Success Outcomes for College Success Students Fall 2008 – Fall 2021 Cohorts

> October 13, 2022 Office of Institutional Research



Executive Summary

Academic Strategies (ENGL 1003) was established in 2008 as a student success strategy designed to orient students to TCC campuses and college services, emphasizing personal and social strategies with the goal of increasing student involvement in college and community activities. From the outset, all students enrolled in the Tulsa Achieves program were required to enroll in the course. Beginning Fall 2013, all students who placed into any level of developmental reading, writing, or mathematics were also required to complete the course. The course was re-named First Year Experience Seminar beginning Fall 2017 and re-designated COLL 1002. The course credit hours were reduced from three credit hours to two. In Fall 2019, the course was again re-named to College Success, re-designated COLL 1003, and the credit hours were increased from two to three. This report summarizes the success outcomes of students who enrolled in either Academic Strategies (ENGL 1003), First Year Experience Seminar (COLL 1002), or College Success (COLL 1003) from 2008 to 2020. Metrics examined were the cohort First-Fallto-First-Spring persistence, First-Fall-to-Second-Fall retention, three-year graduation rate, success rates in developmental courses, and success rates in gateway courses. Course success was defined as receiving a final grade of C or better in any course. Comparisons were made with students of the same cohort by enrollment status who did not enroll in either ENGL 1003, COLL 1002, or COLL 1003. It is important to note that when the course was re-designated in Fall 2017 from three credit hours to two there was an associated shift in the number of first-time students from full-time enrollment status to part-time status. Also, for the purpose of this report the courses ENGL 1003, COLL 1002, and COLL 1003 were combined and referenced collectively as College Success (CS).

Enrollment in College Success (CS) by Full-Time Students

Of the 26,340 first-time, degree-seeking, full-time students enrolling from fall 2008 to fall 2021, 61.9% enrolled in CS. 82.1% of those enrolling in the seminar received a C or higher for the course. The remaining 17.9% who did not earn a C or higher for the course showed dramatically poorer outcomes, even when compared to students who did not enroll in CS at all.

- Fall-to-Spring Persistence Full-time CS students enrolled in the first spring semester at a significantly higher rate (85.5%) than students who did not enroll in the course (73.5%) or who enrolled but did not earn a C or better (47.2%).
- Fall-to-Fall Retention Full-time CS students enrolled in the second fall semester at a significantly higher rate (61.7%) than students who did not enroll in CS (48.9%) or who enrolled but did not earn a C or better (13.7%).
- Graduation Within Three Years Significantly more full-time students (16.1%) who enrolled in CS graduated within three years compared to 12.8% of students who did not take CS, and 0.8% of students who enrolled but did not earn a C or better.
- Success Rates in Developmental Courses (Grades of C or Better) Full-time CS students succeeded at a significantly higher rate in developmental courses (68.1%) compared to 61.3% of students not taking CS.
- Success Rates in Gateway Courses (Grades of C or Better) Full-time CS students succeeded at a significantly higher rate in gateway courses (79.4%) compared to 74.8% of students not taking CS.

Enrollment in the College Success (CS) by Part-Time Students

Of the 21,925 first-time, degree-seeking, part-time students enrolling from fall 2008 to fall 2021, 45.8% enrolled in the CS seminar. 71.1% of those enrolling in the seminar received a C or higher for the course. The remaining 28.9% who did not earn a C or higher for the course showed dramatically poorer outcomes, even when compared to students who did not enroll in CS at all.

- Fall-to-Spring Persistence Part-time CS students enrolled in the first spring semester at a significantly higher rate (71.2%) than students who did not enroll in the course (52.2%) or who enrolled but did not earn a C or better (35.0%).
- Fall-to-Fall Retention Part-time CS students enrolled in the second fall semester at a significantly higher rate (47.4%) than students who did not enroll in CS (33.2%) or who enrolled but did not earn a C or better (10.0%).
- Graduation Within Three Years The graduation rate for part-time CS students was not significantly different to those who did not enroll in CS (5.8%, 6.0% respectively). The graduation rate of students making C or higher in CS, however, was significantly higher (8.0%).
- Success Rates in Developmental Courses (Grades of C or Better) Part-time CS students succeeded at a significantly higher rate in developmental courses (65.0%) compared to 59.5% of students not taking CS.
- Success Rates in Gateway Courses (Grades of C or Better) Part-time CS students succeeded at a similar rate in gateway courses to students not taking CS (73.9%, 73.4% respectively). However, the success in gateway courses was significantly higher for students making a C or higher in CS (78.9%).

The following tables represent the comparison details for full-time students by annual cohort followed by tables representing details for part-time students by annual cohort.

Full-time Student Aggregate Comparison

Fall-to-Spring Persistence Rate – A significantly higher percentage (85.5%) of the 16,311 first-time, fulltime, degree-seeking students who enrolled in CS, as well as those who earned a C or better in CS (93.9%), persisted to the first spring semester compared to 73.5% of the 10,029 students who did not enroll in the CS course.

Fall-to-Fall Retention Rate – A significantly higher percentage (61.7%) of the first-time, full-time students who enrolled in CS, as well as those who earned a C or better in CS (72.2%), enrolled in the second fall semester compared to 48.9% of students who did not enroll in the CS course.

Graduation Within Three Years – Significantly more of the first-time, full-time (16.1%) students who enrolled in CS, as well as those who earned a C or better in CS (19.5%), graduated within three years compared to 12.8% of students who did not take the course.

