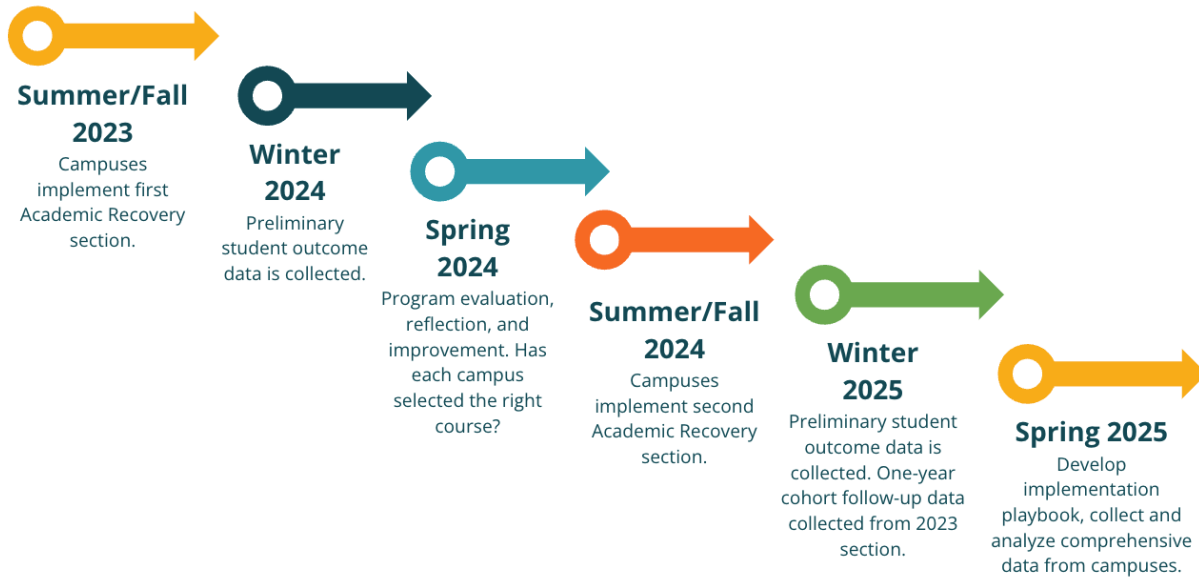


Academic Recovery Project



PARTICIPATING INSTITUTIONS

Arizona State University
Georgia State University
Purdue University
North Carolina A & T
Oregon State University
University of California, Riverside
University of Central Florida
University of Colorado, Denver

University of Illinois Chicago
University of Utah
Virginia Commonwealth University

COURSES IDENTIFIED

Individual campuses:
English 1
Intro: Cell & Molecular Bio
Intro to Computer Science
Intro to Psychology
Math for Liberal Arts
Organic Chemistry 1

Multiple campuses:
College Algebra
Calculus
General Chemistry 1

BACKGROUND

We **know** that the students who have the most to gain from completing a college degree— students from low-income backgrounds, students of color, and students with caregiving responsibilities— are also among the most likely to earn a D, F or Withdraw in required gateway courses.

When students receive a non-passing grade in a required foundational course, **they are delayed in degree advancement, incur an additional financial burden, and are often scared to retake the course.** These students may then stop out altogether. According to data analytics firm **EAB**, **1% of courses are responsible for over 30% of all DFWs**, and 5% of all courses are responsible for 85% of all course retakes.

The UIA's Academic Recovery project seeks to address the lack of clear, scalable solutions to diagnosing and addressing DFW bottlenecks at universities, and in so doing, to improve academic progression rates for low income students and students of color in higher education.

THE INTERVENTION



The Academic Recovery model was developed to **mitigate the negative impact of DFW grades on students and enable their continued progress.** Institutions analyze course metrics to determine which course(s) have the largest impact on their campuses.

Students who were unsuccessful in an academic attempt are recruited to a tailored section of that course which is designed to help them succeed on their second attempt.

