ENTRY LEVEL ASSESSMENT REPORT
2019 - 2020

ROGERS STATE UNIVERSITY
Claremore, Oklahoma

Office of Accountability and Academics
December 2020

ROGERS STATE
UNIVERSITY

Rogers State University
Annual Report of 2019-2020 Entry Level Assessment

EXECUTIVE SUMMARY

- RSU has replaced Accuplacer secondary testing with Next Generation secondary testing (published by Accuplacer). Its use results in more liberal placement of developmental students into college-level courses.
- In 2019-2020, approximately half as many developmental English (writing) students passed Comp I with a C or better through the co-requisite course than through the historical ENGL 0003 process.
    - The number of Supplement ENGL 0111 (Comp I Supplement) sections decreased in the last year from 14 to 8. This 43% decrease exceeds the enrollment drop. It can be concluded that students who enrolled in ENGL 0111 last year were more at-risk. This explains the significant drop in C or better for ENGL 1113.
    - Overall success rate (C or better) in ENGL 1113 for the fall 2019 cohort: 53% of fall 2019 first-time freshmen successfully completed Comp I during their freshman year.
        - 47% of fall 2016 first-time freshmen successfully completed Comp I their freshmen year.
        - **8% more** first-time freshmen completed the Comp I gateway course during their freshman year with the co-requisite initiative
    - Overall success rate (C or better) in ENGL 1213 for the fall 2019 cohort: 38% of fall 2019 first-time freshmen successfully completed Comp II during their freshman year.
        - 29% of fall 2016 first-time freshmen successfully completed Comp I their freshmen year.
        - **9% more** first-time freshmen completed the Comp II gateway course during their freshman year with the co-requisite initiative
- In 2019-2020, students who enrolled in College Algebra Foundations had a **similar success rate** in College Algebra as those students who completed Elementary Algebra and Intermediate Algebra prior to the co-requisite initiative. However, this does not hold true for Math for Critical Thinking.
    - Overall success rate (C or better) in MATH 1513 for the fall 2019 cohort: 40% of fall 2019 first-time freshmen successfully completed College Algebra during their freshman year.
        - 27% of fall 2016 first-time freshmen successfully completed College Algebra their freshmen year.
        - **13% more** first-time freshmen completed College Algebra their freshman year with the co-requisite initiative.
    - Overall success rate (C or better) in MATH 1513 for the fall 2019 cohort: 6% of fall 2019 first-time freshmen successfully completed Math for Critical Thinking during their freshman year.
        - 0% of fall 2016 first-time freshmen successfully completed Math for Critical Thinking their freshmen year.

        - **6% more** first-time freshmen completed Math for Critical Thinking their freshman year with the co-requisite initiative.
    - Overall success rate (C or better) in either MATH gateway course for the fall 2019 cohort during their freshman year was 46%--nearly half. Additional students from this cohort will complete their Math gateway course their sophomore year.
- In 2019-2020, 33% of science proficiency students, who completed BIOL 0123 with C or better, also completed GEOL 1014, PHYS 1014, BIOL 1144 or BIOL 1114 with a C or better in their 2019-2020 freshmen year.
- In 2019-2020, 21% of Reading proficiency students, who completed BIOL 0123 with C or better, also completed GEOL 1014, PHYS 1014, BIOL 1144 or BIOL 1114 with a C or better in their 2019-2020 freshmen year.

Activities

I-1. What information was used to determine college-level course placement?
The American College Test (ACT) serves as the primary test used to measure levels of student achievement and subsequent entry-level placement at RSU. Testing fees are $55 for the ACT National without the Writing subtest and $70 with the Writing subtest. Fee for the ACT Residual test is $55. ACT scores of 19 or higher on each subtest are required for enrollment in collegiate level courses. Students who do not meet the cut-score of 19 on each ACT subtest are referred for secondary testing in the deficient content area. RSU Testing Center staff administered the College Board Accuplacer Next Generation to place students, who are deficient in reading, writing or mathematics, in appropriate developmental courses. The University also accepts classic Accuplacer test results. The Stanford Science (STASS) test was used as the developmental tool to assess student readiness in science. There is no charge to the student for the Accuplacer or the STASS.