Success Rates in Developmental Courses (Grades of C or Higher) – Individual course success was determined by the highest grade received in a course from initial enrollment to report time in the following courses: Reading Foundations I, Reading Foundations II, Writing Foundations I, Writing Foundations I, Writing Foundations Workshop, Math Foundations I, Math Foundations II, Math Foundations I & II, Beginning and Intermediate Algebra, Essentials for Precalculus I, Essentials for Quantitative Reasoning (ENGL 0903, ENGL 0913, ENGL 0923, ENGL 0933, ENGL 0943, MATH 0003, MATH 0013, MATH 0055, MATH 0105, MATH 0123, MATH 0403 respectively). Success outcomes were tallied for all cohort students. CS students received significantly more grades of C or higher (68.1%) compared to 61.3% of grades of C or higher received by students who did not enroll in CS. In addition, students who received a C or higher in CS also earned a C or higher in 77.9% of their developmental courses.

Success Rates in Gateway Courses (Grades of C or Higher) – Individual course success was determined by the highest grade received in gateway course from initial enrollment to report time. Outcomes were tallied for all cohort students. The courses included were: Composition I, Quantitative Reasoning, Precalculus I, General Biology for Non-Majors, Introduction to Biology for Majors, U.S. History from 1492 to the Civil War Era, U.S. History Civil War Era to the Present, American Federal Government, and Introduction to Psychology (ENGL 1113, MATH 1473, MATH 1513, BIOL 1114, BIOL 1224, HIST 1483, HIST 1493, POLS 1113, PSYC 1113 respectively). CS students received significantly more grades of C or higher (79.4%) compared to 74.8% of grades of C or higher for students who did not enroll CS. In addition, students earning a C or higher in CS also earned a C or higher in 84.1% of their gateway courses.

The following tables represent the details for each comparison above by annual cohort for first-time, full-time students. A second series of comparison tables follow which summarize results for first-time, part-time students by annual cohort.

Full-time Stud	ent Fall Cohort	Enrollment in C	S By Year Includii	ng CS Success Ra	te				
Cohort	Entire Fall Cohort	Students Who	Enrolled in CS		Earned a C or r in CS		/ho Did Not Better in CS	Students Who Did Not Enroll in CS	
	Count	Count	% of Total Cohort	Count	% of CS Cohort	Count	% of CS Cohort	Count	% of Total Cohort
Fall 2008	1,684	945	56.1%	783	82.9%	162	17.1%	739	43.9%
Fall 2009	2,313	1,105	47.8%	940	85.1%	165	14.9%	1,208	52.2%
Fall 2010	1,978	882	44.6%	732	83.0%	150	17.0%	1,096	55.4%
Fall 2011	1,982	1,022	51.6%	846	82.8%	176	17.2%	960	48.4%
Fall 2012	1,663	830	49.9%	667	80.4%	163	19.6%	833	50.1%
Fall 2013+	1,720	1,257	73.1%	1,011	80.4%	246	19.6%	463	26.9%
Fall 2014+	2,057	1,485	72.2%	1,223	82.4%	262	17.6%	572	27.8%
Fall 2015+	2,099	1,485	70.7%	1,222	82.3%	263	17.7%	614	29.3%
Fall 2016+	1,935	1,445	74.7%	1,209	83.7%	236	16.3%	490	25.3%
Fall 2017†^	1,520	988	65.0%	831	84.1%	157	15.9%	532	35.0%
Fall 2018+^	1,648	1,041	63.2%	894	85.9%	147	14.1%	607	36.8%
Fall 2019†^	2,055	1,443	70.2%	1,199	83.1%	244	16.9%	612	29.8%
Fall 2020+^	1,845	1,195	64.8%	918	76.8%	277	23.2%	650	35.2%
Fall 2021+^	1,841	1,188	64.5%	909	76.5%	279	23.5%	653	35.5%
Total	26,340	16,311	61.9%	13,384	82.1%	2,927	17.9%	10,029	38.1%

Full-time Stude	ent Fall Cohort Enro	llment in CS W	ho Did Not Ear	n a C or Better	By Year				
Cohort	Students Who Did Not Earn a C or Better in CS	Developmen	tal Education	Tulsa A	Achieves	•	ital Education Achieves	Neither	
	Count	Count	% of Not C or Better	or Better Count or Better		% of Not C or Better	Count	% of Not C or Better	
Fall 2008	162	34	21.0%	39	24.1%	82	50.6%	7	4.3%
Fall 2009	165	40	24.2%	39	23.6%	82	49.7%	4	2.4%
Fall 2010	150	45	30.0%	34	22.7%	67	44.7%	4	2.7%
Fall 2011	176	66	37.5%	21	11.9%	81	46.0%	8	4.5%
Fall 2012	163	60	36.8%	18	11.0%	82	50.3%	3	1.8%
Fall 2013+	246	125	50.8%	29	11.8%	79	32.1%	13	5.3%
Fall 2014+	262	115	43.9%	49	18.7%	83	31.7%	15	5.7%
Fall 2015+	263	83	31.6%	58	22.1%	108	41.1%	14	5.3%
Fall 2016+	236	85	36.0%	37	15.7%	97	41.1%	17	7.2%
Fall 2017+^	157	52	33.1%	41	26.1%	58	36.9%	6	3.8%
Fall 2018+^	147	36	24.5%	52	35.4%	46	31.3%	13	8.8%
Fall 2019+^	244	66	27.0%	71	29.1%	101	41.4%	6	2.5%
Fall 2020+^	277	56	20.2%	94	33.9%	110	39.7%	12	4.3%
Fall 2021 ⁺ ^	279	59	21.1%	81	29.0%	129	46.2%	10	3.6%
Total	2,927	922	31.5%	663	22.7%	1,205	41.2%	132	4.5%