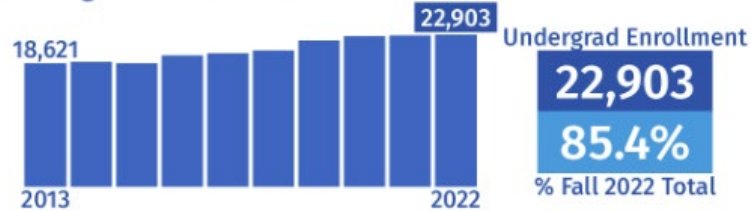
This dedicated section includes comprehensive academic support: **academic coaching, peer-tutoring, supplemental instruction, writing assistance, and early alerts.** In addition to the academic components, students are provided with a tuition waiver for that course and a small living expenses stipend. All of these resources aim to alleviate burdens on the student, allowing them to focus on passing the foundational course and getting back on track toward degree completion.

University of California, Riverside

Hispanic Serving Institution (HSI); Minority Serving Institution (MSI); Asian American Native American, & Pacific Islander Serving Institution (AANAPSI); Seal of Excelencia; American Association of Universities (AAU)

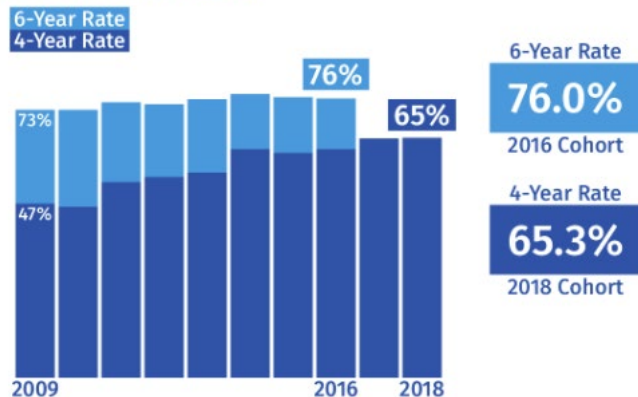
Fall 2022

Undergraduate Enrollment



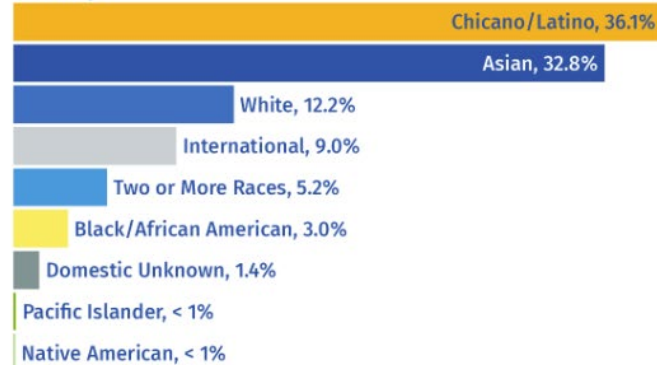
Graduation Rates

Frosh Graduation Rates

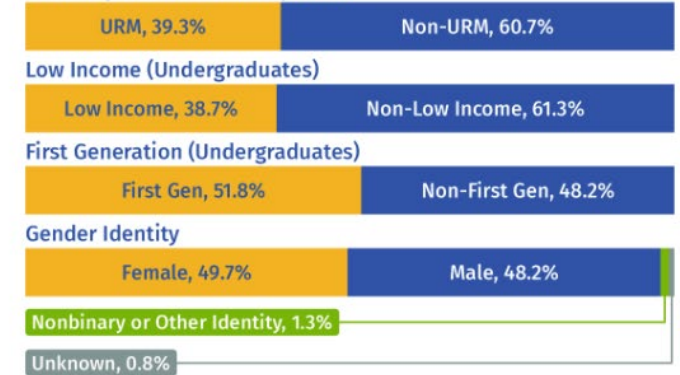


Student Demographics

Ethnicity



Underrepresented Minority (URM)



