



## PENNANT STUDENT RECORDS data collection in the Data Warehouse

### Training and resources

#### Data Warehouse Reporting on Also-Offered-As Courses and Scheduled-With Course Sections

##### First, some definitions:

**Course:** refers to an item in Penn’s Catalog of courses. In the legacy system, we sometimes called this the Course Inventory.

In the warehouse tables, COURSE\_ID is a concatenation of the Subject Area and the Course Number of the Course.

**Course Also-Offered-As:** refers to courses that are represented in the Catalog under different subject areas and/or different course numbers, but they are the *same* course.

Courses can be set up in the Curriculum Management system as being Also-Offered-As. Essentially, it’s all the same Course, but it can be offered under additional subject areas and numbers.

For example:

Art History “Art of Ancient Iran” is ARTH6220  
(Subject ARTH, Course Num 6220).

ARTH6220 can be offered as AAMW6220, “Art of Ancient Iran.”

It is the same course, showing up under the listings of two different departments in two different subject areas.

When courses are set up to be “also offered as” other courses, they will be assigned a “course family ID” – column name **Xlist\_Family** – and one course is the designated primary course in that family.

For example:

| COURSE_ID | Xlist_Family | Pri_Sec_ind |
|-----------|--------------|-------------|
| ARTH6220  | Z10016       | P           |
| AAMW6220  | Z10016       | S           |

The primary controls the course parameters, course title, attributes, etc., that are set up in Curriculum Management. The secondary has no control; it is simply another Course ID in which the same course can be offered.

The above describes how Also-Offered-As works at the **Course** level. These courses share an **Xlist\_Family** designation, and there will always be one and only one primary course.

**Course Section:** refers to a scheduled offering of a course in a term, into which students can enroll.

In the warehouse tables, SECTION\_ID is a concatenation of the Subject Area, Course Number and Section Number.

**Course Section Scheduled With:** refers to two or more course sections meeting at the same time in the same location, with the same educational presentation being taught by the same instructor(s).

For example: when sections ARTH6220401 and AAMW6220401 are set up in a specific term, they will both be “Art of Ancient Iran.” They will meet at the same time and place and be taught by the same instructor(s). It is the same course, offered by two different departments in two different subject areas.

If the base course was in an Also-Offered-As family, the default is that the course sections will be set up as Scheduled-With. However, additional sections can be added to the Scheduled-With group even if they are not Also-Offered-As in the course

For example: Section ARTH2220401 is also titled “Art of Ancient Iran.” It is an undergraduate course, and as such, cannot be set up in Curriculum Management as an “also offered as” with the graduate courses ARTH6220 and AAMW6220. But it can still be scheduled with the graduate course sections.

Course sections that are scheduled with each other share a designated **Scheduled With Group** ID, and one course section will be the primary.

For example:

| Term   | Sched With Group | Section ID  | Subject | Course Num | Section Num | Xlist Family   | Pri Sec Ind |
|--------|------------------|-------------|---------|------------|-------------|----------------|-------------|
| 202030 | 17               | ARTH6220401 | ARTH    | 6220       | 401         | 20203017Z10016 | P           |
| 202030 | 17               | AAMW6220401 | AAMW    | 6220       | 401         | 20203017Z10016 | S           |
| 202030 | 17               | ARTH2220401 | ARTH    | 2220       | 401         | 20203017       | S           |

In the example above, notice how the course sections meeting together share the same Scheduled With Group identifier, but they do not all share the same term Xlist\_Family identifier. In this situation, the course sections meeting together are not necessarily all identical courses. They are course sections that are sharing the resources of the same meeting location and times and are taught by the same instructor.

The course section designated as the primary has control of settings like the maximum enrollment, instructor resources, etc. The max enrollment value represents all enrollment across all the course sections that are scheduled with each other.

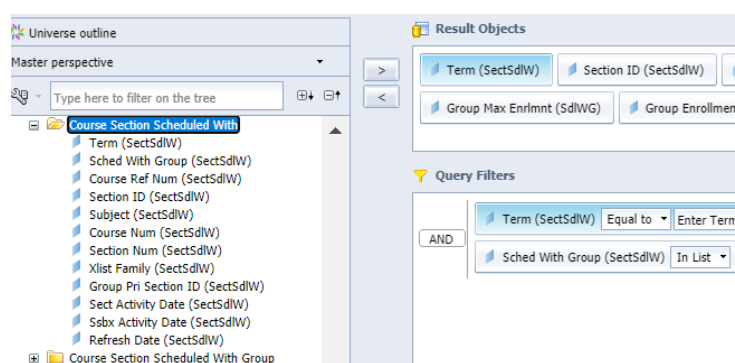
## To recap:

- Courses that share the same XList\_Family indicator are the same course, just offered as different Course IDs.
- Course Sections that inherit the same XList\_Family indicator from the base Course record are sections of the same course, just offered as different Section IDs.
- Course Sections that share the same Scheduled With Group indicator are sections that are sharing resources: they are meeting in the same location, at the same time(s), taught by the same instructor(s). Such courses may also share an XList\_Family, but they don't have to.

