

Creating a Statewide Mathematics Transfer Inventory

Purpose: The purpose of this tool is to help your state develop an inventory of mathematics course requirements by program and by institution. The inventory can be used by the state mathematics task force to assess alignment of program requirements across the state. It can also be used by program chairs, mathematics faculty, advisors, and others to inform decisions about aligning mathematics requirements with programs of study and to advise transfer students.

Who: Mathematics faculty, task force facilitators, and staff

Instructions:

Step 1. Determine your statewide priorities and parameters for data collection.

Ideally, a statewide transfer inventory will include all institutions of higher education, all programs, and all college-level mathematics course requirements. Depending on the time and capacity of your state to collect and maintain this information, you may want to prioritize some data collection in the short-term with a plan for building out your resource in the future. Use data to inform your prioritization. Here are a few questions to guide your planning:

Guiding Questions	Considerations
Which <i>institutions</i> should be included in the inventory? All four-year? Some four-year? Some or all two-year?	<ul style="list-style-type: none">• According to your data, which institutions send/receive the most students in transfer?
Which <i>programs</i> should be included in the inventory? All programs? All award levels? Should you include information about CIP codes?	<ul style="list-style-type: none">• According to your data, which programs send/receive the most transfer students?• Will users want to sort data by program?
What mathematics course information should be included? All college-level mathematics courses required? The first college-level or “gateway” mathematics course?	<ul style="list-style-type: none">• How will you define gateway? How will you describe course options?• How will users best understand the inventory information?• Are common course numbers or course names used across the state? Do you need to provide a key to explain equivalencies?

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Step 2. Create or customize a spreadsheet.

Review the two sample spreadsheets: *Texas Mathematics Pathways Transfer Inventory* and *Arkansas Math Requirements Spreadsheet*. The Texas version may better suit your needs if your state does not use common course numbers/names; if organizing information by institution is most important to your users; or if you want to track mathematics courses in the core curriculum. The Arkansas version may better suit your needs if your state has common course numbers/names and your users want the flexibility to sort information by institution or by program. See the complete Texas Inventory in PDF format at: <https://dcmathpathways.org/resources/texas-transfer-inventory-guide-2016-17-pdf>. Excel versions of the Texas and Arkansas inventories are available in UT Box under “[Create a Statewide Mathematics Transfer Inventory](#)” folder.

Use the excel documents to customize the fields for your state if needed or create your own template incorporating all of the data parameters you’ve identified. Specify consistent language and formatting.

Step 3. Determine data collection responsibilities and collect data.

Identify who will collect mathematics requirement and program information. It may be most efficient for a single person to take on this project or to divide and conquer. Charging a single person or institution to collect all data has the benefit of strong consistency in language and documentation across institutions. Do not underestimate the importance of details and their consistency! * Asking each institution to collect their own data may decrease consistency, but it may allow you to distribute the workload, accelerate data collection, and increase accuracy of information.

Step 4. Ensure accuracy.

Use course catalogues as the source of data collection. Website information is often out of date. Ask task force members, department chairs, or other institutional representatives to review for accuracy.

Catalogues are updated annually. Make a plan for keeping the inventory up-to-date each year.

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*Advice About Language Consistency and Course Options in the Inventory

We recommend you set guidelines for listing mathematics courses in your inventory, especially if more than one person will be collecting data. Some examples are provided below:

Language Examples in Inventory:	Meaning/Interpretation:
Either Math 1302 <i>or</i> 1324 <i>or</i> 1333	One course fulfills requirement.
Math 1113 <i>and</i> either Psyc 2613 <i>or</i> Socg 4053	Two courses fulfill requirement: Math 1113 <u>and</u> one of those two courses listed.
Math 1314, 3302, <i>and</i> either Math 1316 <i>or</i> 2312	Three courses total meet the requirement: Math 1314, Math 3302, and one of the two listed at the end.
<i>Either</i> Math 1324 <i>or</i> Busa 128, Math 1325, <i>and</i> Ba 302	Three courses total for requirement: One of the two listed (Math 1324 <i>or</i> Busa 128) <u>and</u> Math 1325 <u>and</u> Ba 302.
Core Requirement Only	The number of mathematics courses is specified in the institution's core curriculum requirement, as are the course options available.