First-Time Full-Time Frosh Retention Rates - Overall

Selection	Fall 2021 Cohort	Fall 2020 Cohort	Fall 2019 Cohort	Fall 2018 Cohort	Fall 2017 Cohort	Fall 2016 Cohort	Fall 2015 Cohort	Fall 2014 Cohort	Fall 2013 Cohort	Fall 2012 Cohort
Total	5153	4823	4751	4525	4577	5345	4018	4272	4185	4001
Year 1	87.4%	88.2%	91.0%	89.7%	89.2%	88.9%	91.3%	91.0%	89.6%	89.0%

Course Selection Based on Fall 2022 DFW Rate

Course	Title	A	B	C	DFW	S	NC	Enrollment	DFW Rate
CS 010A	Intro to Computer Science	258	80	24	120	1	5	494	25%

Computer Science_BS_Math 9a Placement

Organization: [Computer Science](#)
Curriculum: [Computer Science_BS](#)

Curricular Complexity: 296

Credit Hours: 182



CS 010A – F22

DFW Rates by Demographic

Fall 2022

First Gen		Not First Gen	
34%	172	20%	322
Average DFW Rate	Total Enrollment	Average DFW Rate	Total Enrollment

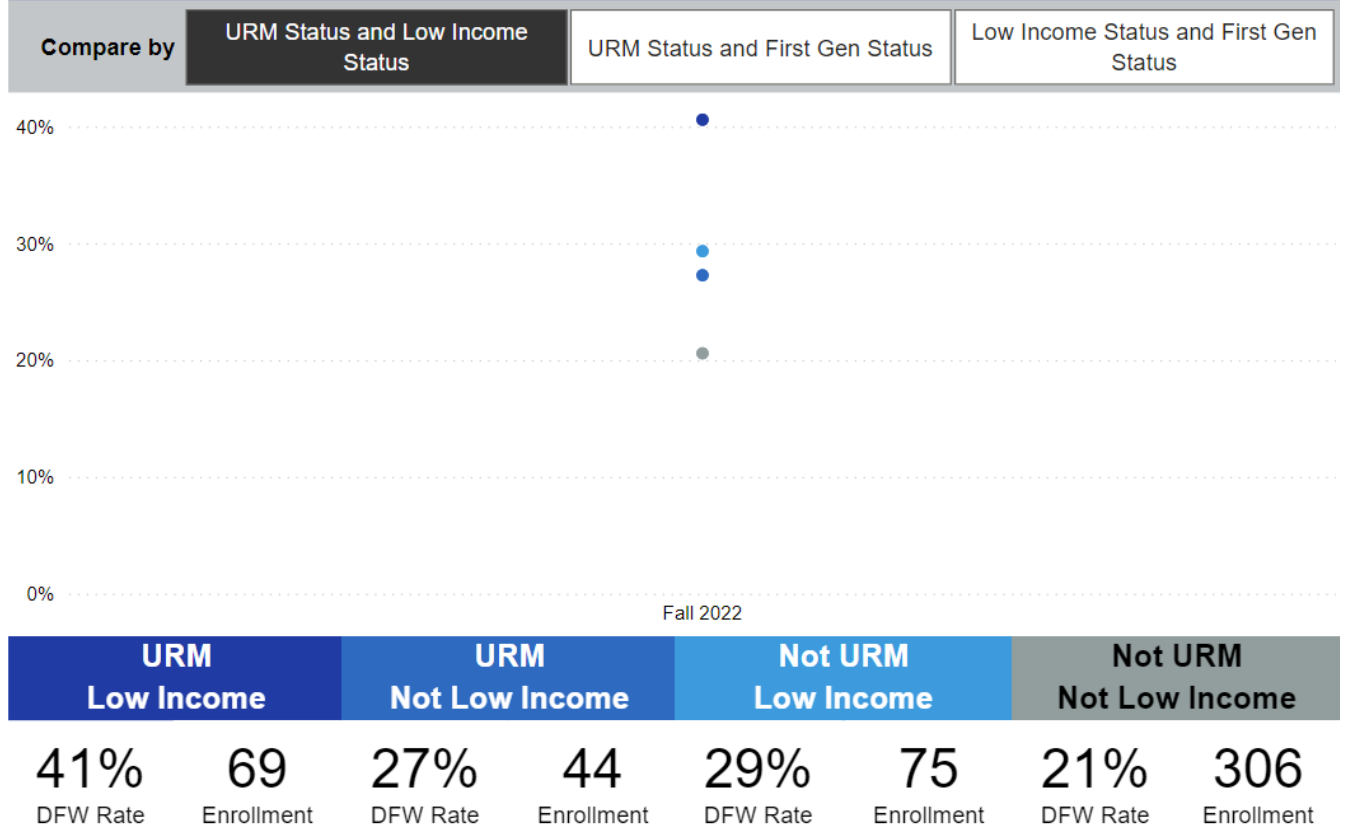
Fall 2022

Low Income		Not Low Income	
35%	144	21%	350
Average DFW Rate	Total Enrollment	Average DFW Rate	Total Enrollment

Fall 2022

URM		Not URM	
35%	113	22%	381
Average DFW Rate	Total Enrollment	Average DFW Rate	Total Enrollment

DFW Rates by Underrepresented Minority (URM) Status, Low Income Status, and First Gen Status



Fall 2022

URM Low Income		URM Not Low Income		Not URM Low Income		Not URM Not Low Income	
41%	69	27%	44	29%	75	21%	306
DFW Rate	Enrollment	DFW Rate	Enrollment	DFW Rate	Enrollment	DFW Rate	Enrollment

CS 010A – Summer 2023