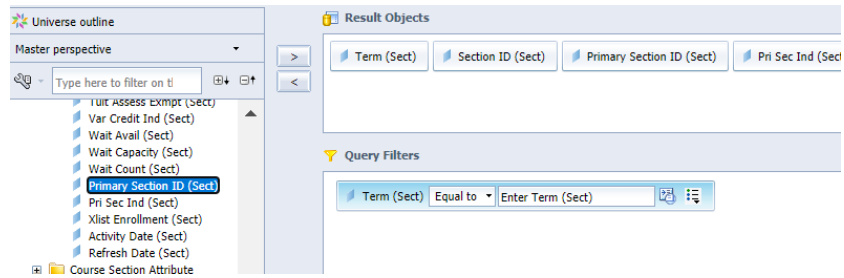
## Query writing and looking at reports

There are different ways to look at Scheduled-With Course Sections.

If you want to specifically just look at course sections in a term that are scheduled with each other, use the CRSE\_SECT\_SCHED\_WITH table. In the Pennant Student Records universe, that folder is called Course Section Scheduled With:



If you want to look at all course sections and include information about whether the section is Scheduled-With something else or not, use the CRSE\_SECTION table, and look at the PRIMARY\_SECTION\_ID. CRSE\_SECTION also has whether the section is the Primary or one of the Secondaries, and the total enrollment across the Scheduled-With sections. In the Pennant Student Records universe, look for PRIMARY\_SECTION\_ID in the Course Section folder:



Sometimes a report needs to return one row per instructor per course section taught per term. When there are Scheduled-With course sections, such a report can result in multiple rows per instructor. The solution is to use the **Primary Section ID**, instead of the Section ID.

Here is a demonstration of the difference between using Section ID vs Primary Section ID. The following report contains both columns. Because the Section\_IDs are different for each of the members of the “Scheduled With Group” there are multiple rows returned:

| Term (Sect) | Instr Preferred Name (SectIns) | Section ID (Sect) | Primary Section ID (Sect) | Pri Sec Ind (Sect) | Registered (Sect) | Xlist Enrollment (Sect) |
|-------------|--------------------------------|-------------------|---------------------------|--------------------|-------------------|-------------------------|
| 202030      | PITTMAN,HOLLY                  | ARTH6220401       | ARTH6220401               | P                  | 15                | 20                      |
| 202030      | PITTMAN,HOLLY                  | AAMW6220401       | ARTH6220401               | S                  | 3                 | 20                      |
| 202030      | PITTMAN,HOLLY                  | ARTH2220401       | ARTH6220401               | S                  | 2                 | 20                      |

The correct way to construct the query depends on what you want to see. If you include every section, you can see the details such as how many students registered for each section. But be careful: if you were to try to sum the total enrollment column it would look like this instructor is teaching 60 people, which is not true.

When sections are scheduled with each other, they *share the total Xlist Enrollment*. In the example shown here, there are 20 people sitting in the class. If you want your query to return just one row per instructor per course section they are teaching in a term, use just the Primary Section ID in your results:

| Term (Sect) | Instr Preferred Name (SectIns) | Primary Section ID (Sect) | Xlist Enrollment (Sect) |
|-------------|--------------------------------|---------------------------|-------------------------|
| 202030      | PITTMAN,HOLLY                  | ARTH6220401               | 20                      |

### Frequently Asked Questions:

Q: Can a Course Section be scheduled with each other if the base courses are not Also-Offered-As?

A: Yes. If courses are Also-Offered-As in the catalog, the sections scheduled will automatically inherit the relationship and they will also be created as scheduled with each other. In situations where there are course sections at different *levels* that are not Also-Offered-As in the catalog, the departments

managing those sections can still set them up to be scheduled with each other, when the sections will be sharing the same instructors in the same locations at the same times.

Q: How can I find the old course numbers for Scheduled-With course sections in Banner?

A: There really is no easy way to do this. You could take the primary course id, find that in the XWALK\_CRSE\_NUMBER, then using the matching SRS primary course id look in the legacy DWADMIN.COURSE\_SECTION table to find the SRS cross-listings that were linked to that primary course historically. This will work as long as the primary course was consistently used in SRS, but there are exceptions, so this work-around is not a comprehensive solution.

Q: How many course sections can be scheduled with each other?

A: Technically there is no limit.

Q: Will there be canned reports for Schedule-With Course Sections?

A: Yes, the Business Objects repository will have reports available to get course sections that are scheduled with each other by term, for specified departments or subject areas, or by school.