I-2. What information was used to determine co-requisite course placement (e.g., cut scores, high school GPA, class ranking)?
The ACT is required of all first-time entering freshmen and students transferring six credit hours or less. Students with ACT scores below 19 are identified as academically at-risk and must complete secondary testing to determine appropriate placement. A Next Generation score of 250 on the English subtest or score of 80 on the classic Accuplacer English subtest is required for college level placement in English Composition I. A Next Generation subtest score from 236 to 249 qualifies a student to enroll in the Composition I Supplemental course concurrently with Composition I. A Next Generation subtest score below 236 places students in Developmental Writing.

For students score below 19 on the ACT Reading subtest, a Next Generation score of 250 on the Reading subtest equates to college-level reading. A classic Accuplacer score of 75 is required on the Reading subtest in order to test out of developmental Reading I.

A Math Next Generation subtest score of 250 or a classic Accuplacer subtest score of 66 places students in college-level mathematics. A Next Generation subtest score of 236-249 or a classic Accuplacer subtest score of 40-65 places students in supplemental math, allowing them to enroll concurrently in a corresponding college-level math course.
A Next Generation math subtest score of 0-235 or a classic Accuplacer score below 40 requires Elementary Algebra.

A score of 56 on the STASS is required for college level science. Students whose scores do not qualify them for immediate college-level course work must enroll in a developmental course(s) to prepare them for success.

I-3. How were students determined to need remediation deficiencies (e.g., cut scores, multiple-measure metrics, or advising process)?
First-time entering students are assessed following application to RSU and prior to enrollment. Students who did not meet the cut score of 19 on each ACT subtest were referred for secondary testing at one of the RSU Testing Centers. With the exception of the STASS test, students who did not pass secondary testing on the first attempt could retake the test one time after a one-week waiting period.

I-4. What options were available for students to remediate basic academic skill deficiencies?
During the 2019-2020 AY, students were encouraged to refresh their understanding of any content areas in which they were to be tested prior to taking secondary tests by visiting a tutor or reviewing a high school textbook. Students were also provided information on a variety of web-based tutorials and ordering information for *ACT Study Guides*. Course placement is mandatory for all students who do not meet proficiency in one or more of the basic skills. If students did not test into college-level course work, they could either complete deficiencies via co-requisite development coursework simultaneously to enrollment in the relevant college-level course, or they could enroll in a traditional developmental course.

Analyses and Findings

I-5. Describe analyses and findings of student success in developmental, co-requisite and college-level courses (include enrollment counts, grade distribution and overall pass rates), effectiveness of the placement decisions, evaluation of cut-scores, and changes in the entry-level assessment process or approaches to teaching as a result of findings.

Mean ACT composite scores for first-time entering freshmen have remained stable over over the last five years with the fall 2020 mean dipping. This may be an artifact of the COVID-19 pandemic, and additional analysis is needed. *Table 1: Mean ACT Scores for First-time Freshmen* provides a summary of mean ACT composite and subtest scores.

Table 1. Mean ACT Scores for First-time Freshmen

Semester	English ACT	Mathematics ACT	Reading ACT	Science ACT	Composite ACT
Fall 2016 N=629	19.8	19.4	22.0	21.0	20.4
Fall 2017 N=652	20.9	20.1	23.0	21.2	21.0
Fall 2018 N=503	18.5	18.5	21.1	19.7	20.0
Fall 2019 N=505	19.0	18.5	21.1	20.3	19.6
Fall 2020 N=503	19.1	18.8	20.9	20.4	19.4

Source: RSU Fall 2020 Fact Book

There were a total of 593 academically deficient enrollments during fall 2020 for English, reading, mathematics, and science. Table 2 presents these enrollments. Beginning in fall 2017, RSU initiated a new model for completion of developmental writing and mathematics for students with ACT scores that are marginally below the required ACT of 19 (or equivalent through Accuplacer secondary testing). This initiative has been implemented in conjunction with the Complete College America (CCA) Oklahoma State Regents for Higher Education (OSRHE) *Scaling Co-requisite Initiative*. Initially, students who scored 17 or 18 on the ACT English sub-test (or the Accuplacer secondary placement test equivalent) were eligible to enroll directly in Comp I while simultaneously enrolled in ENGL 0111 – Composition I Supplemental. The supplemental course is an additional one hour of instruction each week designed to address specific competencies intended to mitigate writing deficiencies.

During fall 2020, all entering students were evaluated on the basis of ACT scores, secondary testing, or prior coursework. A total of 593 students who were academically deficient in at least one area enrolled in 54 sections of six different developmental courses to prepare them for college-level instruction. This included 43 students in Composition I Supplement, 92 students in Reading I, 424 students in developmental mathematics, and 34 students in Science Proficiency.