Fall-to-Spring	Persistence F	Rates of First-ti	me, Full-time	Students						
Cohort		ho Enrolled in CS		o Earned a C or er in CS		o Did Not Earn a etter in CS		Who Did Not oll in CS	Entire F	all Cohort
	Count	% of CS Cohort	Count	% of C or Better in CS	Count	% of Not C or Better in CS	Count	% of Non-CS Cohort	Count	% of Total Cohort
Fall 2008	849	89.8%***	754	96.3%***	95	58.6%	507	68.6%	1,356	80.5%
Fall 2009	1,000	90.5%***	903	96.1%***	97	58.8%	936	77.5%	1,936	83.7%
Fall 2010	778	88.2%***	696	95.1%***	82	54.7%	827	75.5%	1,605	81.1%
Fall 2011	901	88.2%***	799	94.4%***	102	58.0%	719	74.9%	1,620	81.7%
Fall 2012	735	88.6%***	647	97.0%***	88	54.0%	636	76.4%	1,371	82.4%
Fall 2013+	1,075	85.5%***	954	94.4%***	121	49.2%	329	71.1%	1,404	81.6%
Fall 2014+	1,287	86.7%***	1,153	94.3%***	134	51.1%	405	70.8%	1,692	82.3%
Fall 2015+	1,264	85.1%***	1,150	94.1%***	114	43.3%	437	71.2%	1,701	81.0%
Fall 2016+	1,240	85.8%***	1,132	93.6%***	108	45.8%	341	69.6%	1,581	81.7%
Fall 2017+^	822	83.2%***	754	90.7%***	68	43.3%	370	69.5%	1,192	78.4%
Fall 2018+^	891	85.6%***	817	91.4%***	74	50.3%	450	74.1%	1,341	81.4%
Fall 2019+^	1,216	84.3%***	1,122	93.6%***	94	38.5%	456	74.5%	1,672	81.4%
Fall 2020+^	941	78.7%***	844	91.9%***	97	35.0%	478	73.5%	1,419	76.9%
Fall 2021+^	954	80.3%***	846	93.1%***	108	38.7%	484	74.1%	1438	78.1%
Total	13,953	85.5%***	12,571	93.9%***	1,382	47.2%	7,375	73.5%	21,328	81.0%

^Beginning Fall 2017 the CS course dropped from three hours to two.

***Students enrolling in CS persisted to spring at significantly higher rates compared to Non-CS students, *p* < .001.

Fail-to-Spring F	Retained First-time,	Full-time Stud		lot Earn a C Or	Better in CS	0	m		
Cohort	Students Who Did Not Earn a C or Better in CS	Developmen	tal Education	Tulsa A	Achieves	•	ital Education Achieves	Neither	
	Count	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better
Fall 2008	95	23	24.2%	20	21.1%	48	50.5%	4	4.2%
Fall 2009	97	28	28.9%	22	22.7%	45	46.4%	2	2.1%
Fall 2010	82	32	39.0%	16	19.5%	33	40.2%	1	1.2%
Fall 2011	102	47	46.1%	8	7.8%	42	41.2%	5	4.9%
Fall 2012	88	31	35.2%	12	13.6%	43	48.9%	2	2.3%
Fall 2013+	121	67	55.4%	14	11.6%	32	26.4%	8	6.6%
Fall 2014+	134	57	42.5%	27	20.1%	41	30.6%	9	6.7%
Fall 2015+	114	47	41.2%	21	18.4%	41	36.0%	5	4.4%
Fall 2016+	108	45	41.7%	14	13.0%	38	35.2%	11	10.2%
Fall 2017+^	68	21	30.9%	18	26.5%	28	41.2%	1	1.5%
Fall 2018+^	74	18	24.3%	28	37.8%	23	31.1%	5	6.8%
Fall 2019+^	94	24	25.5%	27	28.7%	41	43.6%	2	2.1%
Fall 2020+^	97	14	14.4%	33	34.0%	41	42.3%	6	6.2%
Fall 2021 ⁺ ^	108	21	19.4%	40	37.0%	43	39.8%	4	3.7%
Total	1,382	475	34.4%	300	21.7%	539	39.0%	65	4.7%

^Beginning Fall 2017 the CS course dropped from three hours to two.

Cohort		ho Enrolled in CS		io Earned a C or er in CS		o Did Not Earn a tter in CS		Who Did Not oll in CS	Entire F	all Cohort
	Count	% of CS Cohort	Count	% of C or Better in CS	Count	% of Not C or Better in CS	Count	% of Non-CS Cohort	Count	% of Total Cohort
Fall 2008	622	65.8%***	598	76.4%***	24	14.8%	371	50.2%	993	59.0%
Fall 2009	671	60.7%***	646	68.7%***	25	15.2%	583	48.3%	1,254	54.2%
Fall 2010	570	64.6%***	545	74.5%***	25	16.7%	509	46.4%	1,079	54.6%
Fall 2011	596	58.3%***	580	68.6%***	16	9.1%	418	43.5%	1,014	51.2%
Fall 2012	497	59.9%***	472	70.8%***	25	15.3%	391	46.9%	888	53.4%
Fall 2013+	756	60.1%***	726	71.8%***	30	12.2%	221	47.7%	977	56.8%
Fall 2014+	900	60.6%***	870	71.1%***	30	11.5%	269	47.0%	1,169	56.8%
Fall 2015+	933	62.8%***	904	74.0%***	29	11.0%	303	49.3%	1,236	58.9%
Fall 2016+	934	64.6%***	902	74.6%***	32	13.6%	240	49.0%	1,174	60.7%
Fall 2017+^	599	60.6%***	580	69.8%***	19	12.1%	247	46.4%	846	55.7%
Fall 2018+^	684	65.7%***	657	73.5%***	27	18.4%	322	53.0%	1,006	61.0%
Fall 2019+^	893	61.9%*	859	71.6%***	34	13.9%	354	57.8%	1,247	60.7%
Fall 2020+^	706	59.1%***	667	72.7%***	39	14.1%	334	51.4%	1,040	56.4%
Fall 2021†^	701	59.0%***	656	72.2%***	45	16.1%	340	52.1%	1,041	56.5%
Total	10,062	61.7%***	9,662	72.2%***	400	13.7%	4,902	48.9%	14,964	56.8%

^Beginning Fall 2017 the CS course dropped from three hours to two.

