



TAIR 2023

Math pathways: An Analysis and Visualization of Math Courses Pass rates at Texas A&M University – Corpus Christi

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OFFICE OF PLANNING, ANALYTICS, INSTITUTIONAL RESEARCH, AND
STRATEGIC INITIATIVES

TEXAS A&M UNIVERSITY- CORPUS CHRISTI

TAMUCC Introduction Fall 2022 Quick Facts

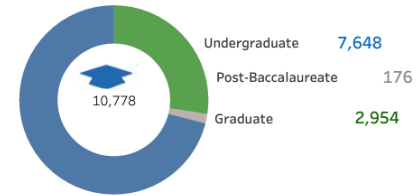
QUICK FACTS-FALL

2022

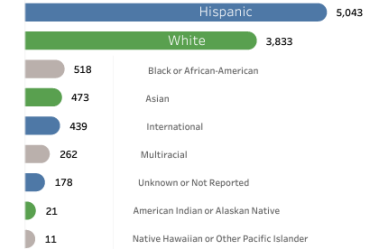
Fall Semester
2022

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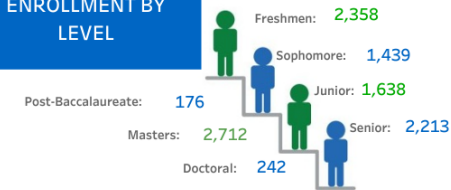
ENROLLMENT



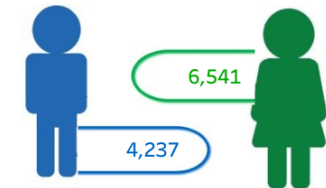
ENROLLMENT BY RACE/ETHNICITY



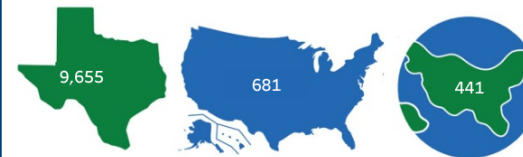
ENROLLMENT BY LEVEL



ENROLLMENT BY GENDER



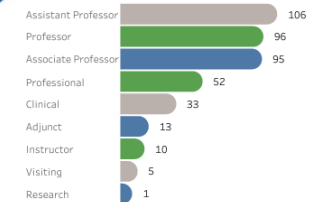
ENROLLMENT FROM



FACULTY



Full-time Faculty By Rank:



RETENTION AND GRADUATION RATES

	1st Year Retention Rate Fall 2021	4th-Year Graduation Rate Fall 2015	6th-Year Graduation Rate Fall 2015
PSA	32%	8%	16%
Non-PSA	68%	19%	38%