Table 2. 2019-2020 Enrollment in Developmental Coursework

Course Title	Course Number	# Sections	# Students
Composition I Supplement	ENGL 0111	8	43
Developmental Reading I	READ 0114	7	92
College Math Foundations	MATH 0312	9	62
College Algebra Foundations	MATH 0412	17	240
Elementary Algebra Plus	MATH 0114	9	122
Science Proficiency	BIOL 0123	4	34
	6 courses	*54 section*	*593*

English Remediation

The Office of Accountability and Academics staff tracked student progress in all developmental courses and appropriate college-level courses by letter grade and retention using the RSU student database. During the 2019-2020 academic year, students who enrolled in Composition I Supplement had a significantly lower success rate in Composition I than students who scored lower than 19 on the ACT English subtest but waived the co-requisite with a qualifying score on the Accuplacer. Only 31% of students who enrolled in the supplemental co-requisite English course successfully completed Composition I with a C or better. This compares to 78% of students, who did not require English remediation, earning a C or better in Composition I. For comparability, the co-requisite student success rate was compared with that of 2017-2018, the first year of the initiative, and that of 2016-2017, the last year of the traditional model. Results for the most recent year demonstrate a **significantly lower success rate**. Simultaneously, RSU adopted a new placement test, the Accuplacer Next Generation. Its use has resulted in a significantly higher placement rate in college-level courses with no remediation required. It is possible that the low Comp I success rate for 2019-2020 Supplemental/Co-requisite students is due to the fact that only those with the lowest test scores are now enrolling in remediation. The number of Supplement sections decreased from 14 to 8, and the number of Supplemental students decreased from 161 to 43 over this period. Further, the high success rate of the few Supplemental/Co-requisite students who completed Composition II last year is even higher than that for the college-ready students, indicating additional analysis is needed.

Table 3: 2019-2020 Co-Requisite vs. College-level Success in ENGL 1113 Composition I

Grade	Co-Requisite Students		Non Co-Requisite Students	
	#	%	#	%
C or Better	13	31%	706	78%
D, F, NP, or I	24	55%*	157	17%
W	6	14%	43	5%
Total	43	100%	906	100%

*33% of Co-requisite students earned an F in Comp I.

Overall Success Rate for ENGL 1113 (Comp I) for All First-Time Freshmen

- 53% of fall 2019 first-time freshmen completed Comp I with a C or Better in first year
- 53% of fall 2018 first-time freshmen completed Comp I with a C or Better in first year
- 55% of fall 2017 first-time freshmen completed Comp I with a C or Better in first year
- 47% of fall 2016 first-time freshmen completed Comp I with a C or Better in first year

Figure 1: Trend Comparison for Traditional Basic Writing and Co-Requisite/Supplemental Remediation – Success Rates in Comp I

