steps are performed:

1. All $9^{\text {th }}$ grade students are assigned to group $A, B$ or $C$ by flagging them on the Student form in the SchedGrp field.

| Group A Students | Group B Students | Group C Students |
| :--- | :--- | :--- |
| Lori Williamson | Barry Lloyd | Jerry Lloyd |
| John Casey | Greg Foran | Dal Pope |
| Kathy Kubitz | John Waldon | James Kelly |
| Judi Beghtol | Linda Lloyd | Sam Defeo |

2. English, Math, Social Studies, and Science are courses to be flagged into groups with PE and electives not flagged.

- Group A - select sections for English, Math, Social Studies and Science. Flag with "A" in the SchedGrp field.
- Group B - select sections for English, Math, Social Studies and Science. Flag with "B" in the SchedGrp field.
- Group C - select sections for English, Math, Social Studies and Science. Flag with "C" in the SchedGrp field
- DO NOT flag PE and electives in the SchedGrp field

| Group A <br> Sections 701-704 | Group B <br> Sections 705-708 | Group C <br> Sections 709-712 |
| :--- | :--- | :--- |
| English -9 | English -9 | English -9 |
| Math -9 | Math -9 | Math -9 |
| Social Studies -9 | Social Studies -9 | Social Studies -9 |
| Science -9 | Science -9 | Science -9 |

3. Run the scheduler. Group A sections will only have Group A students, Group B sections will only have Group B students, and Group C sections will only have Group C students.

| Group A | Group C |  |
| :--- | :--- | :--- |
| Students Scheduled into | Sroup B | Students Scheduled into |
| Sections 701-704 | Students Scheduled into | Sections 709-712 |
| Lori Williamson | Barry Lloyd | Jerry Lloyd |
| John Casey | Greg Foran | Dal Pope |
| Kathy Kubitz | John Waldon | James Kelly |
| Judi Beghtol | Linda Lloyd | Sam Defeo |

4. PE and elective courses will have a mixture of students from each of the three teams. Students with a blank in the SchedGrp field will not be scheduled into any "grouped" sections.

| PE | Pottery | Jewelry |
| :--- | :--- | :--- |
| Barry Lloyd | Linda Lloyd | Jerry Lloyd |
| John Casey | Greg Foran | Dal Pope |
| James Kelly | John Waldon | Kathy Kubitz |
| Judi Beghtol | Lori Williamson | Sam Defeo |

The following example displays Judi Beghtol flagged in Schedule Group A with specific Course requests. When the scheduler ran the sections for these courses that were flagged for Scheduling Group A were assigned and the PE class was randomly scheduled.


## SCHEDULING TEAM / COURSE GROUP AND TEAM NUMBER FIELDS

The Team/Course Group (SMS.CG) and Team Number (SMS.TM) fields have been added to the Scheduling Master Schedule form. The TmCrsGp field may be any letter (A-Z) and the Team\# field may be any number 0-9999.


The scheduling logic that has been applied to these fields is the same scheduling logic that was used with the SMS Group field and Teacher numbers where the courses flagged with A-Z must have the same teacher number as other courses flagged with A-Z.

To use the Team/Course Group and Team Number fields, assign the same Team/ Course Group letter (A-Z) to all sections of all courses that are to be divided into teams or groups. In the example we will have Team/Course Group A with Team Numbers 100-102.

| Group A |
| :--- |
| English Gr 8 |
| Math Gr 8 |
| Social Studies Gr 8 |
| Science Gr 8 |

Then use the Team Number field to indicate the sections that are to be assigned to each group. For example, use 100 for the first group of sections, 101 for the second group of sections, etc.

Using the same example as above, dividing students into three teams, this application would allow the scheduler to determine the team placement for each student.

1. English, Math, Social Studies, and Science are the courses that are to be teamed, with PE and an elective as the non-teamed courses that are taught at the school.
2. Mark all sections of English, Math, Social Studies, and Science with an " $A$ " in the Team/Course Group field in the SMS table.
3. Then, using the Team Number field in the SMS table, mark all sections for the first team with "100". Mark all sections for the second team with "101". Mark all sections for the third team with "102". Remember, you do not have to use 100, 101 and102. You may use any numbers. But all sections for each Team/Course Group must have the same Team Number!
4. The PE and elective sections in the SMS table have a blank Team/Course Group field and a blank Team Number field.
5. When students are scheduled, if a student is scheduled into an English section marked with Team/Class Group "A" and a Team Number of a "100", then that student's Math, Social Studies, and Science sections will also have a Team Number of "100". If a student is scheduled into an English section marked with Team/Class Group "A" and a Team Number of "101", then that student's Math, Social Studies, and Science sections will also have a Team Number of "101", etc.
6. PE and elective sections will have a mixture of students from each of the three teams.

REMEMBER: Each Team must have a unique team number.

The same group of students will be scheduled together for English, Math, Social Studies and Science. PE and Computers are not grouped and will take any student.

The graph below displays two different colors that indicate possibilities of how students in Team/Course Group A for Teams 100 and 101 could be scheduled.

For example, the same students would be scheduled to take English (A 100) Period 1 with Jones, Math (A 100) Period 2 with Casey, Social Studies (A 100) Period 3 with Doyle and Science (A 100) Period 4 with Albert. They would be scheduled into PE and Computers depending upon seats available.

| TCH | Per 1 | Per 2 | Per 3 | Per 4 | Per 5 | Per 6 | Per 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jones | $\begin{aligned} & \text { English } \\ & \text { A } 100 \end{aligned}$ | English A 100 | $\begin{aligned} & \text { English } \\ & \text { A } 100 \end{aligned}$ | Math A 101 | Lunch | $\begin{aligned} & \text { English } \\ & \text { A } 102 \end{aligned}$ | $\begin{aligned} & \text { English } \\ & \text { A } 100 \end{aligned}$ |
| Casey | English A 101 | Math <br> A 100 | Math <br> A 101 | $\begin{aligned} & \hline \text { Math } \\ & \text { A } 102 \end{aligned}$ | Lunch | $\begin{aligned} & \hline \text { Math } \\ & \text { A } 102 \end{aligned}$ | $\begin{aligned} & \text { Math } \\ & \text { A } 100 \end{aligned}$ |
| Doyle | $\begin{gathered} \text { Soc St } \\ \text { A } 102 \end{gathered}$ | $\begin{aligned} & \text { Soc St } \\ & \text { A } 101 \end{aligned}$ | $\begin{aligned} & \text { Soc St } \\ & \text { A } 100 \end{aligned}$ | $\begin{aligned} & \text { Soc St } \\ & \text { A } 101 \end{aligned}$ | Lunch | $\begin{aligned} & \text { Soc St } \\ & \text { A } 102 \end{aligned}$ | $\begin{aligned} & \text { Science } \\ & \text { A } 102 \end{aligned}$ |
| Albert | $\begin{aligned} & \text { Science } \\ & \text { A } 102 \end{aligned}$ | $\begin{aligned} & \text { Science } \\ & \text { A } 102 \end{aligned}$ | $\begin{aligned} & \text { Science } \\ & \text { A } 102 \end{aligned}$ | $\begin{aligned} & \text { Science } \\ & \text { A } 100 \end{aligned}$ | Lunch | $\begin{aligned} & \text { Math } \\ & \text { A } 100 \end{aligned}$ | Science A 101 |
| Bryant | PE | PE | PE | PE | Lunch | PE | PE |
| Gates | Computer | Computer | Computer | Computer | Lunch | Computer | Computer |

