

Remote Meetings Best Practices

- 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

OCTOBER 14, 2021

Agenda

- An overview of the various environments
- Pointing to SIT and how that impacts people using DWHE
- Recent Changes in Development Pennant Student collection
- Financial Aid update
- Reporting on Course data in production WHSE
- Getting ready for Section data – coming to prod soon
- Announcements and wrap-up

Over the coming weeks and months... for Student Records *, we will be working in multiple places, concurrently:

Name/description	Database	Schemas	universes
PRODUCTION Legacy Student Data Collection	WHSE	DWADMIN, DWST	STDTCANQ, STDTERM
DEVELOPMENT Pennant data collection Source is a non-production Banner region. More about that in the next slide...	DWHE	DWNGSS, DWNGSS_PS	Pennant Student Records - DWHE
PRODUCTION Pennant data collection – Source is production Banner. In Sept. 2021, we started with Course data tables.	WHSE	DWNGSS, DWNGSS_PS	Pennant Student Records

* note: this slide is specifically about Student Records data, but the same environments apply to Financial Aid

New Source for the Development Pennant data collections

- Coming this week – the source for the development warehouse data will change from the project's Functional Object Testing to the System Integration Testing (SIT) environment
- The data will still be in the development warehouse, only the underlying source will change
- The data in SIT is more complete – especially in terms of Degree Term, Outcomes, Major, and Minor data
- During SIT testing later this fall, a complete test of registration processes will run – meaning that there will be more current term registrations available for querying

Recent Changes in Development Pennant Student data collection

ST_DEGREE_TERM: New and renamed columns; See Appendix for details.

ST_DEGREE_PURSUAL: New, renamed, and removed columns; See Appendix for details.

ALLOWABLE_GRADES: New table

- Grades that an Instructor can use on course section grading sheets for any TERM, LEVEL, and GRADE_MODE.
- Sample usage: Join from ST_ENROLLMENT to ALLOWABLE_GRADES on term, primary student level, and grade mode.

Recent Changes in Development Pennant Student data collection

New columns in the CRSE_SECTION table:

- FINAL_GRADE_IND
- PART_OF_TERM_DESC
- SPECIAL_APPROVAL_DESC
- SYLLABUS_URL

And COURSE_ID was added to the following tables:

- CRSE_SECT_ATTRIBUTES
- CRSE_SECT_INSTRUCTOR
- CRSE_SECT_MEETING
- CRSE_SECT_OVERRIDE
- CRSE_SECT_SCHED_WITH

Financial Aid update

The Pennant Aid (DWNGSS_PF) tables in production have been live since October 1st.