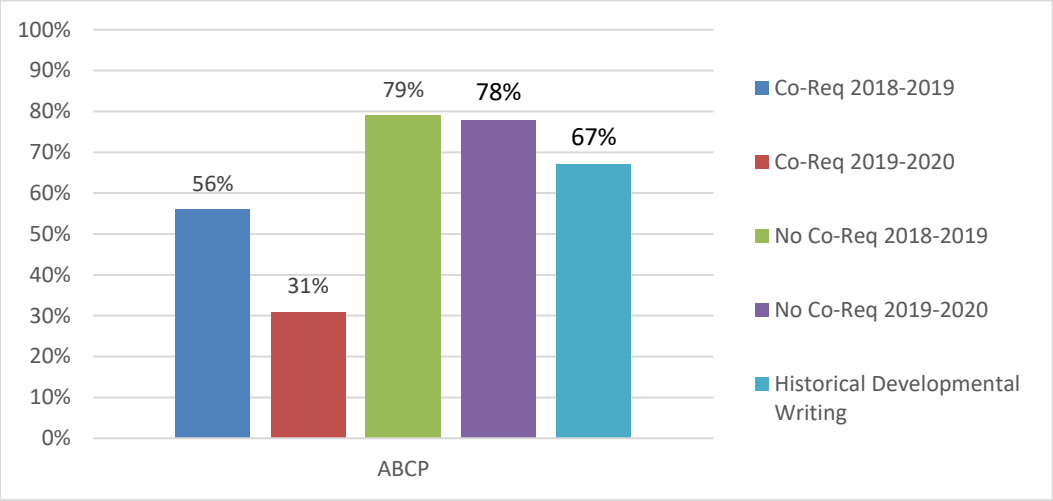


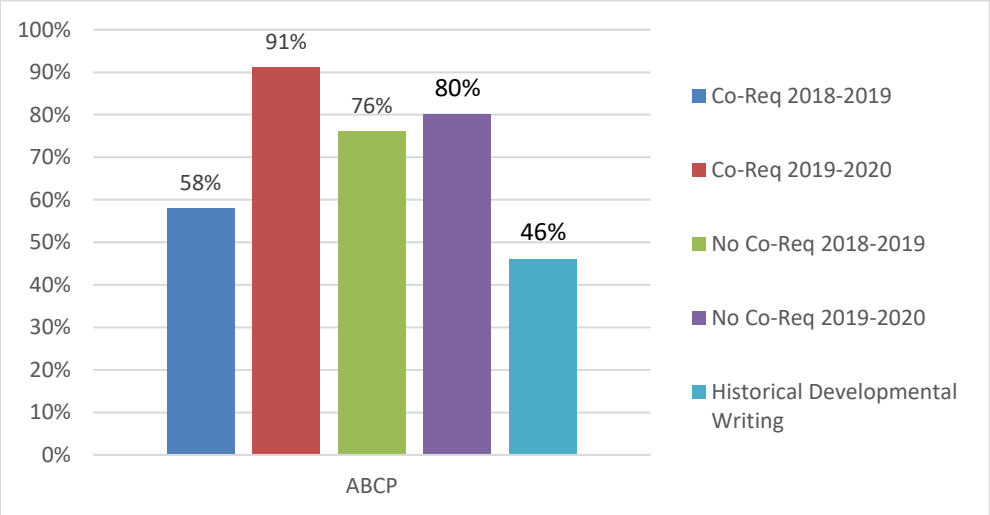
Table 4: 2019-2020 Co-Requisite vs. Non Co-Requisite/College-level Success in ENGL 1213 Composition II

Grade	Co-Requisite Students		Non Co-Requisite Students	
	#	%	#	%
C or Better	10	91%	601	80%
D, F, NP, or I	1	0%	83	12%
W	0	9%	63	8%
Total	11	100%	747	100%

Overall Success Rate for ENGL 1213 (Comp II) for All First-Time Freshmen

- 38% of fall 2019 first-time freshmen completed Comp II with a C or Better in first year
- 38% of fall 2018 first-time freshmen completed Comp II with a C or Better in first year
- 36% of fall 2017 first-time freshmen completed Comp II with a C or Better in first year
- 29% of fall 2016 first-time freshmen completed Comp II with a C or Better in first year?

Figure 2: Trend Comparison for Success (C or Better) in Comp II - Traditional Basic Writing and Co-Requisite/Supplemental Remediation



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Mathematics Remediation

Figure 3. Stem versus non-STEM Mathematics Pathways

MATH 1513 College Algebra

or

MATH 1715 Precalculus

BS Biology
BS Nursing RN-BSN
BS Business Administration
BS Game Development
AS Biology
AS Physical Science
AA Accounting
AA Business Administration

MATH 1503 Math for Critical Thinking

BS Organizational Leadership
BS Sport Management
BS Business Information Tech
BS Justice Administration
BT Applied Technology
BA Communications
BA Liberal Arts
BFA Visual Arts
BA History
BA Military History
BA Public Affairs
BA Social Entrepreneurship
BS Community Counseling
BS Elementary Education
BS Social Science
Bachelor of General Studies (College Algebra is required for Biology and Chemistry minors)

AA Criminal Justice Studies
AS Computer Science
AA Liberal Arts
AA Secondary Education
AA Social Studies Education
AA Social Sciences
AA Elementary Education
AA Social Science

During 2019-2020, students who enrolled in College Algebra Foundations had a **similar success rate** in College Algebra as those students who completed Elementary Algebra and Intermediate Algebra prior to the co-requisite initiative (see Figure 4). Moreover, students on the STEM track