DEGREES AWARDED

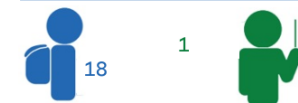
2021-22



ADMINISTRATIVE COST RATIO

7.9

STUDENT TO FACULTY RATIO

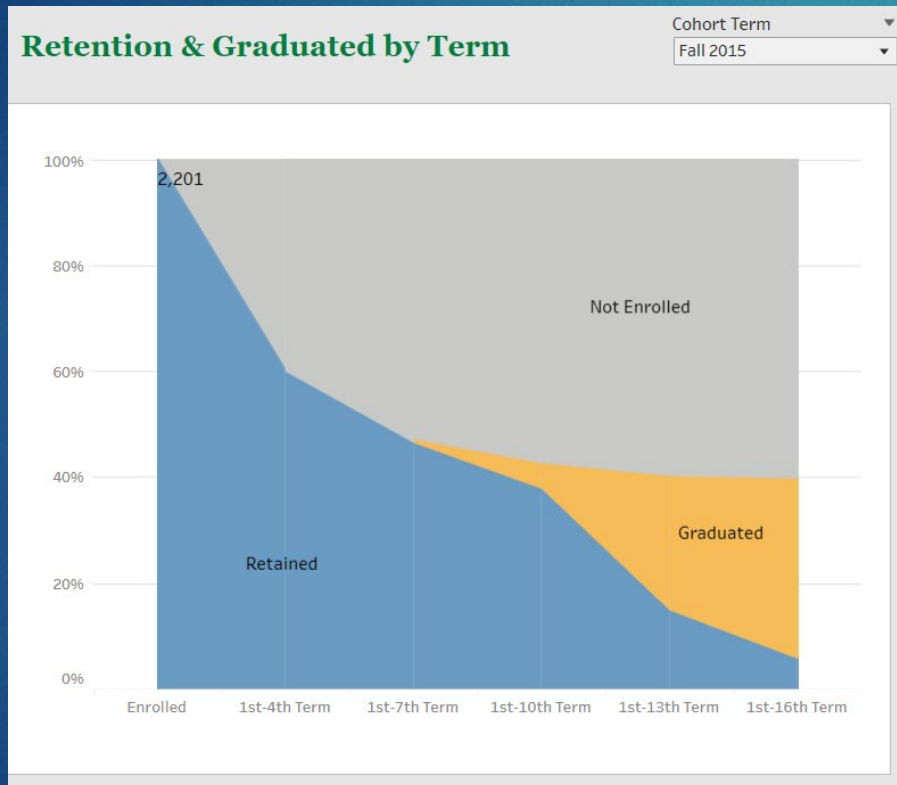


SPACE USAGE EFFICIENCY

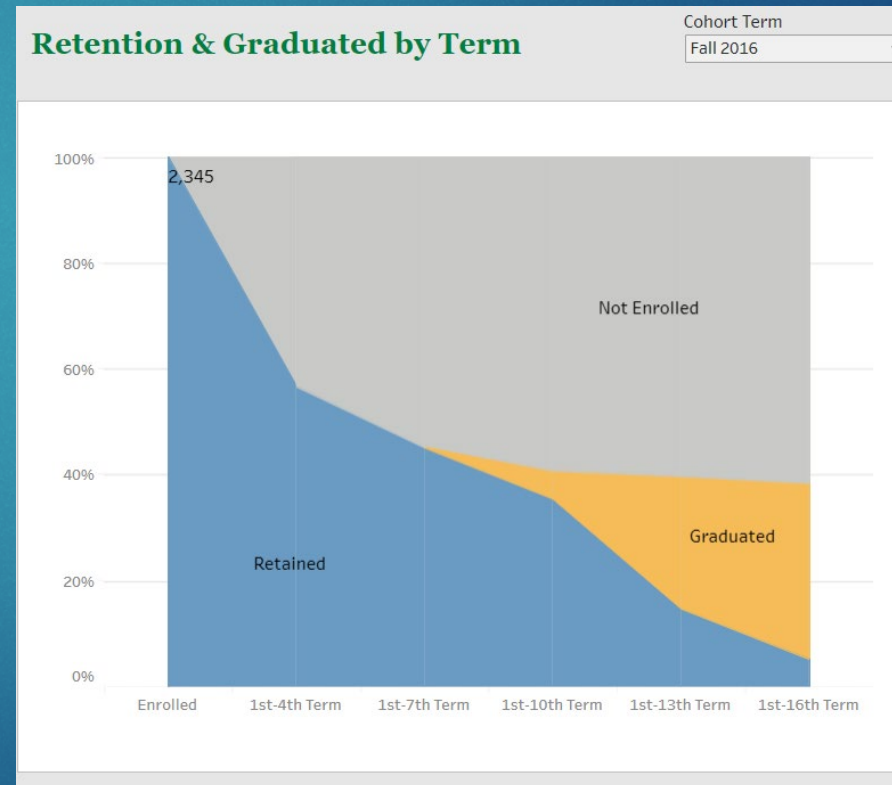
Classroom: 84 Lab: 75

Retention Plateau

Fall 2015 Cohort



Fall 2016



First-Year Retention Analyses: College Experience

Fall 2017 Cohort (Pre-COVID)

Fall 2018 Cohort (Pre-COVID)

<i>College Experience</i>	Full Sample	Dropped out by 2018 Fall	Persisted to 2018 Fall	Chi-square test or Independent t-T-test
Pet. Major Undeclared	15%	23%	9%	***
Average Days Between Application and Registration	196	181	208	***
Average Days Between Registration and Term Start Date	51	50	52	***
Pet. Took Any Math Course Credits	55%	62%	50%	***
Average GPA in fall 2017	2.7	2.2	3.1	***
Average Earned Credits in fall 2017	10.6	9.2	11.7	***

<i>College Experience</i>	Full Sample	Dropped out by 2019 Fall	Persisted to 2019 Fall	Chi-square test or Independent T-test
Pet. Major Undeclared	17%	32%	7%	***
Average Days Between Application and Registration	198	177	212	***
Average Days Between Registration and Term Start Date	52	50	53	**
Pet. Took Any Math Course Credits	55%	65%	46%	***
Average GPA in fall 2018	3.0	2.7	3.2	***
Average Earned Credits in fall 2018	12.6	11.8	13.1	***

First-Year Retention Analyses: College Experience

Fall 2019 Cohort (COVID)

Fall 2020 Cohort (COVID)

<i>College Experience</i>	Full Sample	Dropped out by 2020 Fall	Persisted to 2020 Fall	Chi-square test or Independent T-test
Pct. Major Undeclared	25.6%	47.2%	9.5%	***
Average Days Between Application and Registration	186	161	207	***
Pct. Took Any Math Course Credits	55.8%	66.5%	47.9%	***
Pct. Students Registered at Least 15 Credits	28.2%	24.9%	30.7%	**
Average GPA in fall 2019	2.9	2.7	3.1	***
Average Earned Credits in fall 2019	12	11	13	***

<i>College Experience</i>	Full Sample	Dropped out by 2021 Fall	Persisted to 2021 Fall	Chi-square test or Independent T-test
Pct. Major Undeclared	20.9%	38.3%	7%	***
Average Days Between Application and Registration	193	174	210	***
Pct. Took Any Math Course Credits	62.5%	70.3%	56.3%	***
Pct. Students Registered at Least 15 Credits	34.8%	50.2%	38.6%	**
Average GPA in fall 2020	2.72	2.37	3.01	***
Average Earned Credits in fall 2020	11.3	9.8	12.6	***

Finish in 4 Campaign

About Finish in 4

- ▶ “Finish In 4 is a university initiative designed to help students graduate on time and get the most out of their Texas A&M – Corpus Christi experience. This initiative is a partnership between the student and the institution to make the commitment to assist students to complete their degrees in four years.”

Finish in 4 Pillars

- ▶ Pillar 1: First-Year Momentum
- ▶ Pillar 2: Clear Pathways
- ▶ Pillar 3: Math Success
- ▶ Pillar 4: Gateway Support

Math Taskforce

- ▶ Nationally (and at TAMUCC), too few students enroll in and complete a gateway, credit-bearing college-level math course in their first year, decreasing their likelihood of earning a degree.
- ▶ To address this challenge at TAMUCC, the Provost and Vice President for Academic Affairs, Dr. Clarenda Phillips, established a Math Success Task Force in Spring 2021
- ▶ Task Force membership was cross-divisional and included personnel from Math Department, Student Success, DEI, Registrar, and PAIRS.
- ▶ Dana Center Mathematics Pathways was used as a model to guide the taskforces

“Math Success + Student Success = Graduation Success”

-Dr. Alex Sadovski

Projects



Pass rates for the first math course students took and first course to second course



Math sequence progression rates

1. Course sequences
2. Math 1314 sequences



Pass rates for four college level Math courses by student and institutional characteristics



Use Power BI dashboards to visualize math course pass rate data

Data and measures



CBM0C1
First-time, full-
time, degree-
seeking
undergraduate
students



CBM00S
Math course
taking records
and grades



Banner
Math courses
taking history
at TAMUCC.

Data and measures continued

- ▶ Project 1 and 2
 - ▶ CBM0C1: First-time, full-time students enrolled in fall 2017.
 - ▶ Banner SIS: math academic history data
- ▶ Project 3:
 - ▶ CBM00S: Fall 2018 to summer 2021
 - ▶ Math 1314, 1324, 1332, 1442
- ▶ Project 4:
 - ▶ Visualize the pass rate data with student characteristics filters
 - ▶ Demographic characteristics
 - ▶ Pre-enrollment academic characteristics
 - ▶ Attempt times



Project 1

Pass rates for the first math course
students took and first course to
second course

Definitions

Cohort: fall 2017 full-time, first-time, undergraduate students.

Pass rate: pct. of students passed a certain course with A, B, C or D score in 1st, 2nd, or 3rd attempts.

Semester: number of terms taken by students to pass a course with a A-D score (non-repeat students).

Attempt: number of attempts that students have tried to pass a course with A-D score (repeat course students).

Passing grade: A, B, C, D.

Graduation rate: number of students have earned a BA degree by the most recent graduation record in Banner divided by the number of students have taken the sequence of courses.

Initial success: it applies to the pass rate for successfully finished the first and second course with one attempt.

Ultimate success: it applies to the pass rate for successfully finished the first and second course with multiple attempts.

Successfully progressed: it shows the progression rate with a passing score for a sequence of courses.

