

Math ACT and DFW Science Grades

Report created by Eugene Noble

5/20/2024

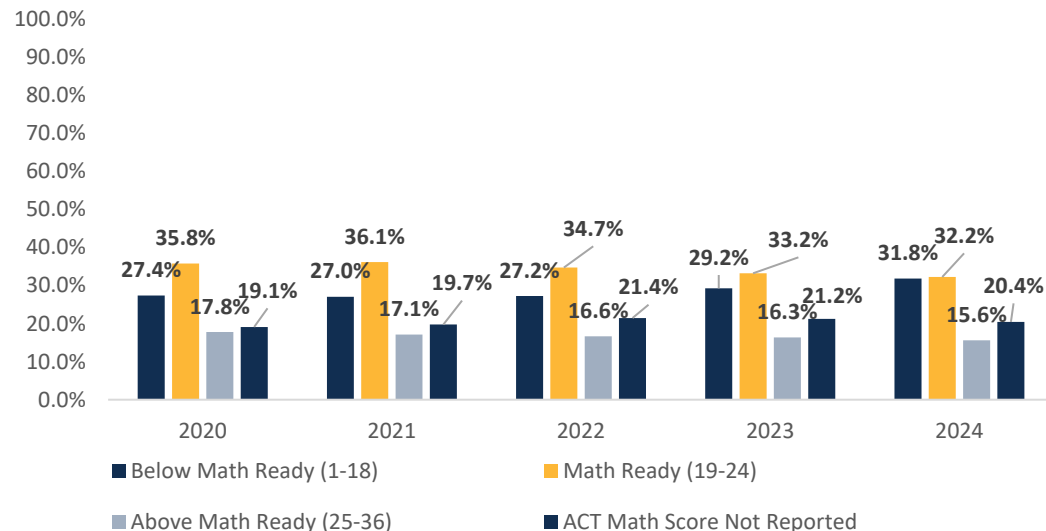


OPEIR Notes:

- First-generation students are identified as first-generation college students based on their answers to FAFSA questions related to parent education levels. For this report, first-generation status is the unduplicated percentage of students for each academic year.
- First-time First-year students are the percentages of First-Time Freshman in each academic year. This includes First-Time Freshman who were also part-time.
- Students' grades that were marked as incomplete, audit, etc. were excluded from DWF rates.
- UTC admissions for academic years 2020, 2021, and 2022 were test-optional. During these periods, standardized exams such as ACT and SAT were not required. While most incoming first-time, first-year freshmen did submit test scores, the primary reason was to earn or maintain financial aid scholarships.

First Generation

First Generation Students - Math ACT Scores 2020-2024



Insight:

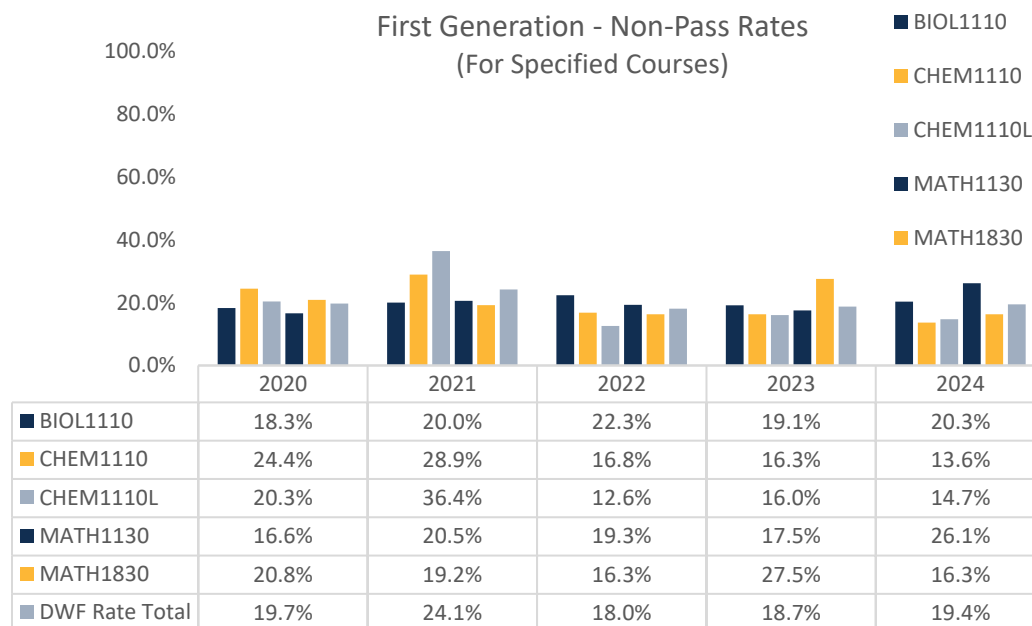
On average, over 30 percent of all first-generation students 2020-2024 had a college ready math ACT score that ranged from 19-24. From 2021, the percentage of first-generation students with a below math ready ACT score has risen from approximately 27 percent to 32 percent in 2024. Across academic years, one-fifth of first-generation students did not report a math ACT score. Non-submission of math ACT scores is likely due to pandemic related academic policies, but further investigation of students who took an alternate math placement test may be needed.