Students who first attempted the course from Fall 2020 to Summer 2022 had a **64.1% (66/103) second-attempt pass rate.**

3 Participants

- 67% first-generation
- 67% low-income
- 33% placed into ARC 035: Intermediate Algebra

Summer Session

- 5 week course – online lecture and laboratory

Academic Interventions

- Minimum of 2 supplemental instruction sessions per week
 - Attendance ranged from 0 – 3 sessions
- 3 academic coaching sessions
 - All participants attended 3 sessions

Financial Incentive

\$1,000 grant

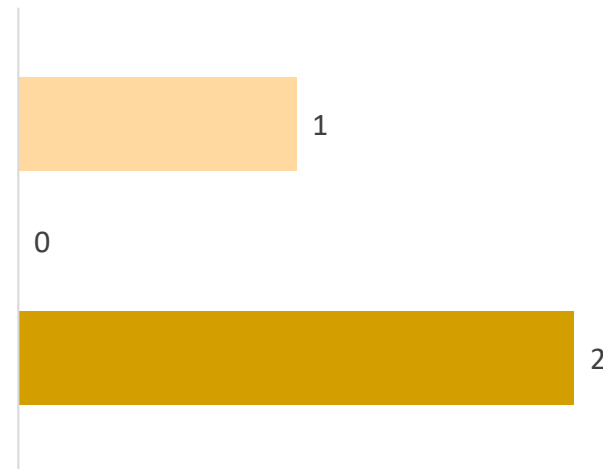
1st Attempt Grade

■ D+ ■ D ■ F



2nd Attempt Grade

■ A ■ B ■ C



**Second Attempt
Pass Rate 100%**



CS 010A

Fall 2020 to Summer 2022 First Attempt Demographics

Measure	CS 010A	Ethnicity	
Total Count	103	International	4.9%
		Black / African American	1.0%
Pell Recipient Status		Asian	45.6%
Pell Recipient	57.3%	Chicano / Latino	37.9%
Not Pell Recipient	42.7%	White	3.9%
		Two or More Races	4.9%
Low Income Status		Domestic Unknown	1.9%
Low Income	49.5%	Entry Type	
Not Low Income	50.5%	Frosh	88.1%
		Transfer	11.9%
First Generation Status		Math Placement	
First Generation	50.5%	ARC 35	17.0%
Not First Generation	49.5%	Precalculus	32.0%
		Calculus	51.0%
Underrep. Minority Status		Student School/College	
URM	38.8%	BCOE	41.7%
Not URM	61.2%	CHASS	4.9%
		CNAS	51.5%
Gender Identity		Business	1.9%
Female	40.2%		
Male	59.8%		

Second-attempt Outcomes

The second-attempt pass rate (66/103 students) for students who first attempted the course from Fall 2020 to Summer 2022 was 64.1%.