Math courses: all math courses were taken at TAMUCC.


Pass rates for the first math course students took and the sequence of courses

Table 1. Students did not repeat first math course

	Enrollment headcount	Pct.earned a passing grade in the first semester	Pct. Earned a passing grade in the second semester	Pct. Earned a passing grade in the third semesters	Pct.earned a passing grade in the fourth semester	Pct. no passing grade	Graduation rate
Math 0300	501	66%	7%	0.8%	0.2%	26%	9%
Math 1442	557	75%	2%	0.4%	N/A	22%	37%
Math 1314	474	74%	4%	0.8%	0.2%	22%	16%
Math 1332	18	83%	6%	0	0	11%	22%

Table 2. Students did repeat first math course

	Enrollment headcount	Pct.earned a passing grade in first attempt	Pct.earned a passing grade in the second attempt	Pct.earned a passing grade in the third attempt	Pct.earned a passing grade in the fourth attempt	Pct. no passing grade	Graduation rate
Math 0300	18	0%	39%	0%	0%	61%	0%
Math 1442	99	3%	76%	1%	N/A	20%	19%
Math 1314	31	16%	55%	3%	3%	23%	6%
Math 1332	0	N/A	N/A	N/A	N/A	N/A	N/A



Project 2

Math sequence pass rates and progression rates

Course Sequence Pass rate

Table 8. Number Successfully Progressed

Started in	Math 1314	Math 1324	Math 1325			
Math 1314	262	30	12			
Started in	Math 1314	Math 1316	Math 2305	Math 2413	Math 2414	
Math 1314	262	17	5	4	2	
Started in	Math 1314	Math 1316	Math 2413	Math 2414	Math 2415	
Math 1314	262	17	5	4	2	
Started in	Math 1314	Math 1442				
Math 1314	262	39	22	8	4	
Progression rate for all	262	39%	8%	3%	2%	

Table 9. Number Successfully Progressed

Started in	Math 1442	No sequential course		
Math 1442	241			
Started in	Math 1442	Math 1314		
Math 1442	323	8		
Started in	Math 1442	Math 1316		
Math 1442	323	2		
Started in	Math 1442	Math 1324	Math 1325	
Math 1442	323	2	1	
Started in	Math 1442	Math 2312	Math 2413	
Math 1442	323	14	8	
Started in	Math 1442	Math 2413		
Math 1442	323	5		
Started in	Math 1442	Math 3342		
Math 1442	323	1		
		32	9	
Progression rate for all	323	10%	3%	

Table 10. Number Successfully Progressed

Started in	Math 0300	Math 1314		
Math 0300	377	109		
Started in	Math 0300	Math 1324	Math 1325	
Math 0300	377	7	6	
Started in	Math 0300	Math 1332		
Math 0300	377	3		
Started in	Math 0300	Math 1442		
Math 0300	377	63		
Started in	Math 0300	Math 2312		
Math 0300	377	1		
Progression rate for all	377	49%	2%	

Table 11. Number Successfully Progressed

Started in	Math 1332			
Math 1332	12			
Started in	Math 1332	Math 1324	Math 1325	
Math 1332	12	1	1	
Started in	Math 1332	Math 2312	Math 2413	
Math 1332	12	1	1	
Progression rate for all	12	17%	17%	

Pass rates for the sequence of courses Math 1314-forward

Table 3. Pass rates for the sequence of courses Math 1314-forward

	Math 1314	Math 2312	Math 2413	GRADUATE?
Probability of Passing in 1 time	100%	94%	71%	24%
Number of students passed	17	16	12	4
Number of students in sequence	17			
	Math 1314	Math 1324	Math 1325	GRADUATE?
Probability of Passing in 1 time	94%	89%	72%	28%
Number of students passed	17	16	13	5
Probability of Passing in 2 times	NA	11%	22%	NA
Number of students passed	NA	2	4	NA
Number of students in sequence	17			
	Math 1314	Math 1316	Math 2413	GRADUATE?
Probability of Passing in 1 time	100%	100%	100%	20%
Number of students passed	5	5	5	1
Number of students in sequence	5			



Project 3

Pass rates for four college level
Math courses by student and
institutional characteristics

Grade categories:

- ▶ C and above
- ▶ DFW rate
- ▶ Incomplete
- ▶ credit/passed
- ▶ No credit/Did not pass

Data slicers:

- ▶ Modality
- ▶ Colleges
- ▶ Class level
- ▶ Race/ethnicity



Math 1314 Pass Rates

Table 1

Initial and Final Pass Rate (highest grade) for Math 1314 fall 2018-Summer 2021

Initial pass rate		Final pass rate	
C and above	59%	C and above	67%
DFW rate	39%	DFW rate	32%
Incomplete	0.1%	Incomplete	0.1%
credit/passed	1.54%	credit/passed	1.54%
No credit/Did not pass	0.26%	No credit/Did not pass	0.19%
Total	1,561	Total	1,561

Table 2

Initial pass Rate by the Instruction Mode from Fall 2018 to Summer 2021

	Face-to-face	Fully distance	Hybrid	Total
C and above	56%	73%	67%	59%
DFW rate	41%	27%	33%	39%
Incomplete	0%	0%	0%	0.1%
credit/passed	2%	0%	0%	1.54%
No credit/Did not pass	0%	0%	0%	0.26%
Grand total	1,256	232	73	1,561

Table 3

Final pass Rate by the Instruction Mode from Fall 2018 to Summer 2021

	Face-to-face	Fully distance	Hybrid	Total
C and above	65%	75%	68%	67%
DFW rate	33%	25%	32%	32%
Incomplete	0%	0%	0%	0.1%
credit/passed	2%	0%	0%	1.54%
No credit/Did not pass	0%	0%	0%	0.19%
Grand total	1,256	232	73	1,561

Table 4

Initial Pass Rate by Colleges From Fall 2018 to Summer 2021

	BU	EH	LA	NH	SE	UC	Overall
C and above	55.8%	61.2%	55.0%	55.4%	61.8%	70.4%	59.4%
DFW rate	39.4%	37.8%	41.6%	42.2%	38.0%	22.2%	38.8%
Incomplete	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%
credit/passed	4.3%	1.0%	2.7%	0.0%	0.2%	7.4%	1.5%
No credit/Did not pass	0.5%	0.0%	0.3%	2.4%	0.0%	0.0%	0.3%
Grand Total	208	394	291	83	558	27	1561

Table 5

Final Pass Rate with Highest Grade by Initial College From Fall 2018 to Summer 2021

