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MEMORANDUM

DATE: August 11, 2023

TO: Four-Year Public Institutions & Community Colleges

FROM: Parris Jackson, Director, Office of Information Technology, MHEC

CC: Emily A. A. Dow, Assistant Secretary, Academic Affairs, MHEC
Barbara Schmertz, Director, Office of Research and Policy Analysis, MHEC
Ann Kellogg, Director of Reporting Services, MHEC

SUBJECT: Revisions to the Course Information System (CIS) and Student Registration System (SRS) for Public Institutions

This memorandum serves to inform you about changes to the semi-annual Course Information System (CIS) and Student Registration System (SRS) data collections and the launch of the new annual Student Course Registration System (SCRS) effective with the current 2023-2024 collection year. Additionally, this memo outlines options for institutions currently participating in the SRS and CIS submissions for migrating to the new SCRS submission. Each institution is requested to email both Ann Kellogg (ann.kellogg@maryland.gov) and mac2help.mhec@maryland.gov of the option to be exercised from the choices below by **Monday, August 21, 2023**.

Background

In 2012, MHEC expanded its unit record data collections; this included the launch of the semi-annual Course Information System (CIS) and Student Registration System (SRS) data collections that began with the Summer/Fall 2014 terms. At inception, the scope of the SRS and CIS collections was limited to undergraduate degree-seeking students enrolled at public institutions of higher education.

Over the last eight collection cycles MHEC has validated these data and issued guidance on the population scope and data definitions to improve data quality and consistency. However, post-CCR-CCA, and with an eye to the requirements for the *Blueprint for Maryland's Future*, MHEC has realized that the scope of the population and data elements in the existing collections are not sufficient to answer current and future policy-relevant questions related to course-taking behaviors and outcomes.

For example, it is critical to collect data on students registered in dual enrollment and early/middle college programs to study the outcomes of students with early access to college-

level courses, particularly those who received state funding to take these courses and to support analysis required by the *Blueprint for Maryland's Future*. Similarly, the state's interest in course-taking has expanded beyond undergraduate courses. With the intense focus on educator preparation programs, particularly through the *Blueprint for Maryland's Future*, and the large investment of state funds awarded to students pursuing undergraduate, graduate and non-degree educator preparation programs, the inclusion of these populations in course-level data collections is now critical.

Finally, there is a benefit to migrating to a single, annual file: reduced reporting burden. Institutions will now process data extracts once per year to produce a single file, rather than twice per year, for a total of eight files.

In 2021 and 2022, MHEC discussed challenges with the SRS and CIS collections and the need for more comprehensive data to support the *Blueprint for Maryland's Future* at Data Advisory Group (DAG) meetings (chaired by Dr. Barbara Schmertz). In winter 2023, Dr. Schmertz requested volunteers from DAG to form a workgroup to discuss migrating from the multi-file, semi-annual SRS and CIS submission to a single file, annual SCRs submission. Over the last 6 months the workgroup has met to discuss the development of the new annual SCRSs, refine the population scope and data definitions, and discuss implementation strategies. Below is a summary of those discussions, highlighting the challenges with the current collection design and a proposed implementation plan.

Challenges with Current Collection Design

Beyond reduced reporting burden and the need to be more comprehensive for the *Blueprint for Maryland's Future*, the new SCRS collection solves two significant technical challenges with the design of the current SRS and CIS data collections.

The first challenge centers on the assignment of courses to terms. The traditional Summer, Fall, Winter and Spring semester cycle where courses span the full term is no longer the prevailing scheduling model at many institutions. Courses may only be scheduled for a portion of a term. Or, at some institutions, courses may have start and end dates that do not fall fully within a traditional term-based structure. This leads to courses being missed from the data collection or being double-reported as institutions must manually track how to report courses that overlap a traditional semester structure (e.g. a course that starts in November but ends in February could be either a Fall term or Spring term course). Additionally, this leads to incomplete grade reporting as a course may be included in a data submission while the course is still in-progress so that the ultimate outcome (pass, fail, withdrawal, etc.) of the course is unknown at the time of data submission.