	2nd Attempt Outcome		
Pell Recipient Status	Pass	DFW/NC/I	Total
Pell Recipient	39	20	59
Not Pell Recipient	27	17	44
Total	66	37	103
Low Income Status	Pass	DFW/NC/I	Total
Low Income	33	18	51
Not Low Income	33	19	52
Total	66	37	103
First Gen Status	Pass	DFW/NC/I	Total
First Gen	32	20	52
Not First Gen	34	17	51
Total	66	37	103

	2nd Attempt Outcome		
URM Status	Pass	DFW/NC/I	Total
URM	26	14	40
Not URM	40	23	63
Total	66	37	103
College	Pass	DFW/NC/I	Total
BCOE	27	16	43
CNAS	35	18	53
CHASS / Other	4	3	7
Total	66	37	103
Math Placement	Pass	DFW/NC/I	Total*
ARC 35	10	7	17
Precalculus	19	13	32
Calculus	35	16	51
Total*	64	36	100

*Totals include all students with nonmissing math placement data.

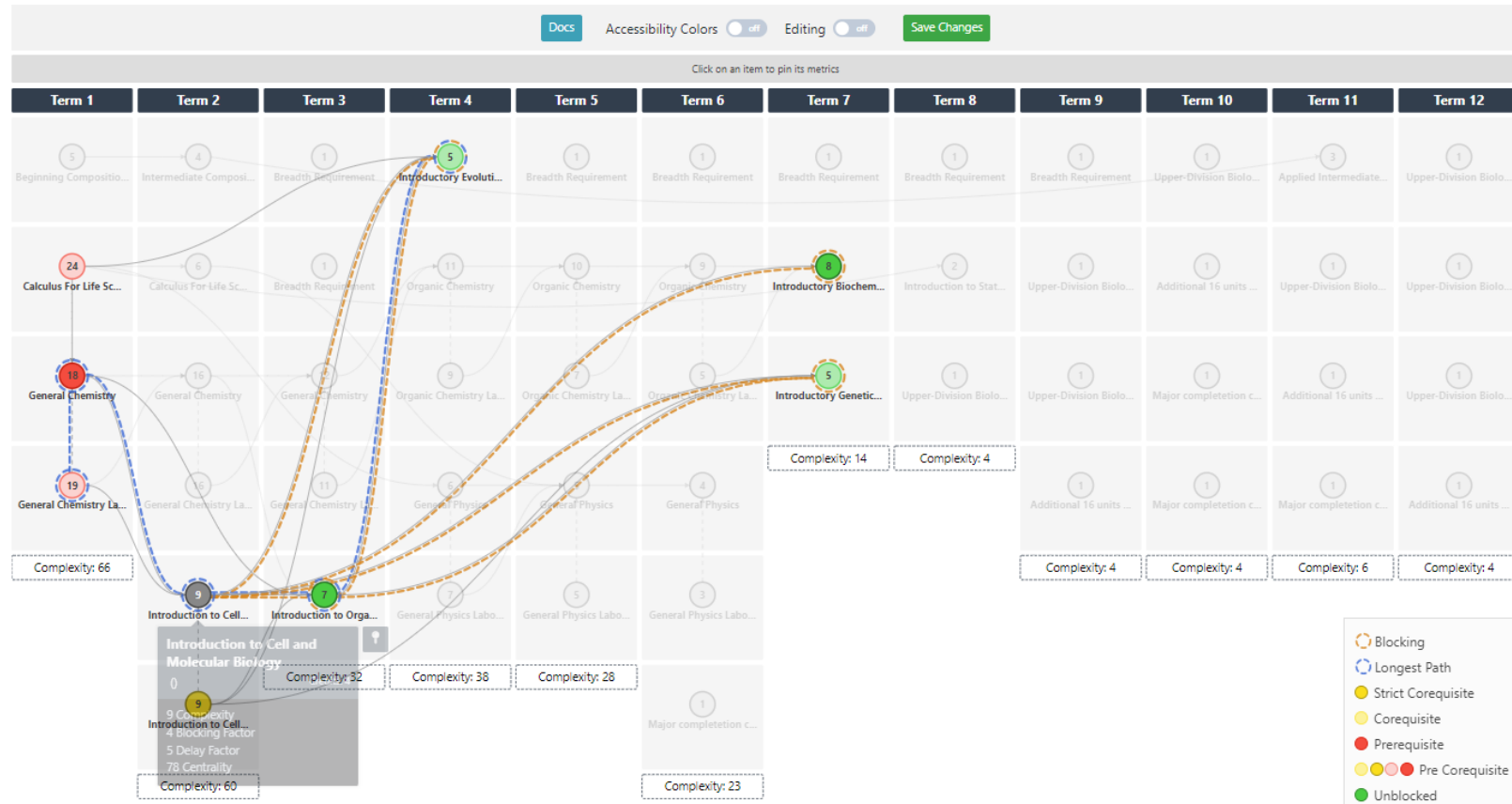
Course Selection Based on Fall 2022 DFW Rate