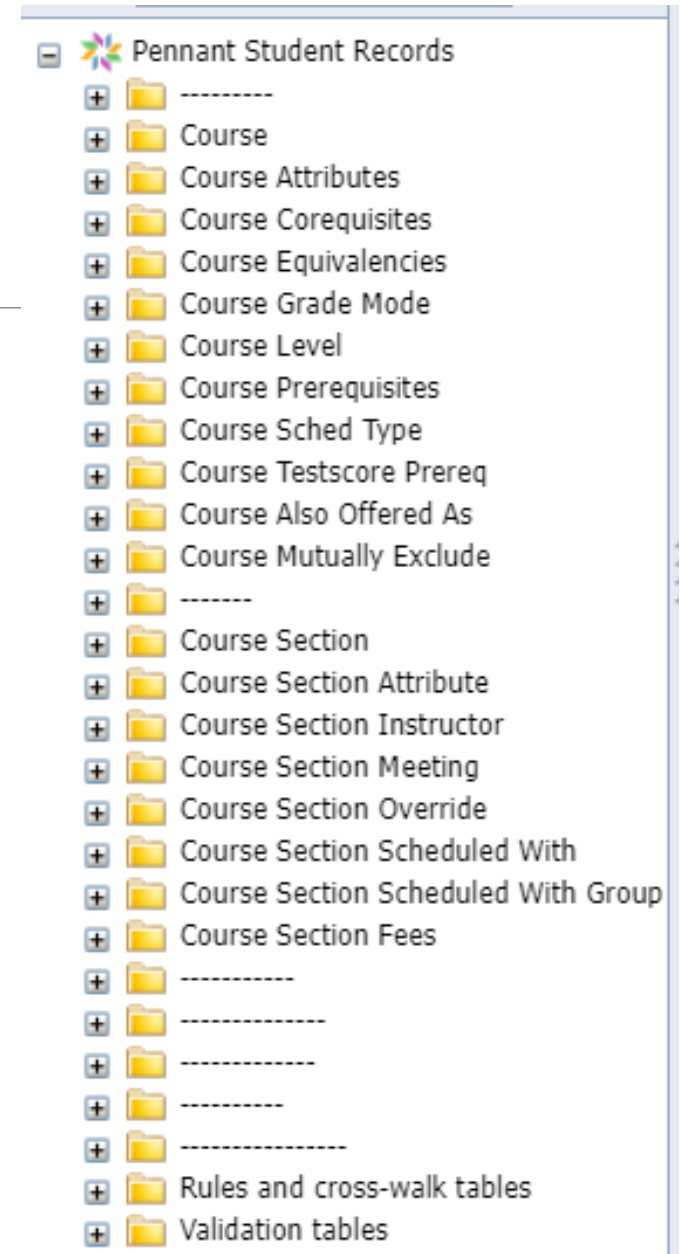
- Main source of data is from Banner.
 - Being used for aid applicants for the next aid year (2022-2023)
- SAM and current Financial Aid data warehouse tables (DWSFA) are main source of data for current aid year.

Eform to request access to the Pennant Aid information has been available since October 4th.

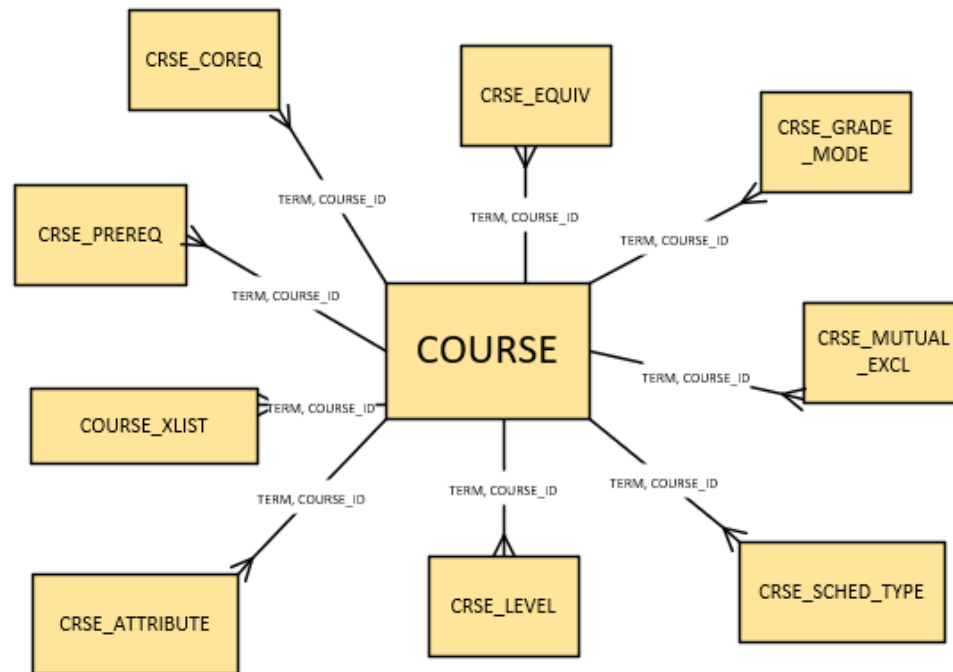
Now in Production: Course and Course Section

In the production warehouse and in the production universe *Pennant Student Records* you now can see the tables and views for Course and Course Section (along with the rules and validation tables and views)

All other tables and views are only available in the development warehouse and in the development universe:
Pennant Student Records - DWHE



The COURSE table, and related tables



Descriptions of the tables and what they contain: <https://www.isc.upenn.edu/pennant-student-records>

Course records are term-effective in the source (Banner), but are stored term-by-term in the warehouse

In the legacy Course_Inventory table, we had to look at the start/end Terms. In Pennant Student Records, we will have one row per term.