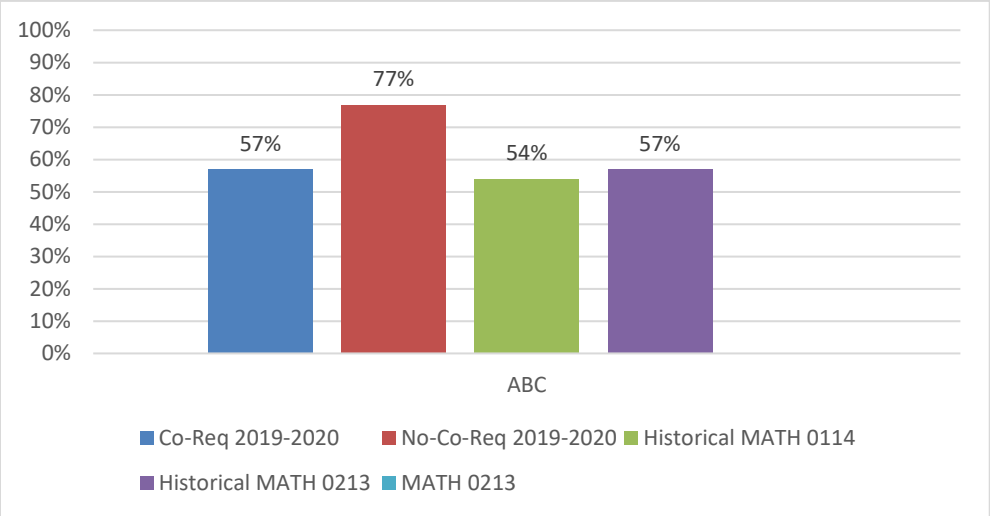
were more likely to successfully complete College Algebra with a C or better during their first year than prior to the co-requisite initiative.

Table 5: 2019-2020 Co-Requisite vs. Non Co-Requisite/College-level Success in College Algebra

Grade	Co-Requisite Students		Non Co-Requisite Students	
	#	%	#	%
C or Better	108	48%	581	73.3%
D, F, NP, or I	83	37%	148	18.7%
W	34	15%	64	8.1%
Total	225	100%	793	100%*

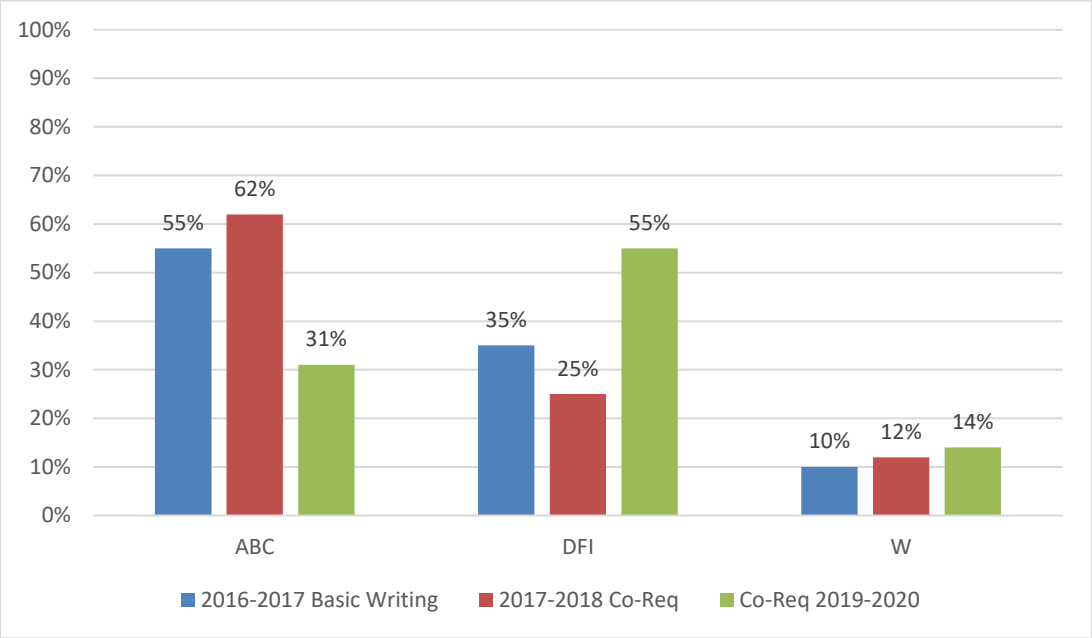
*Total may not add up to exactly 100% due to rounding.