The second technical challenge is that SRS and CIS must be merged together for the data to be of use. Four data elements are required to successfully merge the data from SRS and CIS. The values in those four fields must be identical in both files. For example, a section code in SRS reported as 001 and a section code reported in CIS as 01 will result in a failed merge. Data files are rejected multiple times until 100% of the four elements match across the two files.

To address these challenges, a new Student Course Registration System (SCRS) has been developed with a new file structure.

Implementing the Student Course Registration System (SCRS): Collection Calendar

Under the current collections calendar the semi-annual SRS/CIS file requires reporting for two different academic years in a single collection year. For example, the 2023-2024 collection calendar includes the Winter/Spring 2023 SRS/CIS files from the 2022-2023 and the Summer/Fall SRS/CIS files from the 2023-2024 academic year.

For the implementation of the new SCRS, MHEC discussed two implementation options. One option considered was to delay data collection so that the annual file submitted under the collection calendar would align to the academic year (AY) (Summer/Fall/Winter/Spring). The second option considered was to retain the existing collection calendar structure and allow the annual file to cross academic years (Winter/Spring from prior AY and Summer/Fall from current AY).

After much consideration, the decision was to allow the annual file to contain data from two separate academic years as shifting to an academic year reporting would create too much of a delay in data that are needed to support reporting and research initiatives, particularly in relationship to the *Blueprint for Maryland's Future*. Given that the new file still contains term code and contains course start and end dates, MHEC can correctly attribute the courses reported in an annual file to the correct academic year.

		Begin	End
Annual Student Registration System (SRS) & Annual Course Information System (CIS) Winter 2023, Spring 2023, Summer 2023 and Fall 2023	MHEC IT Data Verification Cycle	3/15/2024	4/12/2024
	MHEC Research Data Quality Validation Cycle	May 20, 2024	August 30, 2024
	MHEC IT File Release Data	September 3, 2024	

		Begin	End
Student Course Registration System (SCRS) Winter 2023, Spring 2023, Summer 2023 and Fall 2023	MHEC IT Data Verification Cycle	3/15/2024	4/12/2024
	MHEC Research Data Quality Validation Cycle	May 20, 2024	August 30, 2024
	MHEC IT File Release Data from Stage 1	September 3, 2024	

Effective with the 2023-2024 collections calendar as of July 1, 2023, all institutions will submit an annual file with all course data from the 2023-2024 by exercising one of the following options:

- **Option 1:** Existing SRS/CIS file layout
 - a. Institutions WILL NOT submit Winter/Spring 2023 SRS and CIS files by the original due date of 9/15/2023, but instead WILL create two annual files (one SRS and one CIS) that are comprehensive of Winter/Spring 2023 and Summer/Fall 2023. These two files will be submitted with the regularly

scheduled Summer/Fall 2023 data submission on March 15, 2024. (See calendar above).

- b. This requires no change in the data elements, data element values or population scope.
- c. In 2024-2025, institutions will be required to submit the new single annual SCRS file, with all new data elements, all new data element values, and the expanded population scope.
- **Option 2:** Submit new SCRS file layout (Layout is forthcoming)
 - a. The submission will be under the new file structure.
 - b. The submission of the new data elements and new data values will be optional.
 - c. The expanded population scope will be optional.
 - d. The file will be submitted on the regularly scheduled Summer/Fall 2023 data submission of March 15, 2024. (See calendar above).
 - e. In 2024-2025, the new data elements, new data element values, and the expanded population scope will be required.

Submission Option Selection and Deadlines

All institutions must select one of the two options outlined above for migrating to the new SCRS file. Institutions must email both Ann Kellogg (ann.kellogg@maryland.gov) and mac2help.mhec@maryland.gov with their selection (option 1 or option 2) by **Monday, August 21, 2023**.