This makes it easier to join between Course tables, and to join to the Course Section tables, using Term.

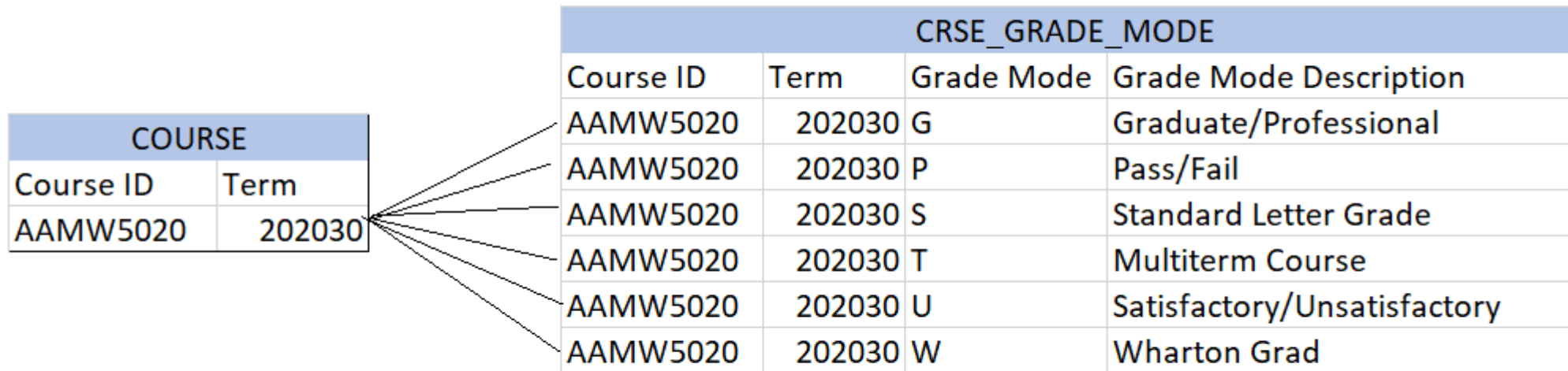
To get just one row per Course, **always specify the Term** in your queries. Otherwise, you'll get multiple rows back, as in this example:

Course ID (Crse)	Effective Term (Crse)	Term (Crse)	Title (Crse)
AAMW5020	202220	202220	Mesopotamia 2200-1600bce
AAMW5020	202220	202230	Mesopotamia 2200-1600bce
AAMW5020	202220	202310	Mesopotamia 2200-1600bce
AAMW5020	202220	202320	Mesopotamia 2200-1600bce
AAMW5230	202220	202220	Narrative in Ancient Art
AAMW5230	202220	202230	Narrative in Ancient Art
AAMW5230	202220	202310	Narrative in Ancient Art
AAMW5230	202320	202320	Comparative Narratives in Art

How the COURSE table relates to other tables with course information

“One-to-Many”

For example: In a specified term, for on specified course, there can be multiple available grade modes:



Recap: reporting on Course data

Main points covered today:

- The Course (aka catalog) data are now in the production warehouse.
(for Webi users: *Pennant Student Records* universe)
- Course data are term-effective in Banner. To facilitate warehouse reporting, we are storing the Course data term-by-term.
- There are numerous tables that join to COURSE on Course_ID and Term.
- The relationship between COURSE and the other tables is “one-to-many”.