Insight:

Excluding incompletes, non-pass rates (grades earned of D, F, or W) for specified courses in math and science have varied across academic years for first-generation students. In recent years, the percentage of first-generation students who did not pass General Chemistry and the course's lab component has decreased, with less than 15 percent of students not passing the course in 2024.

In 2024, there was a noticeable increase in the percentage of first-generation students who did not pass College Algebra. Conversely, only 16 percent of students did not pass Calculus for Management, Life, and Social Sciences.

First Generation - Non-Pass Rates
(For Specified Courses)

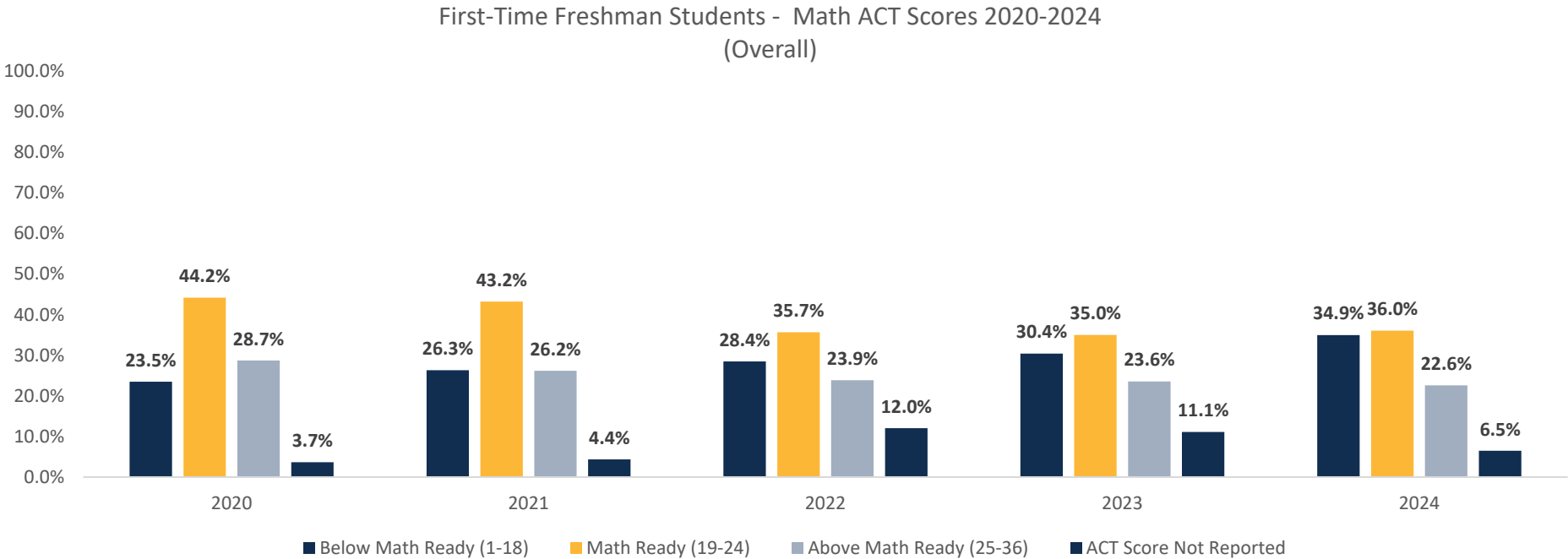


First-Time Freshman Students - Math ACT Scores

Insight:

Over 40 percent of first-time first-year students had a college ready math ACT score during 2020-2021. However, since then, the percentage of incoming first-time first-year students who reported a math ACT score in the range of 19-24 has hovered around 35-36 percent. Regardless, the percentage of first-time first-year students who were math ready or reported a score of above math ready has been consistently higher across all five academic years compared to their first-generation peers. It should be noted during academic year(s) 2020, 2021, 2023, and 2024 that 20 percent of incoming first-time first-year students in the fall were also first-generation students.