Course	Title	A	B	C	DFW	S	NC	Enrollment	DFW Rate
BIOL 005A	Intro to Cell & Molecular Biology	180	136	217	91	2	2	628	15%

Biology_BS_Math 7A Placement

Organization: [Biology](#)
Curriculum: [Biology_BS](#)

Curricular Complexity: 283
Credit Hours: 180



BIOL 005A – F22

DFW Rates by Demographic

Fall 2022

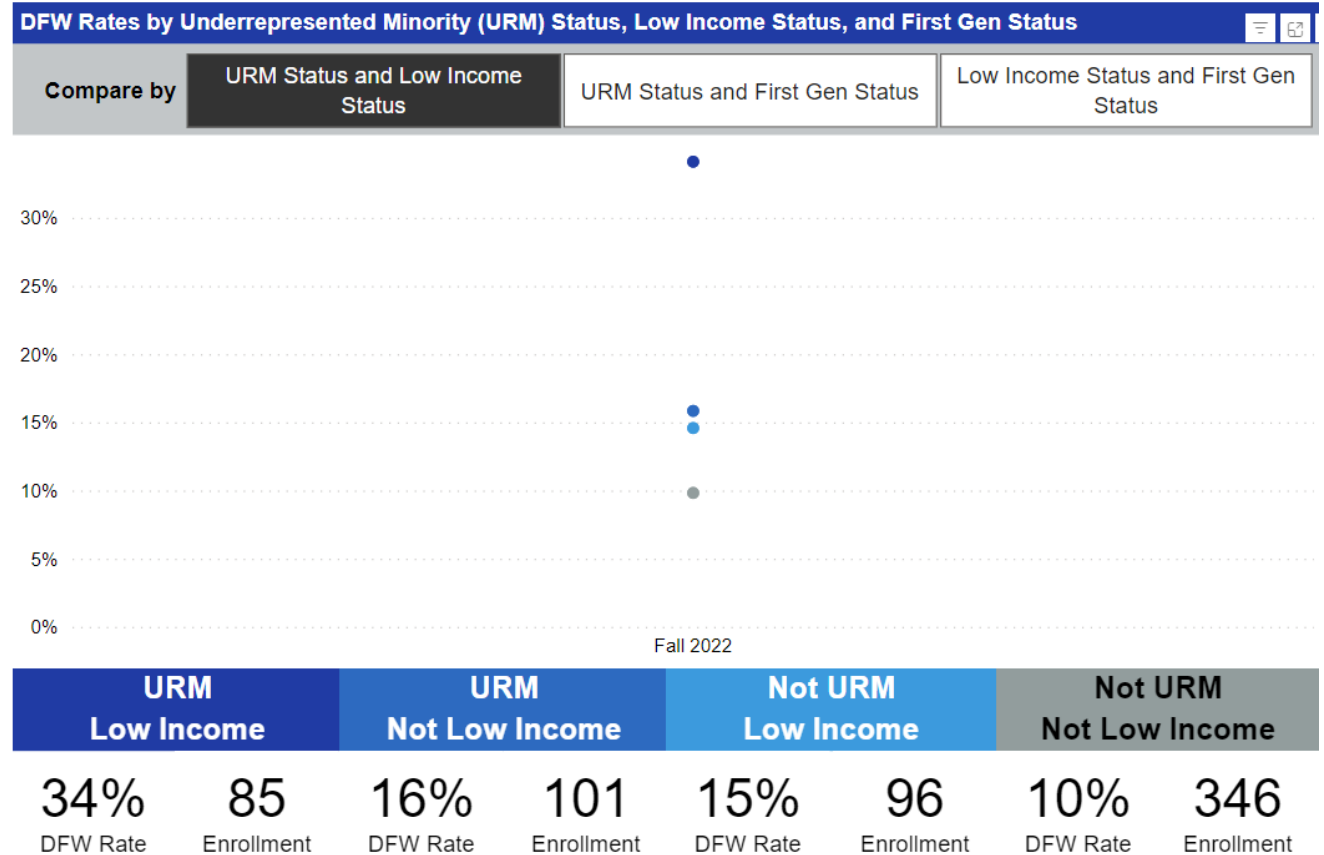
First Gen		Not First Gen	
25%	228	9%	400
Average DFW Rate	Total Enrollment	Average DFW Rate	Total Enrollment