Coming Soon: Course Section data

Table:
CRSE_SECTION

Universe folder:
Course Section

Data for
Summer 2022
and Fall 2022
sections will be
in the
warehouse in
November 2021

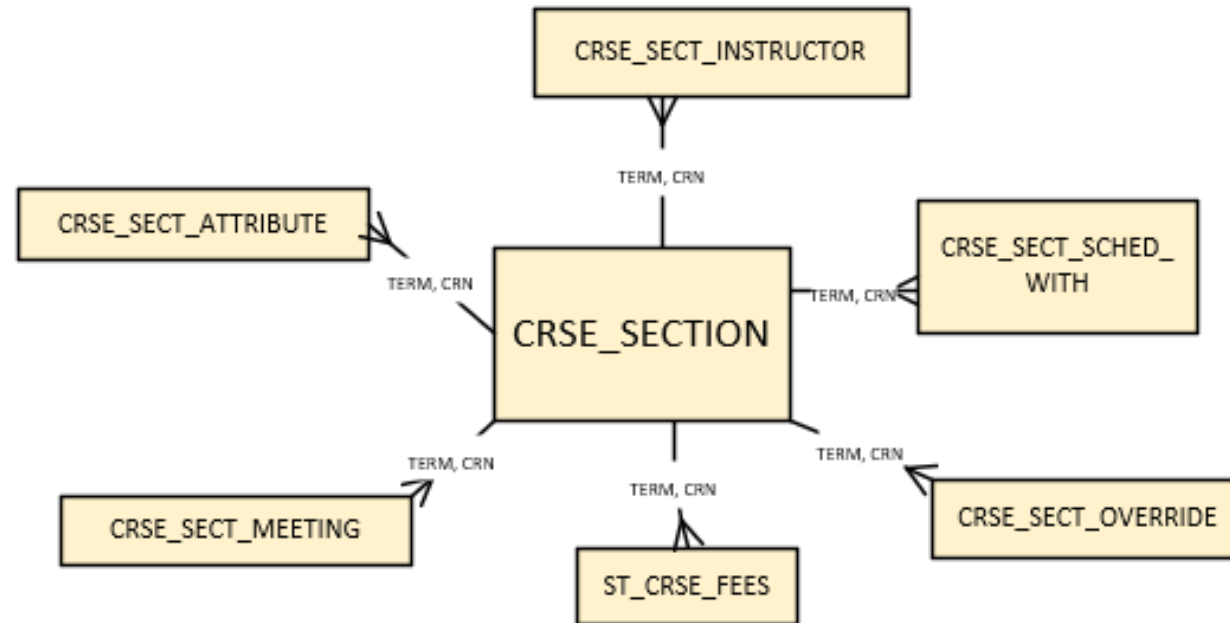
The screenshot displays a data tool interface with two main panels. The left panel, titled "Universe outline", shows a tree view under "Master perspective" with a search box "Type here to filter on the tree". The "Course Section" folder is expanded, listing various attributes such as "Academic Cutoff Date (Sect)", "Available Seats (Sect)", "Billable Hours Bu (Sect)", "Campus (Sect)", "Census Enrlmt (Sect)", "Course ID (Sect)", "Course Num (Sect)", "Credit Hours Bu (Sect)", "Department (Sect)", "Division (Sect)", "Drop Cutoff Date (Sect)", "Duration Unit Code (Sect)", "Enroll Cutoff Date (Sect)", "Final Grade Ind (Sect)", "Gradable Ind (Sect)", "Instructional Method (Sect)", "Integratn Code (Sect)", "Lab Hours (Sect)", "Learn First Start Date (Sect)", "Learn Last Start Date (Sect)", "Lecture Hours (Sect)", and "Link ID (Sect)".

The right panel, titled "Result Objects", shows a list of selected attributes: "Term (Sect)", "Instr Preferred Name (SectIns)", "Credit Type (Sect)", "Schedule Type (Sect)", "Section ID (Sect)", "Available Seats (Se)", "Department (Sect)", "Division (Sect)", "Credit Hours Bu (Sect)", and "Credit Hours (Sect)".

Below the Result Objects panel is the "Query Filters" section, which contains three filter conditions:

- "Total Enrollment (Sect) Greater than 0"
- "AND Division (Sect) Equal to AL"
- "Term (Sect) Equal to 202220"

The CRSE_SECTION table, and related tables



Descriptions of the tables and what they contain: <https://www.isc.upenn.edu/pennant-student-records>

Some new vocabulary for Course Sections

CRN vs Section ID

The CRN, or Course Reference Number, is Banner's internal identifier for a course section.