A detailed breakdown of math ACT scores for all first-time first-year students by race/ethnicity and gender is included in the table below.



Math ACT Score by Race/Ethnicity and Gender

Math Score	2020	2021	2022	2023	2024
Below Math Ready (1-18)	23%	26%	28%	30%	35%
American Indian or Alaska Native	0%	0%	0%	0%	0%
Female	0%	0%	0%	0%	0%
Male	0%	0%	0%	0%	0%
Asian	0%	0%	1%	1%	1%
Female	0%	0%	1%	1%	1%
Male	0%	0%	0%	0%	0%
Black or African American	4%	6%	5%	4%	4%
Female	3%	4%	3%	3%	3%
Male	1%	1%	2%	2%	2%
Hispanic	2%	2%	2%	2%	2%
Female	1%	1%	1%	2%	2%
Male	1%	0%	1%	0%	1%
Native Hawaiian or Other Pacific Islander	0%	0%	0%	0%	0%
Female	0%	0%	0%	0%	0%
Male	0%	0%	0%	0%	0%
Two or More	1%	1%	1%	2%	2%
Female	0%	1%	1%	1%	1%
Male	0%	0%	0%	0%	1%
White	16%	17%	18%	21%	19%
Female	11%	11%	13%	14%	13%
Male	5%	5%	5%	7%	6%
Not Reported	1%	1%	1%	1%	7%
Female	1%	1%	0%	0%	4%
Male	0%	0%	0%	0%	2%

Math Ready (19-24)	44%	43%	36%	35%	36%
American Indian or Alaska Native	0%	0%	0%	0%	0%
Female	0%	0%	0%	0%	0%
Male	0%	0%	0%	0%	0%
Asian	1%	1%	1%	1%	1%
Female	1%	1%	1%	0%	0%
Male	0%	0%	0%	0%	0%
Black or African American	4%	4%	3%	2%	2%
Female	3%	2%	2%	1%	2%
Male	2%	2%	1%	1%	1%
Hispanic	3%	3%	2%	2%	2%
Female	2%	2%	1%	1%	1%
Male	1%	2%	1%	1%	1%
Native Hawaiian or Other Pacific Islander	0%	0%	0%	0%	0%
Female	0%	0%	0%	0%	0%
Two or More	1%	1%	2%	1%	2%
Female	1%	1%	1%	1%	1%
Male	0%	0%	1%	0%	1%
White	33%	33%	28%	28%	24%
Female	20%	21%	18%	16%	14%
Male	13%	12%	10%	13%	9%
Not Reported	1%	1%	0%	1%	6%
Female	1%	1%	0%	0%	3%
Male	1%	1%	0%	0%	3%

Above Math Ready (25-36)	29%	26%	24%	24%	23%
American Indian or Alaska Native	0%	0%	0%	0%	0%
Female	0%	0%	0%	0%	0%
Male	0%	0%	0%	0%	0%
Asian	1%	1%	1%	1%	1%
Female	1%	1%	0%	1%	1%
Male	0%	0%	0%	0%	0%
Black or African American	1%	1%	1%	1%	1%
Female	0%	0%	0%	0%	0%
Male	0%	0%	0%	0%	0%
Hispanic	2%	1%	2%	1%	1%
Female	1%	1%	1%	1%	0%
Male	1%	1%	1%	0%	1%
Native Hawaiian or Other Pacific Islander	0%	0%	0%	0%	0%
Male	0%	0%	0%	0%	0%
Two or More	0%	0%	1%	1%	1%
Female	0%	0%	1%	1%	0%
Male	0%	0%	0%	0%	0%
White	24%	22%	19%	19%	16%
Female	12%	11%	10%	10%	9%
Male	12%	10%	9%	9%	7%
Not Reported	1%	1%	0%	0%	3%
Female	0%	1%	0%	0%	2%
Male	1%	0%	0%	0%	1%