Fall 2022

Low Income		Not Low Income	
24%	181	11%	447
Average DFW Rate	Total Enrollment	Average DFW Rate	Total Enrollment

Fall 2022

URM		Not URM	
24%	186	11%	442
Average DFW Rate	Total Enrollment	Average DFW Rate	Total Enrollment



BIOL 005A – Summer 2023

Students who first attempted the course from Fall 2020 to Summer 2022 had a **69.7% (101/145 students) second-attempt pass rate.**

21 Participants

- 14% retook lecture and lab
- 76% first-generation
- 57% low-income
- 71% placed into ARC 035: Intermediate Algebra

Summer Session

- 10-week course – online lecture and discussion

Academic Interventions

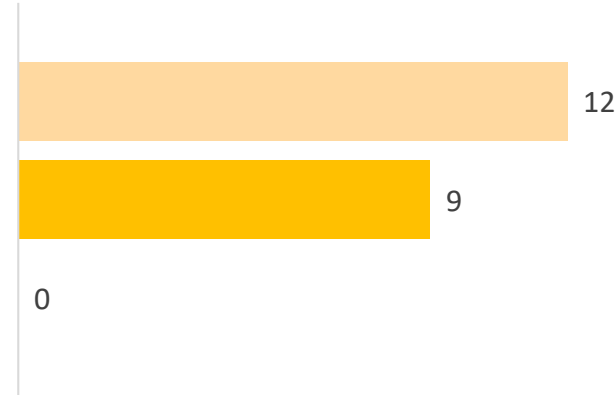
- Minimum of 2 supplemental instruction sessions per week
 - Attendance ranged from 0 to 26 sessions
- 4 academic coaching sessions