Section ID is something we use in the warehouse to uniquely identify a course section. It is the concatenation of the Subject area, the Course number, and the Section number.

EITHER ONE can be used to uniquely identify a course section in the warehouse Pennant Student Records data collection.

Scheduled With

In the legacy system, we referred to course sections that were offered at the same time in the same location taught by the same instructors as "cross-listed"

In Pennant, these are now referred to as sections that are "scheduled with" each other.

We will have a more detailed look at course sections at an upcoming SDUG meeting.

Recap: reporting on Course Section data

Main points covered today:

- The Course Section tables are now in the production warehouse (*Pennant Student Records* universe) but **not section data**. Expect to start seeing section data in November 2021, for sections scheduled for Summer 2022 and Fall 2022.
- The relationship between CRSE_SECTION and the other tables is “one-to-many”; the universe joins are on CRN and Term.
- We have some new terminology and new ways of looking at section data.
- You can explore the new tables with test data now in the development warehouse (*Pennant Student Records–DWHE* universe)

Announcements

- The University Registrar's census date this term is Monday, October 18.
- SRS Census data will be available in the warehouse on Tuesday, October 19.

Wrap-up

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

Appendix: Changes to specified tables in the Development Pennant Student Records data collection

Changes to ST_DEGREE_TERM

renamed TERM_GPA_CREDIT	to	TERM_GPA_HOURS
renamed TERM_CUMULATIVE_EARNED_CREDIT	to	TERM_CUM_EARNED_CREDIT
renamed TERM_CUMULATIVE_QUALITY_POINTS	to	TERM_CUM_QUALITY_POINTS
renamed TERM_CUMULATIVE_GPA_CREDIT	to	TERM_CUM_GPA_HOURS
Added these columns:		
TERM_ATTEMPTED_CREDIT_BU		
TERM_EARNED_CREDIT_BU		
TERM_QUALITY_POINTS_BU		
TERM_GPA_HOURS_BU		
TERM_CUM_EARNED_CREDIT_BU		
TERM_CUM_QUALITY_POINTS_BU		
TERM_CUM_GPA_HOURS_BU		

Appendix (continued): Changes to specified tables in the Development Pennant Student Records data collection

Changes to ST_DEGREE_PURSUAL

renamed LAST_DEG_TERM_STATUS	to	LAST_ENROLLED_TERM_STATUS
renamed LAST_DEG_TERM_STATUS_DESC	to	LAST_ENROLLED_TERM_STATUS_DESC
renamed HRS_ATTEMPTED_PENN	to	ATTEMPTED_CREDIT
renamed HRS_ATTEMPTED_PENN_BU	to	ATTEMPTED_CREDIT_BU
renamed HRS_EARNED_PENN	to	EARNED_CREDIT
renamed HRS_EARNED_PENN_BU	to	EARNED_CREDIT_BU
renamed HRS_EARNED_EXT	to	TRANSFER_CREDIT
renamed HRS_EARNED_EXT_BU	to	TRANSFER_CREDIT_BU
renamed QUAL_PTS_PENN	to	QUALITY_POINTS
renamed QUAL_PTS_PENN_BU	to	QUALITY_POINTS_BU
renamed PENN_GPA	to	GPA
Deleted these 12 columns:		
HRS_ATTEMPTED_EXT, HRS_ATTEMPTED_EXT_BU, HRS_ATTEMPTED_TOTAL, HRS_ATTEMPTED_TOTAL_BU, HRS_EARNED_TOTAL, HRS_EARNED_TOTAL, HRS_EARNED_TOTAL_BU, OVERALL_GPA, QUAL_PTS_EXT, QUAL_PTS_EXT_BU, QUAL_PTS_TOTAL, QUAL_PTS_TOTAL_BU, TRANSFER_GPA		
Added these 2 columns:		
GPA_HOURS		
GPA_HOURS_BU		