***Students enrolling in CS enrolled at significantly higher rates for second fall semester compared to Non-CS students, *p* < .001.

	Students Who								
Cohort	Did Not Earn a C or Better in CS	Developmer	ntal Education	Tulsa A	Achieves	•	ntal Education a Achieves	Ne	ither
	Count	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better
Fall 2008	24	4	16.7%	4	16.7%	14	58.3%	2	8.3%
Fall 2009	25	7	28.0%	5	20.0%	13	52.0%	0	0.0%
Fall 2010	25	8	32.0%	2	8.0%	13	52.0%	2	8.0%
Fall 2011	16	10	62.5%	1	6.3%	4	25.0%	1	6.3%
Fall 2012	25	10	40.0%	4	16.0%	11	44.0%	0	0.0%
Fall 2013+	30	17	56.7%	3	10.0%	8	26.7%	2	6.7%
Fall 2014+	30	12	40.0%	8	26.7%	7	23.3%	3	10.0%
Fall 2015+	29	9	31.0%	9	31.0%	10	34.5%	1	3.4%
Fall 2016+	32	14	43.8%	7	21.9%	9	28.1%	2	6.3%
Fall 2017 ⁺ ^	19	4	21.1%	9	47.4%	6	31.6%	0	0.0%
Fall 2018+^	27	7	25.9%	8	29.6%	9	33.3%	3	11.1%
Fall 2019+^	34	8	23.5%	15	44.1%	11	32.4%	0	0.0%
Fall 2020+^	39	4	10.3%	17	43.6%	15	38.5%	2	5.1%
Fall 2021+^	45	11	24.4%	14	31.1%	19	42.2%	1	2.2%
Total	400	125	31.3%	106	26.5%	149	37.3%	19	4.8%

Graduation fr	om TCC withi	n Three Years	– First-time, F	ull-time Studen	ts					
Cohort		ho Enrolled in CS		o Earned a C or er in CS		o Did Not Earn a tter in CS		Who Did Not II in CS	Entire F	all Cohort
	Count	% of CS Cohort	Count	% of C or Better in CS	Count	% of Not C or Better in CS	Count	% of Non-CS Cohort	Count	% of Total Cohort
Fall 2008	132	14.0%*	131	16.7%***	1	0.6%	83	11.2%	215	12.8%
Fall 2009	167	15.1%***	166	17.7%***	1	0.6%	131	10.8%	298	12.9%
Fall 2010	163	18.5%***	162	22.1%***	1	0.7%	113	10.3%	276	14.0%
Fall 2011	173	16.9%***	172	20.3%***	1	0.6%	91	9.5%	264	13.3%
Fall 2012	129	15.5%**	127	19.0%***	2	1.2%	103	12.4%	232	14.0%
Fall 2013+	180	14.3%	177	17.5%	3	1.2%	82	17.7%+	262	15.2%
Fall 2014+	229	15.4%	227	18.6%*	2	0.8%	88	15.4%	317	15.4%
Fall 2015+	268	18.0%	265	21.7%*	3	1.1%	111	18.1%	379	18.1%
Fall 2016+	313	21.7%***	312	25.8%***	1	0.4%	81	16.5%	394	20.4%
Fall 2017+^	235	23.8%**	234	28.2%***	1	0.6%	104	19.5%	339	22.3%
Fall 2018+^	282	27.1%**	278	31.1%***	4	2.7%	138	22.7%	420	25.5%
Fall 2019+^	356	24.2%	354	29.0%*	2	0.8%	156	22.8%	512	23.7%
Fall 2020+^		•	Available after Summer 2023							
Fall 2021+^				Av	ailable after S	ummer 2024				
Total	2,627	16.1%***	2,605	19.5%***	22	0.8%	1,281	12.8%	3,908	14.8%

^Beginning Fall 2017 the CS course dropped from three hours to two.

*Students enrolling in CS graduated within 3 years at significantly higher rates compared to Non-CS students, p < .05.

**Students enrolling in CS graduated within 3 years at significantly higher rates compared to Non-CS students, p < .01.

***Students enrolling in CS graduated within 3 years at significantly higher rates compared to Non-CS students, *p* < .001.

⁺Students not enrolling in CS graduated within 3 years at significantly higher rates compared to CS students, p < .05.

Cohort	Students Who Did Not Earn a C or Better in CS	Developmen	tal Education	Tulsa A	Tulsa Achieves		atal Education Achieves	Neither		
	Count	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better	
Fall 2008	1	0	0.0%	0	0.0%	0	0.0%	1	100.0%	
Fall 2009	1	1	100.0%	0	0.0%	0	0.0%	0	0.0%	
Fall 2010	1	1	100.0%	0	0.0%	0	0.0%	0	0.0%	
Fall 2011	1	0	0.0%	0	0.0%	0	0.0%	1	100.0%	
Fall 2012	2	2	100.0%	0	0.0%	0	0.0%	0	0.0%	
Fall 2013+	3	2	66.7%	1	33.3%	0	0.0%	0	0.0%	
Fall 2014+	2	2	100.0%	0	0.0%	0	0.0%	0	0.0%	
Fall 2015+	3	0	0.0%	2	66.7%	1	33.3%	0	0.0%	
Fall 2016+	1	0	0.0%	1	100.0%	0	0.0%	0	0.0%	
Fall 2017+^	1	0	0.0%	1	100.0%	0	0.0%	0	0.0%	
Fall 2018†^	4	2	50.0%	1	25.0%	0	0.0%	1	25.0%	
Fall 2019 ⁺ ^	2	1	50.0%	0.0%	0	0.0%				
Fall 2020+^			Available after Summer 2023							
Fall 2021+^				Available	e after Summer	2024				
Total	22	11	50.0%	7	31.8%	1	4.5%	3	13.6%	