	BU	EH	LA	NH	SE	UC	Overall
C and above	61.4%	71.3%	60.2%	66.3%	68.4%	74.1%	66.6%
DFW rate	34.3%	27.7%	36.4%	31.3%	31.5%	18.5%	31.6%
Incomplete	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%
credit/passed	4.3%	1.0%	2.7%	0.0%	0.2%	7.4%	1.5%
No credit/Did not pass	0.0%	0.0%	0.3%	2.5%	0.0%	0.0%	0.2%
Grand Total	210	397	294	80	553	27	1561

Table 8

Initial Pass Rate by Class Level from Fall 2018 to Summer 2021

Class level	Freshman	Sophomore	Junior	Senior	Post-Bac	Master	Grand Total
C and above	58%	59%	61%	79%	87%	0%	59%
DFW rate	40%	38%	36%	21%	13%	100%	39%
Incomplete	0%	0%	0%	0%	0%	0%	0%
credit/passed	1%	3%	2%	0%	0%	0%	2%
No credit/Did not pass	0%	0%	1%	0%	0%	0%	0%
Column total	1083	324	99	39	15	1	1561

Table 9

Final Pass Rate by Class Level from Fall 2018 to Summer 2021

Class level	Freshman	Sophomore	Junior	Senior	Post-Bac	Master	Grand Total
C and above	65%	67%	69%	85%	87%	0%	67%
DFW rate	33%	30%	28%	15%	13%	100%	32%
Incomplete	0%	0%	0%	0%	0%	0%	0%
credit/passed	1%	3%	2%	0%	0%	0%	2%
No credit/Did not pass	0%	0%	1%	0%	0%	0%	0%
Column total	1083	324	99	39	15	1	1561

Table 10

Initial Pass Rate by Race/Ethnicity from Fall 2018 to Summer 2021

Class level	American Indian or Alaskan Native	Asian	Black or African-American	Hispanic	International	Multiracial	Native Hawaiian or Other Pacific Islander	Unknown or Not Reported	White	Grand Total
C and above	33%	73%	48%	57%	91%	59%	100%	73%	60%	59%
DFW rate	67%	27%	50%	41%	7%	39%	0%	27%	38%	39%
Incomplete	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
credit/passed	0%	0%	2%	1%	1%	2%	0%	0%	2%	2%
No credit/Did not pass	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Column total	3	26	94	809	74	41	1	11	502	1561

Table 11

Final Pass Rate by Race/Ethnicity from Fall 2018 to Summer 2021

Class level	American Indian or Alaskan Native	Asian	Black or African-American	Hispanic	International	Multiracial	Native Hawaiian or Other Pacific Islander	Unknown or Not Reported	White	Grand Total
C and above	33%	81%	61%	64%	92%	66%	100%	82%	68%	66.6%
DFW rate	67%	19%	37%	34%	7%	32%	0%	18%	30%	31.6%
Incomplete	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
credit/passed	0%	0%	2%	1%	1%	2%	0%	0%	2%	1.5%
No credit/Did not pass	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Column total	3	26	94	809	74	41	1	11	502	1561

Math 1324 Pass Rates

Table 1

Initial and Final Pass Rate (highest grade) for Math 1324 fall 2018-Summer 2021

Initial pass rate		Final pass rate	
C and above	78%	C and above	82%
DFW rate	20%	DFW rate	17%
Incomplete	0.1%	Incomplete	0.0%
credit/passed	1.04%	credit/passed	1.04%
No credit/Did not pass	0.39%	No credit/Did not pass	0.13%
Total	1,539	Total	1,539

Table 2

Initial pass Rate by the Instruction Mode from Fall 2018 to Summer 2021

	Face-to-face	Fully distance	Hybrid	Total
C and above		79%	71%	85%
DFW rate		19%	29%	15%
Incomplete		0%	0%	0%
credit/passed		1%	0%	0%
No credit/Did not pass		0%	0%	0%
Grand total	1,224	268	47	1539

Table 3

Final pass Rate by the Instruction Mode from Fall 2018 to Summer 2021

	Face-to-face	Fully distance	Hybrid	Total
C and above		82%	73%	85%
DFW rate		16%	27%	15%
Incomplete		0%	0%	0%
credit/passed		1%	0%	0%
No credit/Did not pass		0%	0%	0%
Grand total	1,226	299	48	1,539

Table 4

Initial Pass Rate by Colleges From Fall 2018 to Summer 2021

	BU	EH	LA	NH	SE	UC	Grand Total
C and above	68.0%	57.9%	87.3%	72.0%	80.0%	91%	78%
DFW rate	29.7%	42.1%	12.7%	28.0%	16.7%	8%	20%
Incomplete	0.1%	0.0%	0.0%	0.0%	0.0%	0%	0%
credit/passed	1.6%	0.0%	0.0%	0.0%	3.3%	1%	1%
No credit/Did not pass	0.6%	0.0%	0.0%	0.0%	0.0%	0%	0%
Grand Total	772	19	236	25	30	457	1539

Table 5

Final Pass Rate with Highest Grade by Initial College From Fall 2018 to Summer 2021

	BU	EH	LA	NH	SE	UC	Grand Total
C and above	74.6%	68.4%	88.5%	72.0%	80.6%	92.8%	82%
DFW rate	23.6%	31.6%	11.5%	28.0%	16.1%	6.6%	17%
credit/passed	1.6%	0.0%	0.0%	0.0%	3.2%	0.7%	1%
No credit/Did not pass	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0%
Grand Total	772	19	235	25	31	457	1539

Table 6

Initial Pass Rate by Class Level from Fall 2018 to Summer 2021

Class level	Freshman	Sophomore	Junior	Senior	Post-bac	Grand Total
C and above	83%	69%	63%	69%	83%	78%
DFW rate	16%	26%	34%	31%	17%	20%
Incomplete credit/passed	0%	0%	1%	0%	0%	1%
No credit/Did not pass	0%	1%	0%	0%	0%	0%
Column total	1046	307	144	36	6	1539

Table 7

Final Pass Rate by Class Level from Fall 2018 to Summer 2021

Class level	Freshman	Sophomore	Junior	Senior	Post-bac	Grand Total
C and above	85%	72%	68%	78%	83%	82%
DFW rate	15%	24%	31%	22%	17%	17%
Incomplete credit/passed	0%	0%	1%	0%	0%	1%
No credit/Did not pass	0%	1%	0%	0%	0%	0%
Column total	1046	328	154	45	6	1539