Figure 4: Trend Comparison for Success (C or Better) in College Algebra - Traditional Remedial Mathematics and Co-Requisite/Supplemental Remediation



Students who enrolled in College Math Foundations had a lower success rate in Mathematics for Critical Thinking than those who did not place into co-requisite coursework. However, there is **an anomaly present** for student success in College Math Foundations and Math for Critical Thinking. Students who enrolled in the traditional Intermediate Algebra course prior to the co-requisite initiative were significantly more successful than the other two groups. It is possible that specific teaching practices may be affecting success in this course, and this is under review. (See Figure 5.)

Figure 5: Trend Comparison for Traditional Developmental Math and Co-Requisite/ College Math Foundations – Success Rates in College Algebra



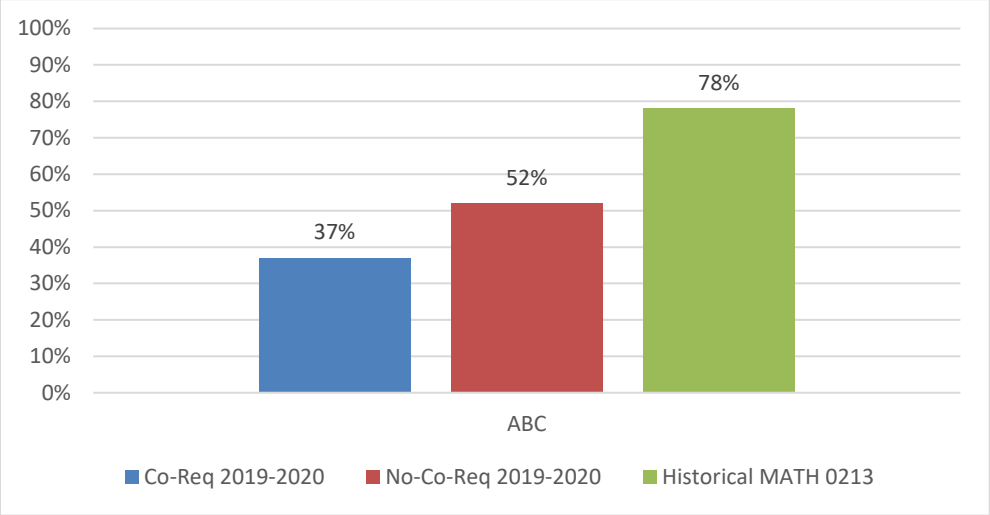
Overall Success Rate for MATH 1513 (College Algebra) for All First-Time Freshmen

- 40% of fall 2019 first-time freshmen completed College Algebra with a C or better in first year
- 37% of fall 2018 first-time freshmen completed College Algebra with a C or Better in first year
- 33% of fall 2017 first-time freshmen completed College Algebra with a C or better in first year
- 27% of fall 2016 first-time freshmen completed College Algebra with a C or better in first year

Table 6: 2019-2020 Math for Critical Thinking: Comparison of Co-Requisite vs. Non Co-Requisite Groups

		Co-Requisite Group for Critical Thinking	Non Co-Requisite Group for Critical Thinking	Total
Math for Critical Thinking	A, B, C,P	20	62	82
	D, F,I,NP	24	29	53
	W	18	29	47
Total		62	120	182

Figure 6: Trend Comparison for Success (C or Better) in Math for Critical Thinking - Traditional Remedial Mathematics and Co-Requisite/Supplemental Remediation



Overall Success Rate for MATH 1503 (Math for Critical Thinking) for All First-Time Freshmen

- 6% of fall 2019 first-time freshmen completed Math for Critical Thinking with a C or better in first year
- 5% of fall 2018 first-time freshmen completed Math for Critical Thinking with a C or Better in first year
- 5% of fall 2017 first-time freshmen completed Math for Critical Thinking with a C or better in first year
- 0% of fall 2016 first-time freshmen completed Math for Critical Thinking with a C or better in first year

Science Proficiency

Six science proficiency students (33%), who completed BIOL 0123 with C or better, also completed GEOL 1014, PHYS 1014, BIOL 1144 or BIOL 1114 with a C or better in their 2019-2020 freshmen year.

Reading Proficiency

Thirteen reading proficiency students (21%), who completed BIOL 0123 with C or better, also completed GEOL 1014, PHYS 1014, BIOL 1144 or BIOL 1114 with a C or better in their 2019-2020 freshmen year.