Student Succe	ess Rates (Grades	of C or Bette	er) in Developme	ental Course	s – First-time, F	ull-time Stuc	lents			
Cohort	Students Who E	nrolled in CS	Students Who E Better i		Students Who I a C or Bett		Students Who Enroll in		Entire Fall Co	hort
Fall 2008	1,204 of 1,716 Grades	70.2%***	1,091 of 1,414 Grades	77.2%***	113 of 302 Grades	37.4%	729 of 1,160 Grades	62.8%	1,933 of 2,876 Grades	67.2%
Fall 2009	1,233 of 1,855 Grades	66.5%***	1,150 of 1,561 Grades	73.7%***	83 of 294 Grades	28.2%	1,179 of 1,913 Grades	61.6%	2,412 of 3,768 Grades	64.0%
Fall 2010	985 of 1,448 Grades	68.0%***	907 of 1,202 Grades	75.5%***	78 of 246 Grades	31.7%	1,089 of 1,829 Grades	59.5%	2,074 of 3,277 Grades	63.3%
Fall 2011	1,180 of 1,774 Grades	66.5%***	1,083 of 1,426 Grades	75.9%***	97 of 348 Grades	27.9%	985 of 1,605 Grades	61.4%	2,165 of 3,379 Grades	64.1%
Fall 2012	1,022 of 1,519 Grades	67.3%***	929 of 1,178 Grades	78.9%***	93 of 341 Grades	27.3%	761 of 1,272 Grades	59.8%	1,783 of 2,791 Grades	63.9%
Fall 2013†	1,495 of 2,182 Grades	68.5%***	1,384 of 1,741 Grades	79.5%***	111 of 441 Grades	25.2%	160 of 304 Grades	52.6%	1,655 of 2,486 Grades	66.6%
Fall 2014†	1,451 of 2,163 Grades	67.1%***	1,376 of 1,788 Grades	77.0%***	75 of 375 Grades	20.0%	221 of 370 Grades	59.7%	1,672 of 2,533 Grades	66.0%
Fall 2015†	1,296 of 1,912 Grades	67.8%***	1,214 of 1,562 Grades	77.7%***	82 of 350 Grades	23.4%	230 of 377 Grades	61.0%	1,526 of 2,289 Grades	66.7%
Fall 2016†	1,592 of 2,251 Grades	70.7%***	1,486 of 1,869 Grades	79.5%***	106 of 382 Grades	27.7%	184 of 305 Grades	60.3%	1,776 of 2,556 Grades	69.5%
Fall 2017†^	757 of 1,135 Grades	66.7%	716 of 940 Grades	76.2%***	41 of 195 Grades	21.0%	193 of 306 Grades	63.1%	950 of 1,441 Grades	65.9%
Fall 2018†^	821 of 1,088 Grades	75.5%***	777 of 942 Grades	82.5%***	44 of 146 Grades	30.1%	340 of 497 Grades	68.4%	1,161 of 1,585 Grades	73.2%
Fall 2019†^	1,076 of 1,531 Grades	70.3%***	1,023 of 1,247 Grades	82.0%***	53 of 284 Grades	18.7%	230 of 360 Grades	63.9%	1,306 of 1,891 Grades	69.1%
Fall 2020+^	448 of 698 Grades	64.2%	411 of 538 Grades	76.4%***	37 of 160 Grades	23.1%	146 of 228 Grades	64.0%	594 of 926 Grades	64.1%
Fall 2021†^	524 of 876 Grades	59.8%	471 of 588 Grades	80.1% ***	53 of 288 Grades	18.4%	178 of 290 Grades	61.4%	702 of 1,166 Grades	60.2%
Total	15,084 of 22,148 Grades	68.1%***	14,018 of 17,996 Grades	77.9%***	1,066 of 4,152 Grades	25.7%	6,625 of 10,816 Grades	61.3%	21,709 of 32,964 Grades	65.9%

^Beginning Fall 2017 the CS course dropped from three hours to two.

*Students enrolled in CS performed significantly better compared to Non-CS students, p < .05.

***Students enrolled in CS performed significantly better compared to Non-CS students, p < .001.

Student Succes	ss Rates (Grades of	C or Better) in [Developmental	Courses – First-time, Full-tim	e Students Who	Did Not Earn	a C or Better in CS
Cohort	Students Who Did Not Earn a C or Better in CS	Development	al Education	Tulsa Achieves	Developmen and Tulsa	tal Education Achieves	Neither
Fall 2008	113 of 302 Grades	41 of 104 Grades	39.4%		72 of 192 Grades	37.5%	
Fall 2009	83 of 294 Grades	26 of 109 Grades	23.9%		57 of 185 Grades	30.8%	
Fall 2010	78 of 246 Grades	37 of 108 Grades	34.3%		41 of 138 Grades	29.7%	
Fall 2011	97 of 348 Grades	66 of 182 Grades	36.3%		31 of 166 Grades	18.7%	
Fall 2012	93 of 341 Grades	41 of 155 Grades	26.5%		52 of 186 Grades	28.0%	
Fall 2013+	111 of 441 Grades	78 of 291 Grades	26.8%		33 of 150 Grades	22.0%	
Fall 2014+	75 of 375 Grades	41 of 224 Grades	18.3%		31 of 148 Grades	20.9%	
Fall 2015+	82 of 350 Grades	37 of 153 Grades	24.2%		43 of 195 Grades	22.1%	
Fall 2016+	106 of 382 Grades	46 of 170 Grades	27.1%		57 of 209 Grades	27.3%	
Fall 2017+^	41 of 195 Grades	19 of 96 Grades	19.8%		17 of 93 Grades	18.3%	
Fall 2018+^	44 of 146 Grades	18 of 61 Grades	29.5%		23 of 81 Grades	28.4%	
Fall 2019+^	53 of 284 Grades	24 of 121 Grades	19.8%		28 of 152 Grades	18.4%	
Fall 2020+^	37 of 160 Grades	5 of 52 Grades	9.6%		28 of 97 Grades	28.9%	
Fall 2021+^	53 of 288 Grades	16 of 98 Grades	16.3%		35 of 177 Grades	19.8%	
Total	1,066 of 4,152 Grades	495 of 1,924 Grades	25.7%		548 of 2,169 Grades	25.3%	