Table 8

Initial Pass Rate by Race/Ethnicity from Fall 2018 to Summer 2021

Class level	American Indian or Alaskan Native	Asian	Black or African-American	Hispanic	International	Multiracial	Native Hawaiian or Other Pacific Islander	Unknown or Not Reported	White	Grand Total
C and above	80%	88%	68%	69%	95%	84%	100%	87%	83%	78%
DFW rate	20%	10%	32%	29%	5%	14%	0%	13%	16%	20%
Incomplete credit/passed	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No credit/Did not pass	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Column total	5	49	62	524	38	37	2	45	777	1539

Table 9

Final Pass Rate by Race/Ethnicity from Fall 2018 to Summer 2021

Class level	American Indian or Alaskan Native	Asian	Black or African-American	Hispanic	International	Multiracial	Native Hawaiian or Other Pacific Islander	Unknown or Not Reported	White	Grand Total
C and above	80%	96%	76%	75%	100%	84%	100.0%	89%	85%	82%
DFW rate	20%	2%	24%	24%	0%	14%	0.0%	11%	14%	17%
Incomplete credit/passed	0%	0%	0%	0%	0%	0%	0.0%	0%	0%	0%
No credit/Did not pass	0%	0%	0%	0%	0%	0%	0.0%	0%	0%	0%
Column total	5	49	62	524	38	37	2	45	777	1539

Math 1332 Pass Rates

Table 1

Initial and Final Pass Rate (highest grade) for Math 1332 fall 2018-Summer 2021

Initial pass rate	Final pass rate	
C and above	72% C and above	73%
DFW rate	22% DFW rate	22%
Incomplete	0.9% Incomplete	0.9%
credit/passed	1.79% credit/passed	1.79%
No credit/Did not pass	2.68% No credit/Did not pass	1.79%
Total	112 Total	112

Table 2

Initial pass Rate by the Instruction Mode from Fall 2018 to Summer 2021

	Face-to-face	
C and above	72%	
DFW rate	22%	
Incomplete	1%	
credit/passed	2%	
No credit/Did not pass	3%	
Grand total	112	

Table 3

Final pass Rate by the Instruction Mode from Fall 2018 to Summer 2021

	Face-to-face	
C and above	73%	
DFW rate	22%	
Incomplete	1%	
credit/passed	2%	
No credit/Did not pass	2%	
Grand total	112	

Table 4

Initial Pass Rate by Colleges From Fall 2018 to Summer 2021

	BU	EH	LA	NH	SE	UC	Grand Total
C and above	0.0%	0.0%	73.4%	33.3%	100.0%	90.9%	72%
DFW rate	100.0%	100.0%	20.2%	66.7%	0.0%	9.1%	22%
Incomplete	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	1%
credit/passed	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2%
No credit/Did not pass	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	3%
Grand Total	1	2	94	3	1	11	112

Table 5

Final Pass Rate with Highest Grade by Initial College From Fall 2018 to Summer 2021

	BU	EH	LA	NH	SE	UC	Grand Total
C and above	0.0%	0.0%	74.5%	33.3%	100.0%	90.9%	73%
DFW rate	100.0%	100.0%	20.2%	66.7%	0.0%	9.1%	22%
Incomplete	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	1%
credit/passed	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2%
No credit/Did not pass	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2%
Grand Total	1	2	94	3	1	11	112

Table 6**Initial Pass Rate by Class Level from Fall 2018 to Summer 2021**

Class level	Freshman	Sophomore	Junior	Senior	Grand Total
C and above	76%	75%	56%	75%	72%
DFW rate	22%	21%	33%	15%	22%
Incomplete	0%	0%	6%	0%	1%
credit/passed	0%	4%	0%	5%	2%
No credit/Did not pass	2%	0%	6%	5%	3%
Column total	46	28	18	20	112

Table 7**Final Pass Rate by Class Level from Fall 2018 to Summer 2021**

Class level	Freshman	Sophomore	Junior	Senior	Grand Total
C and above	76%	75%	61%	75%	73%
DFW rate	22%	21%	28%	20%	22%
Incomplete	0%	0%	6%	0%	1%
credit/passed	0%	4%	0%	5%	2%
No credit/Did not pass	2%	0%	6%	0%	2%
Column total	46	28	18	20	112

Table 8**Initial Pass Rate by Race/Ethnicity from Fall 2018 to Summer 2021**

Class level	Asian	Black or African-American	Hispanic	Multiracial	Unknown or Not Reported	White	Grand Total
C and above	100%	83%	69%	0%	67%	76%	72%
DFW rate	0%	8%	24%	100%	33%	21%	22%
Incomplete	0%	0%	2%	0%	0%	0%	1%
credit/passed	0%	0%	3%	0%	0%	0%	2%
No credit/Did not pass	0%	8%	2%	0%	0%	3%	3%
Column total	3	12	59	2	3	33	112

Table 9**Final Pass Rate by Race/Ethnicity from Fall 2018 to Summer 2021**

Class level	Asian	Black or African-American	Hispanic	Multiracial	Unknown or Not Reported	White	Grand Total
C and above	100%	83%	69%	0%	67%	79%	73.2%
DFW rate	0%	8%	25%	100%	33%	18%	22.3%
Incomplete	0%	0%	2%	0%	0%	0%	1%
credit/passed	0%	0%	3%	0%	0%	0%	1.8%
No credit/Did not pass	0%	8%	0%	0%	0%	3%	2%
Column total	3	12	59	2	3	33	112

Math 1442 Pass Rates

Table 1

Initial and Final Pass Rate (highest grade) for Math 1442 fall 2018-Summer 2021

Initial pass rate		Final pass rate	
C and above	54%	C and above	65%
DFW rate	43%	DFW rate	33%
Incomplete	0.1%	Incomplete	0.1%
credit/passed	1.59%	credit/passed	1.52%
No credit/Did not pass	1.11%	No credit/Did not pass	0.73%
Total	2,894	Total	2,894

Table 2

Initial pass Rate by the Instruction Mode from Fall 2018 to Summer 2021

	Face-to-face	Fully distance	Hybrid
C and above	55%	53%	77%
DFW rate	42%	46%	23%
Incomplete	0%	0%	0%
credit/passed	2%	1%	0%
No credit/Did not pass	2%	0%	0%
Grand total	1,945	927	22

Table 3

Final pass Rate by the Instruction Mode from Fall 2018 to Summer 2021

	Face-to-face	Fully distance	Hybrid
C and above	62%	56%	61%
DFW rate	34%	44%	39%
Incomplete	0%	0%	0%
credit/passed	2%	0%	0%
No credit/Did not pass	2%	0%	0%
Grand total	1,839	1,031	24