ACT Score Not Reported	3.7%	4.4%	12.0%	11.1%	6.5%
Asian	0.1%	0.2%	0.7%	0.2%	0.1%
Female	0.0%	0.2%	0.5%	0.1%	0.0%
Male	0.1%	0.0%	0.2%	0.0%	0.1%
Black or African American	0.3%	0.4%	1.2%	1.7%	0.2%
Female	0.2%	0.2%	0.8%	0.9%	0.1%
Male	0.1%	0.1%	0.5%	0.7%	0.1%
Hispanic	0.4%	0.3%	1.5%	1.1%	0.1%
Female	0.2%	0.1%	0.8%	0.7%	0.0%
Male	0.2%	0.2%	0.7%	0.4%	0.1%
Native Hawaiian or Other Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.0%
Male	0.0%	0.0%	0.0%	0.0%	0.0%
Two or More	0.2%	0.2%	0.6%	0.4%	0.3%
Female	0.1%	0.1%	0.4%	0.2%	0.1%
Male	0.1%	0.1%	0.2%	0.2%	0.2%
White	2.7%	3.2%	7.9%	7.6%	4.3%
Female	1.0%	2.0%	4.9%	4.3%	2.4%
Male	1.7%	1.2%	2.9%	3.3%	1.9%
Not Reported	0.0%	0.1%	0.2%	0.2%	1.5%
Female	0.0%	0.0%	0.2%	0.1%	0.8%
Male	0.0%	0.0%	0.0%	0.1%	0.7%

All Students - Non-Pass Course Rates by Race/Ethnicity and Gender (For Specified Courses)

Insight:

A detailed breakdown of non-pass rates for the specified courses is included in the table below. Rates by race/ethnicity and gender are for all students during the academic year regardless of first-generation status or student classification. Almost identical to the first-generation student cohort in 2024, roughly 26 percent of all students who took College Algebra did not pass the course, and roughly 16 percent of all students who took Calculus for Management, Life, and Social Sciences did not pass. This may indicate that DWF rates for these math courses aren't exclusive to just first-generation students.

**Non-Pass Rates by Race/Ethnicity and Gender
(For Specified Courses)**

Courses	2020	2021	2022	2023	2024
BIOL1110	19.7%	18.2%	24.0%	19.4%	18.7%
Female	20.9%	16.3%	24.1%	19.6%	19.1%
American Indian or Alaska Native	50.0%	0.0%	0.0%	50.0%	0.0%
Asian	26.7%	6.7%	40.0%	13.3%	13.3%
Black or African American	16.2%	20.0%	28.5%	17.7%	17.7%
Hispanic	30.4%	8.9%	26.8%	14.3%	19.6%
Two or More	8.8%	14.7%	8.8%	32.4%	35.3%
White	21.8%	17.0%	24.1%	20.6%	16.6%
Not Reported	17.1%	11.4%	14.3%	8.6%	48.6%
Male	18.1%	20.9%	23.8%	19.1%	18.1%
Asian	33.3%	0.0%	0.0%	50.0%	16.7%
Black or African American	17.4%	17.4%	27.9%	22.1%	15.1%
Hispanic	23.1%	23.1%	25.6%	10.3%	17.9%
Two or More	16.7%	11.1%	16.7%	16.7%	38.9%
White	18.3%	21.7%	23.9%	20.0%	16.1%
Not Reported	7.7%	26.9%	15.4%	3.8%	46.2%