Student Succ	ess Rates (Grade	s of C or Bett	er) in Gateway C	ourses – First	t-time, Full-tim	e Students				
Cohort	Students Who E	Enrolled in CS	Students Who E Better i		Students Who a C or Bet		Students Who Enroll in		Entire Fall Cor	nort
Fall 2008	2,950 of 3,805 Grades	77.5%***	2,807 of 3,442 Grades	81.6%***	143 of 363 Grades	39.4%	1,848 of 2,581 Grades	71.6%	4,798 of 6,386 Grades	75.1%
Fall 2009	3,578 of 4,584 Grades	78.1%***	3,423 of 4,214 Grades	81.2%***	155 of 370 Grades	41.9%	3,396 of 4,665 Grades	72.8%	6,974 of 9,249 Grades	75.4%
Fall 2010	3,024 of 3,794 Grades	79.7%***	2,862 of 3,433 Grades	83.4%***	162 of 361 Grades	44.9%	2,835 of 4,006 Grades	70.8%	5,859 of 7,800 Grades	75.1%
Fall 2011	3,329 of 4,249 Grades	78.3%***	3,194 of 3,900 Grades	81.9%***	135 of 349 Grades	38.7%	2,463 of 3,451 Grades	71.4%	5,792 of 7,700 Grades	75.2%
Fall 2012	2,607 of 3,299 Grades	79.0%***	2,501 of 3,005 Grades	83.2%***	106 of 294 Grades	36.1%	2,256 of 3,061 Grades	73.7%	4,863 of 6,360 Grades	76.5%
Fall 2013†	4,010 of 5,047 Grades	79.5%*	3,839 of 4,585 Grades	83.7%***	171 of 462 Grades	37.0%	1,371 of 1,771 Grades	77.4%	5,381 of 6,818 Grades	78.9%
Fall 2014†	4,904 of 6,130 Grades	80.0%***	4,697 of 5,565 Grades	84.4%***	207 of 565 Grades	36.6%	1,685 of 2,183 Grades	77.2%	6,589 of 8,313 Grades	79.3%
Fall 2015†	4,948 of 6,154 Grades	80.4%	4,752 of 5,586 Grades	85.1%***	196 of 568 Grades	34.5%	1,883 of 2,352 Grades	80.1%	6,831 of 8,506 Grades	80.3%
Fall 2016†	4,816 of 5,892 Grades	81.7%***	4,626 of 5,411 Grades	85.5%***	190 of 481 Grades	39.5%	1,449 of 1,850 Grades	78.3%	6,265 of 7,742 Grades	80.9%
Fall 2017†^	3,316 of 4,221 Grades	78.6%***	3,202 of 3,804 Grades	84.2%***	114 of 417 Grades	27.3%	1,556 of 2,053 Grades	75.8%	4,872 of 6,274 Grades	77.7%
Fall 2018†^	3,714 of 4,554 Grades	81.6%***	3,554 of 4,129 Grades	86.1%***	160 of 425 Grades	37.6%	1,817 of 2,349 Grades	77.4%	5,531 of 6,903 Grades	80.1%
Fall 2019†^	4,454 of 5,675 Grades	78.5%	4,339 of 5,190 Grades	83.6%***	115 of 485 Grades	23.7%	1,890 of 2,419 Grades	78.1%	6,344 of 8,094 Grades	78.4%
Fall 2020†^	3,181 of 4,057 Grades	78.4%*	3,037 of 3,535 Grades	85.9%***	144 of 522 Grades	27.6%	1,871 of 2,445 Grades	76.5%	5,052 of 6,502 Grades	77.7%
Fall 2021 ⁺ ^	2,742 of 3,515 Grades	78.0%***	2,630 of 3,034 Grades	86.7%***	112 of 481 Grades	23.3%	1,636 of 2,188 Grades	74.8%	4,378 of 5,703 Grades	76.8%
Total	51,573 of 64,976 Grades	79.4%***	49,463 of 58,833 Grades	84.1%***	2,110 of 6,143 Grades	34.3%	27,956 of 37,374 Grades	74.8%	79,529 of 102,350 Grades	77.7%

^Beginning Fall 2017 the CS course dropped from three hours to two.

*Students enrolled in CS performed significantly better compared to Non-CS students, p < .05.