Table 4

Initial Pass Rate by Colleges From Fall 2018 to Summer 2021

	BU	EH	LA	NH	SE	UC
C and above	45.5%	50.7%	47.3%	55.4%	61.3%	56.0%
DFW rate	45.5%	47.5%	48.5%	42.2%	37.0%	32.0%
Incomplete	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%
credit/passed	4.5%	1.1%	2.3%	1.3%	1.1%	8.0%
No credit/Did not pass	4.5%	0.7%	1.7%	1.0%	0.6%	4.0%
Grand Total	22	276	769	1,091	711	25

Table 5

Final Pass Rate with Highest Grade by Initial College From Fall 2018 to Summer 2021

	BU	EH	LA	NH	SE	UC
C and above	47.8%	65.3%	55.8%	66.2%	72.7%	54.2%
DFW rate	43.5%	33.3%	40.9%	31.9%	25.7%	33.3%
Incomplete	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%
credit/passed	4.3%	1.0%	2.3%	1.1%	1.2%	8.3%
No credit/Did not pass	4.3%	0.3%	0.9%	0.7%	0.4%	4.2%
Grand Total	23	294	788	1080	685	24

Table 6**Initial Pass Rate by Class Level from Fall 2018 to Summer 2021**

Class level	Freshman	Sophomore	Junior	Senior	Post-Bac
C and above	48%	57%	56%	60%	64%
DFW rate	48%	41%	42%	38%	32%
Incomplete credit/passed	0%	0%	0%	0%	0%
No credit/Did not pass	2%	2%	1%	2%	4%
Column total	930	1222	513	201	28

Table 7**Final Pass Rate by Class Level from Fall 2018 to Summer 2021**

Class level	Freshman	Sophomore	Junior	Senior	Post-Bac
C and above	59%	67%	68%	68%	71%
DFW rate	38%	31%	31%	30%	25%
Incomplete credit/passed	0%	0%	0%	0%	0%
No credit/Did not pass	1%	2%	1%	2%	4%
Column total	925	1356	658	284	30

Table 8**Initial Pass Rate by Race/Ethnicity from Fall 2018 to Summer 2021**

Class level	American Indian or Alaskan Native	Asian	Black or African-American	Hispanic	International	Multiracial	Unknown or Not Reported	White
C and above	33%	64%	45%	52%	80%	57%	57%	58%
DFW rate	67%	36%	51%	46%	20%	33%	38%	39%
Incomplete credit/passed	0%	0%	1%	0%	0%	0%	0%	0%
No credit/Did not pass	0%	0%	2%	1%	0%	5%	2%	2%
Column total	6	72	146	1673	46	60	48	843

Table 9**Final Pass Rate by Race/Ethnicity from Fall 2018 to Summer 2021**

Class level	American Indian or Alaskan Native	Asian	Black or African-American	Hispanic	International	Multiracial	Unknown or Not Reported	White
C and above	50%	76%	58%	63%	89%	60%	65%	66%
DFW rate	50%	24%	40%	34%	11%	32%	31%	32%
Incomplete credit/passed	0%	0%	1%	0%	0%	0%	0%	0%
No credit/Did not pass	0%	0%	1%	1%	0%	5%	2%	2%
Column total	6	72	146	1673	46	60	48	843



There is more we can do...

Demo Power BI DBs

Student Characteristics

Race/ethnicity

All

First-gen Status

All

PSA

All

Gender

All

COLL

All

First-term Attempted Cre...

12 18

ACT_Math

7 34

SAT_Math

280 800

Course 1

1314

Course 2

1324

Course 3

1325

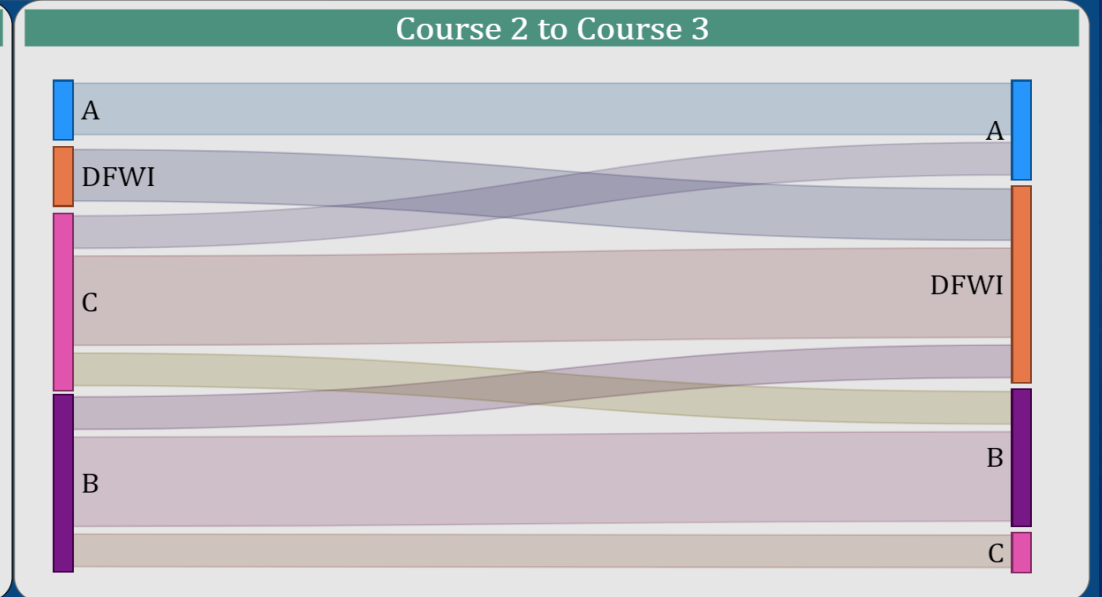
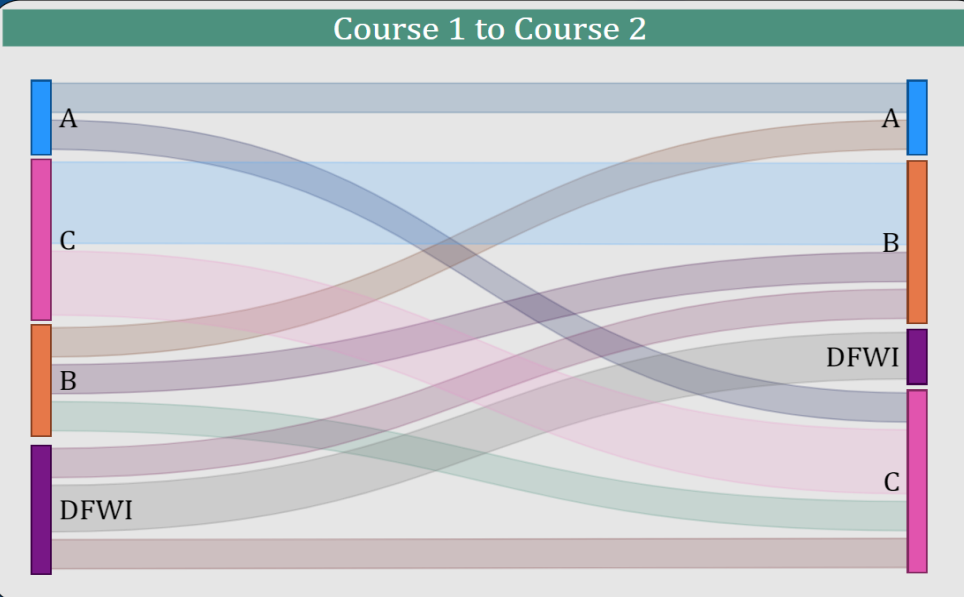
The data is for Fall 2017 first-time full-time undergraduate students enrolled in sequences of Math course starting from any math courses. This analysis only includes students who took these three courses in a consecutive order without repeating any course.