Financial Incentive

\$1,000 grant

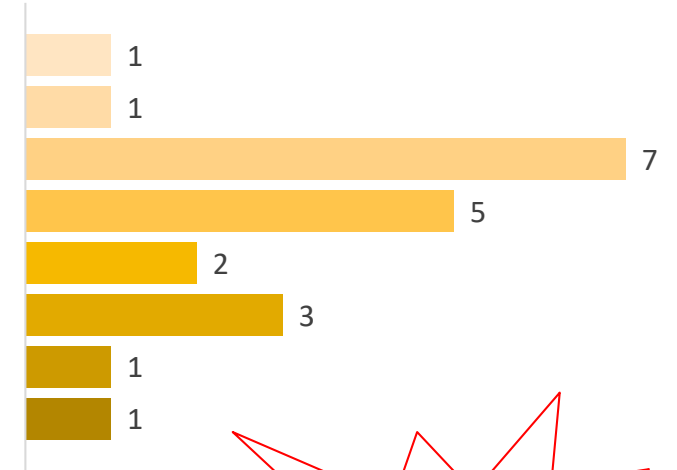
1st Attempt Grade

■ D ■ F ■ W



2nd Attempt Grade

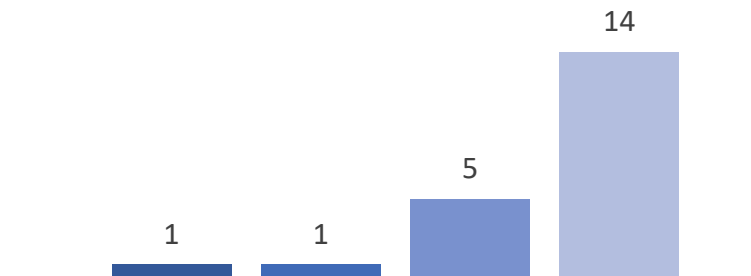
■ F ■ D ■ C ■ C+ ■ B- ■ B ■ B+ ■ A-



**Second Attempt
Pass Rate 90%**

Academic Coaching Sessions

■ 0 ■ 2 ■ 3 ■ 4+



BIOL 005A

Fall 2020 to Summer 2022 First Attempt Demographics

Total Count	145	Ethnicity	
Pell Recipient Status		International	0.7%
Pell Recipient	54.5%	Black / African American	4.1%
Not Pell Recipient	45.5%	Asian	27.6%
Low Income Status		Chicano / Latino	56.6%
Low Income	55.2%	White	7.6%
Not Low Income	44.8%	Two or More Races	3.4%
First Generation Status		Domestic Unknown	
First Generation	67.6%	Entry Type	
Not First Generation	32.4%	Frosh	93.8%
Underrep. Minority Status		Transfer	6.2%
URM	60.7%	Math Placement	
Not URM	39.3%	ARC 35	51.4%
Gender Identity		Precalculus	22.2%
Female	76.6%	Calculus	26.4%
Male	23.4%	Student School/College	
		BCOE	6.2%
		CHASS	11.0%
		CNAS	82.8%

Second-attempt Outcomes

The second-attempt pass rate (101/145 students) for students who first attempted the course from Fall 2020 to Summer 2022 was 69.7%.

	2nd Attempt Outcome		
Pell Recipient Status	Pass	DFW/NC/I	Total
Pell Recipient	54	25	79
Not Pell Recipient	47	19	66
Total	101	44	145
Low Income Status	Pass	DFW/NC/I	Total
Low Income	58	22	80
Not Low Income	43	22	65
Total	101	44	145
First Gen Status	Pass	DFW/NC/I	Total
First Gen	66	32	98
Not First Gen	35	12	47
Total	101	44	145

URM Status	Pass	DFW/NC/I	Total
URM	64	24	88
Not URM	37	20	57
Total	101	44	145
College	Pass	DFW/NC/I	Total
BCOE	7	2	9
CNAS	81	39	120
CHASS / Other	13	3	16
Total	101	44	145
Math Placement	Pass	DFW/NC/I	Total*
ARC 35	52	22	74
Precalculus	20	12	32
Calculus	29	9	38
Total*	101	43	144

*Totals include all students with nonmissing math placement data.

Second-attempt Pass Comparison Based on Demographic

Data compares the second-pass attempt rate between Accelerator Program 2023 participants (N=21) and students from the Fall 2020 to Summer 2022 first-attempt group (N=145).