**Students enrolled in CS performed significantly better compared to Non-CS students, p < .01.

***Students enrolled in CS performed significantly better compared to Non-CS students, *p* < .001.

Student Succes	ss Rates (Grades of	C or Better) in (Gateway Cours	es – First-time,	Full-time Stud	ents Who Did N	ot Earn a C or I	Better in CS	
Cohort	Students Who Did Not Earn a C or Better in CS	Developmen	tal Education	Tulsa A	chieves	Developmen ^a and Tulsa		Neit	her
Fall 2008	143 of 363 Grades	36 of 67 Grades	53.7%	33 of 113 Grades	29.2%	67 of 163 Grades	41.1%	7 of 20 Grades	35.0%
Fall 2009	155 of 370 Grades	32 of 68 Grades	47.1%	47 of 130 Grades	36.2%	69 of 156 Grades	44.2%	7 of 16 Grades	43.8%
Fall 2010	162 of 361 Grades	39 of 84 Grades	46.4%	35 of 101 Grades	34.7%	85 of 163 Grades	52.1%	3 of 13 Grades	23.1%
Fall 2011	135 of 349 Grades	55 of 115 Grades	47.8%	24 of 64 Grades	37.5%	45 of 149 Grades	30.2%	11 of 21 Grades	52.4%
Fall 2012	106 of 294 Grades	34 of 78 Grades	43.6%	21 of 61 Grades	34.4%	50 of 148 Grades	33.8%	1 of 7 Grades	14.3%
Fall 2013+	171 of 462 Grades	83 of 201 Grades	41.3%	42 of 99 Grades	42.4%	40 of 136 Grades	29.4%	6 of 26 Grades	23.1%
Fall 2014+	207 of 565 Grades	64 of 184 Grades	34.8%	75 of 164 Grades	45.7%	49 of 165 Grades	29.7%	19 of 52 Grades	36.5%
Fall 2015+	196 of 568 Grades	44 of 150 Grades	29.3%	81 of 189 Grades	42.9%	65 of 195 Grades	33.3%	6 of 34 Grades	17.6%
Fall 2016+	190 of 481 Grades	63 of 162 Grades	38.9%	52 of 120 Grades	43.3%	48 of 150 Grades	32.0%	27 of 49 Grades	55.1%
Fall 2017†^	114 of 417 Grades	16 of 103 Grades	15.5%	66 of 148 Grades	44.6%	25 of 148 Grades	16.9%	7 of 18 Grades	38.9%
Fall 2018†^	160 of 425 Grades	33 of 92 Grades	35.9%	73 of 182 Grades	40.1%	37 of 109 Grades	33.9%	17 of 42 Grades	40.5%
Fall 2019†^	115 of 485 Grades	23 of 104 Grades	22.1%	63 of 216 Grades	29.2%	29 of 155 Grades	18.7%	0 of 10 Grades	0.0%
Fall 2020†^	144 of 522 Grades	13 of 68 Grades	19.1%	81 of 269 Grades	30.1%	35 of 148 Grades	23.6%	14 of 29 Grades	48.3%
Fall 2021+^	112 of 481 Grades	20 of 69 Grades	29.0%	64 of 215 Grades	29.8%	21 of 174 Grades	12.1%	7 of 23 Grades	30.4%
Total	2,110 of 6,143 Grades	555 of 1,545 Grades	35.9%	757 of 2,071 Grades	36.6%	665 of 2,159 Grades	30.8%	132 of 360 Grades	36.7%

TCC Institutional Research, October 2022

SR-2223-5679 | Page 17

Part-time Student Aggregate Comparison

Fall-to-Spring Persistence Rate – A significantly higher percentage (71.2%) of the 10,046 first-time, parttime, degree-seeking students who enrolled in CS, as well as those who earned a C or better in CS (85.9%), persisted to the first spring semester compared to 52.2% of the 11,879 students who did not enroll in the course.

Fall-to-Fall Retention Rate – A significantly higher percentage (47.4%) of the first-time, part-time students who enrolled in CS, as well as those who earned a C or better in CS (62.6%), enrolled in the second fall semester compared to 33.2% of students who did not enroll in the course.

Graduation Within Three Years – 5.8% of part-time students who enrolled in CS, and 8.0% of those who earned a C or better in CS, graduated within three years compared to 6.0% of students who did not take the course.

Success Rates in Developmental Courses (Grades of C or Higher) – Individual course success was determined by the highest grade received in a course from initial enrollment to report time in the following courses: Reading Foundations I, Reading Foundations II, Writing Foundations I, Writing Foundations I, Writing Foundations Workshop, Math Foundations I, Math Foundations II, Math Foundations I & II, Beginning and Intermediate Algebra, Essentials for Precalculus I, Essentials for Quantitative Reasoning (ENGL 0903, ENGL 0913, ENGL 0923, ENGL 0933, ENGL 0943, MATH 0003, MATH 0013, MATH 0055, MATH 0105, MATH 0123, MATH 0403 respectively). Success outcomes were tallied for all cohort students. CS students received significantly more grades of C or higher (65.0%) compared to 59.5% of grades of C or higher received by students who did not enroll in CS. In addition, students who received a C or higher in CS also earned a C or higher in 75.5% of their developmental courses.

Success Rates in Gateway Courses (Grades of C or Higher) Individual course success was determined by the highest grade received in gateway course from initial enrollment to report time. Outcomes were tallied for all cohort students. The courses included were: Composition I, Quantitative Reasoning, Precalculus I, General Biology for Non-Majors, Introduction to Biology for Majors, U.S. History from 1492 to the Civil War Era, U.S. History Civil War Era to the Present, American Federal Government, and Introduction to Psychology (ENGL 1113, MATH 1473, MATH 1513, BIOL 1114, BIOL 1224, HIST 1483, HIST 1493, POLS 1113, PSYC 1113 respectively). CS students received 73.9% grades of C or higher compared to 73.4% of grades of C or higher for students who did not enroll CS. Although the rate for CS students was slightly higher, the difference was not significant. Other factors unique to the part-time student experience may be impacting course outcomes. However, students receiving a C or higher in CS also earned a C or higher in 78.9% of their gateway courses which is a significantly higher rate than students not taking CS.