Course 1 grade	Number of Students	%
A	2	12.50%
B	3	18.75%
C	7	43.75%
DFWI	4	25.00%
Total	16	100.00%

Course 2 grade	Number of Students	%
A	2	12.50%
B	6	37.50%
C	6	37.50%
DFWI	2	12.50%
Total	16	100.00%

Course 3 grade	Number of Students	%
A	3	18.75%
B	5	31.25%
C	1	6.25%
DFWI	7	43.75%
Total	16	100.00%



Demo Power BI DBs

Student Characteristics

Race/ethnicity
All

PSA
All

College
All

Class Level
All

Term
All

First_attempt
All

Final_attempt
All

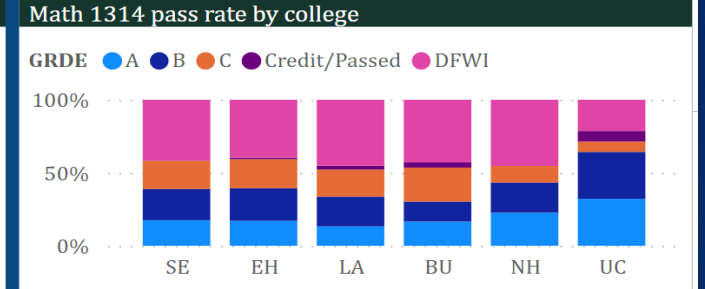
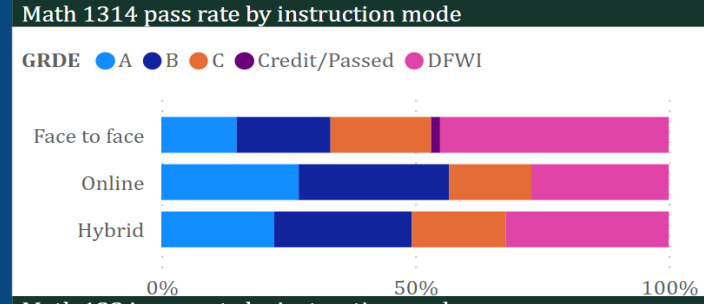
Attempted Times
All

Course Number
All

Instruction Mode
All

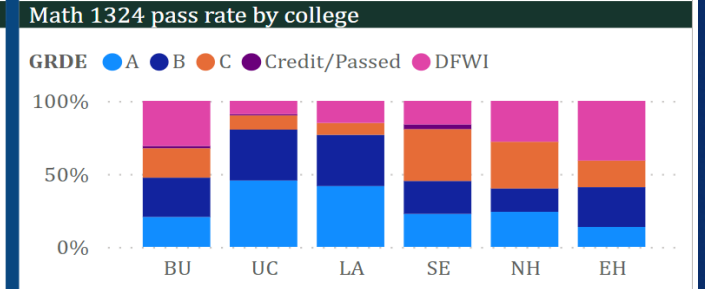
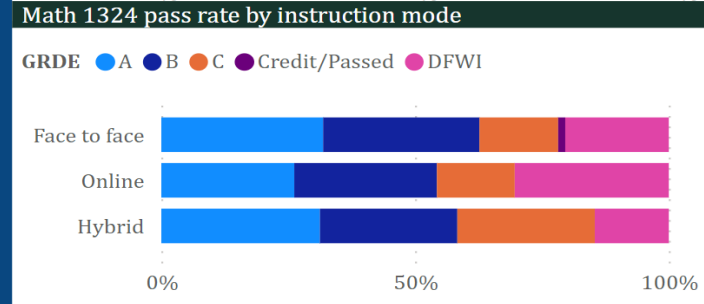
Math 1314 Pass rate

GRDE	Count of PIDM	% Total Students
A	313	17.01%
B	378	20.54%
C	352	19.24%
Credit/Passed	26	1.41%
DFWI	614	41.79%
Total	1561	100.00%



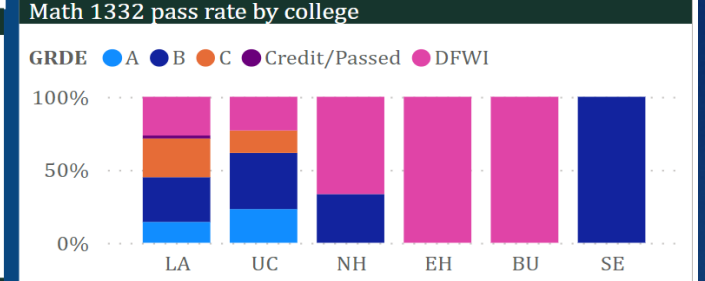
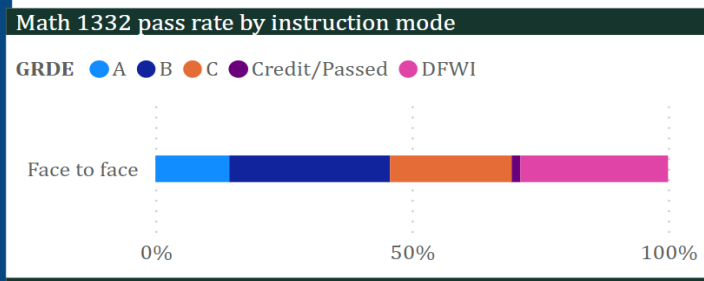
Math 1324 Pass rate

