

# Remote Meetings Best Practices

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- Turn off your video function
- Please go on **Mute** unless you are speaking
- Please **enter your questions in the chat function**. When your question is being answered, you can go off **Mute** to ask follow-up questions
- Please do not use the chat function for off-topic discussions

DATA WAREHOUSE

STUDENT DATA USER GROUP

JUNE 17, 2021

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# Agenda

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- Also-Offered-As Course & Banner Defined Cross List Sections
- Course & Course Sections Timeline
- Pennant Student Records data collection
- Crse\_Ref\_Num (CRN) vs Course\_ID , PIDM vs Penn\_ID
- Financial Aid data collection

# Also-Offered-As Course & Banner Defined Cross List Sections

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- The relationship between an also-offered-as/equivalent courses (at the same level) is defined in the **COURSE** record.
- **CRSE\_SECTION** records always have a corresponding Course record.
- More than one course section (and potential equivalent partners) can meet together (**CRSE\_SECT\_SCHED\_WITH**) at the same time in the same place.
- There will be times where combinations of sections with **or without the also-offered-as/equivalent designation** will meet in the same room, with the same instructor, etc. The variations and their relationship will be identified with a unique Banner cross-list code. (**SCHED\_WITH\_GROUP**)a
- The legacy 'Primary section' identification is being derived from a set of business rules.

# Banner Cross List Section Hierarchy

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- An Oracle function that will be used any time we need to define a Primary Course Section.
- The Data Warehouse will define the “P” on tables containing course section data, including the cross-listed section table: CRSE\_SECT\_SCHED\_WITH
- The Hierarchy is defined as follows:
  - If one P and one or more S exist on the COURSE record, **the corresponding section with P is primary.**
  - If multiple Ps and multiple S exist on the COURSE record, and there is a P/S relationship for each P (P12345, S12345, P23456, S23456)... **the P section with the lowest course number is primary.**
  - If multiple Ps and one or more S exist, and one P and one or more S have the same course family identifier (P12345, S 12345, P 23456)... **the P that is part of the course family is primary.**
  - If none of the above is true, the primary will be determined by the **course section with the lowest Course Reference Number (CRN)**
- Note: this will all be done automatically for users of the Data Warehouse. This slide is meant to explain how the primary will be determined. You do not need to implement this logic yourself

Individuals involved in section maintenance will be entering data in two systems in Fall 2021 and Spring 2022: SRS and CLSS

### 2021/2022 Academic Year

3-digit courses will be managed in SRS  
All active Course Inventory and all Course sections for the 2021/2022 academic year will continue to be extracted to the DWADMIN tables, and will be in the STDTCANQ universe

### 2022/2023 Academic Year

4-digit courses will be managed in CLSS.  
All converted courses will have the 4-digit course numbers. Course sections built in CLSS will have the 4-digit course numbers. The new records will be in the DWNGSS\_PS tables, and will be in the Pennant Student Records universe

The **Academic Year** will determine the appropriate place to look for the data

Course sections for terms prior to the 2022/2023 Academic Year will not be in Pennant Student Records. Queries for older terms' course section data will need to be done in the legacy data collection. The students' academic history -- courses that they took prior to 2022/2023 -- will be in Banner and you will see those data in the new ST\_ENROLLMENT table.

COURSE\_INVENTORY,  
COURSE\_XLIST\_INVENTORY,  
COURSE\_INVENTORY\_DESC,  
COURSE\_ADMIN\_CODE,  
COURSE\_SECTION\_REG\_CONTROL,  
COURSE\_SECTION\_TUIT\_SCHOOL,  
COURSE\_TERMS\_OFFERED,  
COURSE\_INV\_DESC\_TEXT,  
COURSE\_SECTION,  
COURSE\_SECTION\_ACTIVITY,  
COURSE\_SECTION\_INSTRUCTOR,  
COURSE\_SECTION\_STATUS,  
COURSE\_SECTION\_TYPE,  
COURSE\_SECTION\_TYPE\_TERM

COURSE, COURSE\_XLIST,  
CRSE\_ATTRIBUTE, CRSE\_COREQ,  
CRSE\_EQUIV, CRSE\_GRADE\_MODE,  
CRSE\_LEVEL, CRSE\_MUTUAL\_EXCL,  
CRSE\_PREREQ, CRSE\_SCHED\_TYPE,  
CRSE\_RESTRICT\_\*, CRSE\_SECTION,  
CRSE\_SECT\_ATTRIBUTE,  
CRSE\_SECT\_INSTRUCTOR,  
CRSE\_SECT\_MEETING,  
CRSE\_SECT\_OVERRIDE,  
CRSE\_SECT\_SCHED\_WITH,  
CRSE\_SECT\_SCHED\_WITH\_GRP

# Pennant Student Records data collection

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\*COURSE\_DESC removed, descriptions added to COURSE

- Added COURSE\_ID column - concatenates subject area and course number. (list tables and columns)
- Remember that COURSE\_ID, along with TERM, is needed to join between the course section and course inventory information.
- Added a number of “description” columns to many of the tables, to facilitate reporting.