CHEM1110	22.5%	27.7%	18.5%	15.2%	16.0%
Female	24.7%	29.9%	16.7%	14.0%	14.7%
American Indian or Alaska Native	0.0%	100.0%	0.0%	0.0%	0.0%
Asian	17.9%	21.4%	28.6%	10.7%	21.4%
Black or African American	25.6%	35.5%	19.0%	13.2%	6.6%
Hispanic	29.5%	23.0%	14.8%	13.1%	19.7%
Two or More	13.3%	30.0%	30.0%	3.3%	23.3%
White	25.1%	29.7%	15.7%	14.9%	14.6%
Not Reported	20.7%	31.0%	6.9%	17.2%	24.1%
Male	19.5%	24.7%	21.0%	16.8%	17.8%
Asian	0.0%	12.5%	50.0%	25.0%	12.5%
Black or African American	19.7%	27.9%	29.5%	16.4%	6.6%
Hispanic	25.6%	27.9%	20.9%	4.7%	20.9%
Native Hawaiian or Other Pacific Islander	0.0%	0.0%	50.0%	50.0%	0.0%
Two or More	33.3%	25.0%	20.8%	4.2%	16.7%
White	19.0%	24.9%	19.7%	18.5%	17.8%
Not Reported	13.3%	16.7%	13.3%	16.7%	40.0%
CHEM1110L	19.0%	34.0%	16.7%	13.7%	16.6%
Female	22.4%	37.3%	13.3%	11.5%	15.4%
Asian	30.0%	30.0%	10.0%	10.0%	20.0%
Black or African American	23.2%	44.9%	15.9%	7.2%	8.7%
Hispanic	25.0%	33.3%	13.9%	5.6%	22.2%
Two or More	8.7%	30.4%	21.7%	8.7%	30.4%
White	23.4%	36.8%	12.4%	13.4%	14.1%
Not Reported	7.7%	38.5%	7.7%	15.4%	30.8%
Male	15.2%	30.3%	20.5%	16.2%	17.9%
Asian	37.5%	12.5%	25.0%	12.5%	12.5%
Black or African American	25.5%	31.9%	21.3%	17.0%	4.3%
Hispanic	20.6%	32.4%	17.6%	5.9%	23.5%
Two or More	25.0%	37.5%	12.5%	12.5%	12.5%
White	11.4%	30.0%	21.2%	17.9%	19.4%
Not Reported	16.7%	27.8%	16.7%	11.1%	27.8%

MATH1130	17.6%	17.4%	18.2%	20.6%	26.3%
Female	17.3%	18.4%	18.1%	20.9%	25.3%
American Indian or Alaska Native	0.0%	0.0%	0.0%	50.0%	50.0%
Asian	8.3%	25.0%	16.7%	33.3%	16.7%
Black or African American	24.2%	19.7%	11.4%	17.4%	27.3%
Hispanic	18.5%	29.2%	15.4%	20.0%	16.9%
Two or More	13.9%	16.7%	16.7%	25.0%	27.8%
White	17.2%	17.6%	20.5%	21.5%	23.4%
Not Reported	7.9%	15.9%	6.3%	15.9%	54.0%
Male	17.8%	16.4%	18.2%	20.3%	27.2%
Asian	18.2%	9.1%	0.0%	18.2%	54.5%
Black or African American	19.6%	13.1%	17.8%	23.4%	26.2%
Hispanic	22.0%	18.3%	15.9%	19.5%	24.4%
Two or More	14.0%	14.0%	18.0%	16.0%	38.0%
White	17.6%	17.5%	19.6%	21.1%	24.2%
Not Reported	15.6%	9.1%	9.1%	11.7%	54.5%
MATH1830	22.3%	17.4%	20.3%	23.4%	16.7%
Female	21.8%	16.4%	18.7%	24.0%	19.1%
American Indian or Alaska Native	0.0%	100.0%	0.0%	0.0%	0.0%
Asian	33.3%	0.0%	11.1%	33.3%	22.2%
Black or African American	13.8%	18.5%	26.2%	20.0%	21.5%
Hispanic	21.2%	15.2%	21.2%	24.2%	18.2%
Two or More	0.0%	18.8%	12.5%	50.0%	18.8%
White	25.1%	15.7%	18.2%	21.8%	19.1%
Not Reported	7.4%	22.2%	11.1%	44.4%	14.8%
Male	22.6%	18.2%	21.5%	22.9%	14.8%
American Indian or Alaska Native	0.0%	100.0%	0.0%	0.0%	0.0%
Asian	41.7%	16.7%	8.3%	33.3%	0.0%
Black or African American	17.3%	21.2%	34.6%	15.4%	11.5%
Hispanic	14.6%	25.0%	22.9%	20.8%	16.7%
Two or More	28.6%	19.0%	19.0%	19.0%	14.3%
White	23.2%	17.4%	20.6%	23.6%	15.2%
Not Reported	23.8%	9.5%	19.0%	28.6%	19.0%