GRDE	Count of PIDM	% Total Students
A	508	30.79%
B	498	30.18%
C	261	15.82%
Credit/Passed	18	1.09%
DFWI	323	22.12%
Total	1539	100.00%



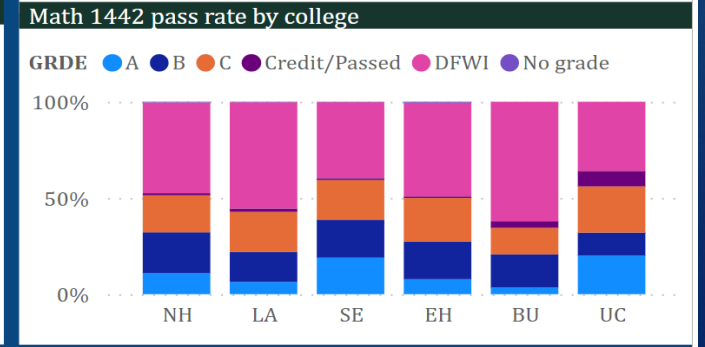
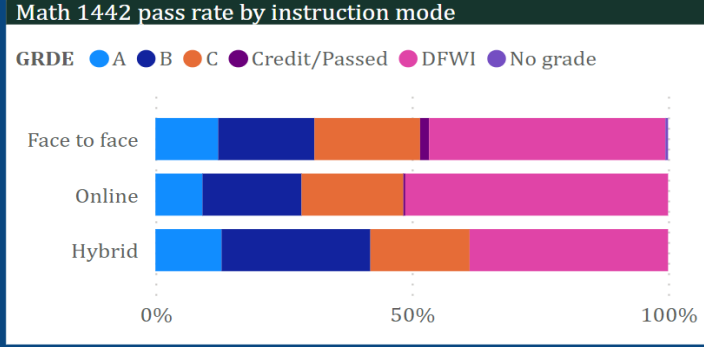
Math 1332 Pass rate

GRDE	Count of PIDM	% Total Students
A	17	14.41%
B	37	31.36%
C	28	23.73%
Credit/Passed	2	1.69%
DFWI	29	28.81%
Total	112	100.00%

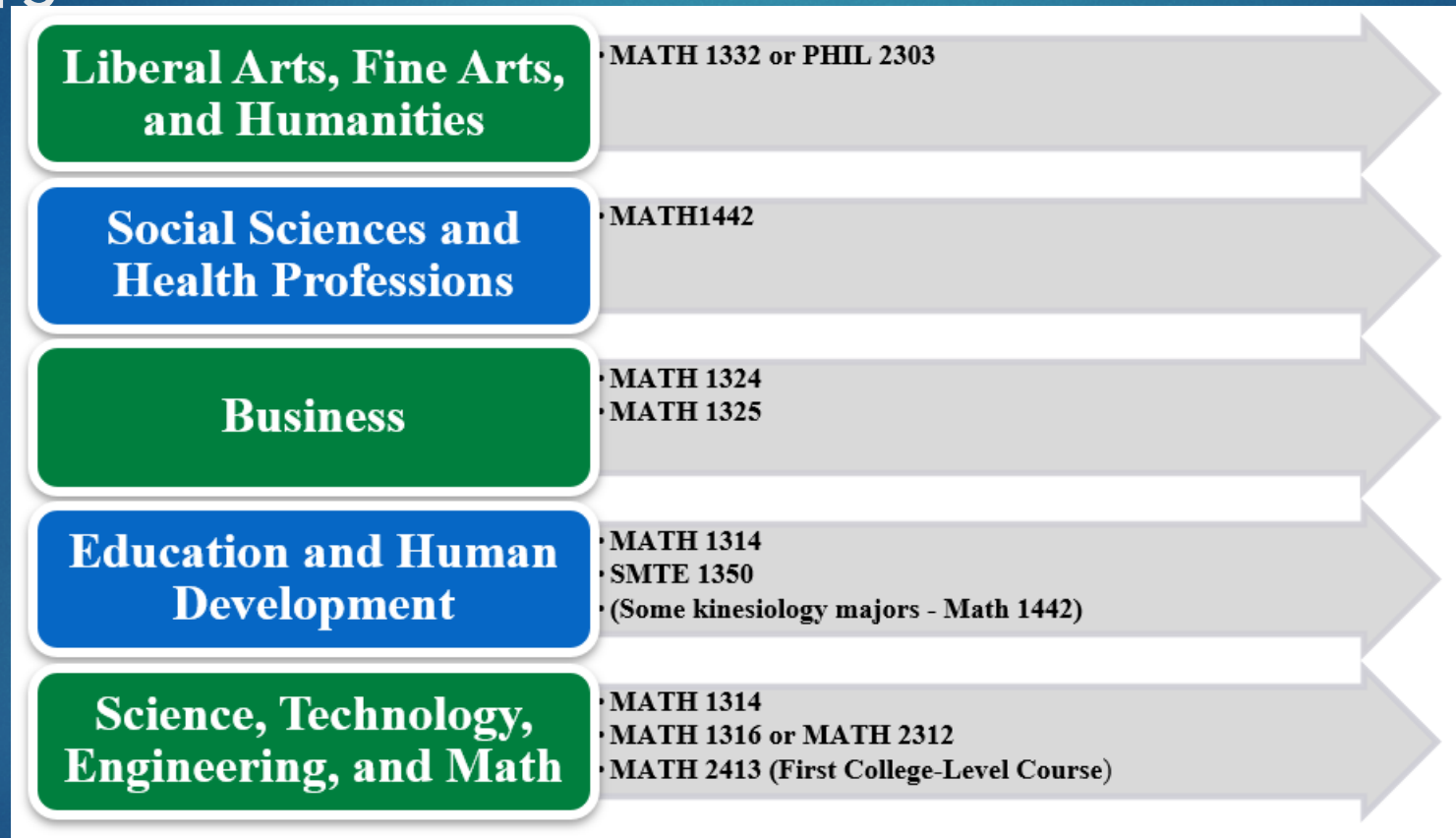


Math 1442 Pass rate

GRDE	Count of PIDM	% Total Students
A	424	11.18%
B	720	19.05%
C	751	20.34%
Credit/Passed	48	1.26%
DFWI	1297	47.82%
No grade	13	0.34%
Total	2894	100.00%



Math Taskforce Recommendations: Develop Math Pathways by Meta Majors



Math Taskforce Recommendations:

- ▶ Advising
- ▶ Student Support Services
- ▶ Faculty Professional Development
- ▶ College Readiness Committee
- ▶ *Internal Recommendation
 - ▶ PowerBI DB



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