# Pennant Student Records data collection

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## Oracle RESERVED Word Cleanup

- CRSE\_SECT\_ATTRIBUTES: ATTRIBUTE is now ATTRIBUTE\_CODE.
- CRSE\_SECT\_INSTRUCTOR: CATEGORY was removed.
- ST\_HOLD: TO\_DATE is now END\_DATE, FROM\_DATE is now START\_DATE.
- ST\_THESIS DISSERTATION: TYPE is now QUALIFYING\_PAPER\_TYPE
  
- DEGREE is now DEGREE\_CODE, PROGRAM is now PROGRAM\_CODE  
in ST\_DEGREE\_OUTCOME, ST\_DEGREE\_OUTCOME\_MAJOR,  
ST\_DEGREE\_TERM, ST\_DEGREE\_PURSUAL, ST\_MAJOR\_MINOR



# Pennant Student Records data collection

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- much larger (and much more realistic) set of data is now available in ST\_TERM, ST\_DEGREE\_TERM, ST\_DEGREE\_PURSUAL and ST\_DEGREE\_OUTCOMES
- ST\_DEGREE\_TERM and ST\_DEGREE\_PURSUAL both have DEGREE\_LEVEL and STUDENT\_LEVEL
- ST\_DEGREE\_PURSUAL now has LAST\_ENROLLED\_TERM and LAST\_DEGREE\_TERM

# Pennant Student Records data collection

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- We are adding indexes to many of the tables in DWHE to facilitate reporting
- In our dev environment, the “current term” is Fall 2020 (202030). The tables are being built-out term-by-term, to the current term if the student is graduating, otherwise to the next\_next term (currently 202120).
- Also in our dev environment there are some odd test cases with data in terms “way out” in the future. You can ignore those.

# Course Reference Number (CRN) vs Course Section ID

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In Pennant Student Records, you will see two identifiers for course sections:

- **CRN**, sometimes called CRSE\_REF\_NUM in the warehouse tables, is the Banner Course Reference Number that uniquely identifies a scheduled section in Banner. It is used to join tables behind-the-scenes.
- Course **Section\_ID** is the Subject Area + Course Number + Section Number (aka sequence number). It is similar to the Section\_ID field used in the legacy data collection.

**Recommendation: Use Section\_ID in reports.**

# PIDM vs Penn\_ID

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In Pennant Student Records, you will see two identifiers for person records:

- **PIDM** is the Banner Person identity management unique identifier. It is used to join tables behind-the-scenes.
- **Penn\_ID** is the Banner outward-facing identifier. It is used on Banner forms and will be the ID that people will see and use in the user interface.

Recommendation: Use Penn\_ID in reports.

# Financial Aid Data Warehouse Update

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Data in the Financial Aid Data Warehouse will have Banner as Data Source

R1 – August 2021:

SAM and current DWFA is still source for financial aid data for Aid Year 2021-2022.  
New FA Data Warehouse will be available with limited data -Only incoming applicants for Fall 2022

With R2 and as Banner becomes source of data, more data will populate FA Data Warehouse tables

# Financial Aid Data Warehouse Update

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FA Data Warehouse Working Group still meeting regularly

Finalizing table structure for data warehouse:

- Awards table
- Bio and Group Information
- Need Information
- Requirements
- Cost of Attendance and Budget

# Financial Aid Data Warehouse Update

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Discussions on:

- Testing
- Security
- Data Warehouse table useability
  - Institutional Methodology vs Federal Methodology

# Financial Aid Data Warehouse Update

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We are looking to deliver the following:

- New Tables that are easy to work and join together
- Documentation to explain fields and map current FA Data Warehouse fields to new fields
- New Business Objects Universe



# Financial Aid Data Warehouse Update

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Timeline:

June/July

- finalize data tables, views
- documentation
- testing

August – R1

Fall – Applicant information for Fall 2022

# Wrap-up

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- Questions/comments
- Feedback/ Suggestions for future meetings?
- Follow-up questions/comments: [da-staff@isc.upenn.edu](mailto:da-staff@isc.upenn.edu)
- Discussions about student data: [student-wh@lists.upenn.edu](mailto:student-wh@lists.upenn.edu)