The following tables represent the details for each comparison above by annual cohort for first-time, part-time students.

Part-time Stud	dent Fall Cohort	Enrollment in C	S By Year Includi	ng CS Success Ra	ate				
Cohort	Entire Fall Cohort	Students Who	Enrolled in CS		Earned a C or r in CS		/ho Did Not Better in CS	Students Who Did Not Enroll in CS	
	Count	Count	% of Total Cohort	Count	% of CS Cohort	Count	% of CS Cohort	Count	% of Total Cohort
Fall 2008	809	171	21.1%	112	65.5%	59	34.5%	638	78.9%
Fall 2009	1,681	285	17.0%	201	70.5%	84	29.5%	1,396	83.0%
Fall 2010	1,770	410	23.2%	298	72.7%	112	27.3%	1,360	76.8%
Fall 2011	1,515	394	26.0%	286	72.6%	108	27.4%	1,121	74.0%
Fall 2012	1,583	420	26.5%	279	66.4%	141	33.6%	1,163	73.5%
Fall 2013+	1,547	806	52.1%	597	74.1%	209	25.9%	741	47.9%
Fall 2014+	1,609	857	53.3%	627	73.2%	230	26.8%	752	46.7%
Fall 2015+	1,536	785	51.1%	600	76.4%	185	23.6%	751	48.9%
Fall 2016+	1,716	981	57.2%	713	72.7%	268	27.3%	735	42.8%
Fall 2017†^	2,248	1,586	70.6%	1,210	76.3%	376	23.7%	662	29.4%
Fall 2018+^	2,025	1,348	66.6%	941	69.8%	407	30.2%	677	33.4%
Fall 2019+^	1,405	784	55.8%	546	69.6%	238	30.4%	621	44.2%
Fall 2020+^	1,231	637	51.7%	381	59.8%	256	40.2%	594	48.3%
Fall 2021+^	1,250	582	46.6%	356	61.2%	226	38.8%	668	53.4%
Total	21,925	10,046	45.8%	7,147	71.1%	2,899	28.9%	11,879	54.2%

Part-time Stud	ent Fall Cohort Enro	ollment in CS V	Vho Did Not Ear	n a C or Better	· By Year				
Cohort	Students Who Did Not Earn a C or Better in CS	Developmer	tal Education	Tulsa A	achieves		tal Education Achieves	Ne	ither
	Count	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better
Fall 2008	59	18	30.5%	14	23.7%	23	39.0%	4	6.8%
Fall 2009	84	25	29.8%	19	22.6%	36	42.9%	4	4.8%
Fall 2010	112	28	25.0%	26	23.2%	46	41.1%	12	10.7%
Fall 2011	108	29	26.9%	23	21.3%	50	46.3%	6	5.6%
Fall 2012	141	38	27.0%	29	20.6%	59	41.8%	15	10.6%
Fall 2013+	209	103	49.3%	29	13.9%	59	28.2%	18	8.6%
Fall 2014+	230	105	45.7%	40	17.4%	72	31.3%	13	5.7%
Fall 2015+	185	65	35.1%	40	21.6%	70	37.8%	10	5.4%
Fall 2016+	268	90	33.6%	56	20.9%	102	38.1%	20	7.5%
Fall 2017†^	376	135	35.9%	78	20.7%	127	33.8%	36	9.6%
Fall 2018†^	407	94	23.1%	106	26.0%	150	36.9%	57	14.0%
Fall 2019 ⁺ ^	238	53	22.3%	16	6.7%	154	64.7%	15	6.3%
Fall 2020†^	256	79	30.9%	47	18.4%	111	43.4%	7	2.7%
Fall 2021+^	226	63	27.9%	43	19.0%	106	46.9%	14	6.2%
Total	2,899	925	31.9%	566	19.5%	1,165	40.2%	231	8.0%

Fall-to-Spring	Persistence F	ates of First-ti	me, Part-time	Students						
Cohort		ho Enrolled in CS		o Earned a C or er in CS		o Did Not Earn a tter in CS		Vho Did Not Il in CS	Entire F	all Cohort
	Count	% of CS Cohort	Count	% of C or Better in CS	Count	% of Not C or Better in CS	Count	% of Non-CS Cohort	Count	% of Total Cohort
Fall 2008	130	76.0%***	97	86.6%***	33	55.9%	366	57.4%	496	61.3%
Fall 2009	220	77.2%***	177	88.1%***	43	51.2%	654	46.8%	874	52.0%
Fall 2010	306	74.6%***	262	87.9%***	44	39.3%	682	50.1%	988	55.8%
Fall 2011	300	76.1%***	248	86.7%***	52	48.1%	679	60.6%	979	64.6%
Fall 2012	311	74.0%***	250	89.6%***	61	43.3%	680	58.5%	991	62.6%
Fall 2013+	603	74.8%***	513	85.9%***	90	43.1%	351	47.4%	954	61.7%
Fall 2014+	651	76.0%***	546	87.1%***	105	45.7%	368	48.9%	1,019	63.3%
Fall 2015+	601	76.6%***	525	87.5%***	76	41.1%	364	48.5%	965	62.8%
Fall 2016+	745	75.9%***	625	87.7%***	120	44.8%	311	42.3%	1,056	61.5%
Fall 2017+^	1,092	68.9%***	1,001	82.7%***	91	24.2%	351	53.0%	1,443	64.2%
Fall 2018+^	927	68.8%***	805	85.5%***	122	30.0%	371	54.8%	1,298	64.1%
Fall 2019+^	519	66.2%***	469	85.9%***	50	21.0%	338	54.4%	857	61.0%
Fall 2020+^	375	58.9%	310	81.4%***	65	25.4%	330	55.6%	705	57.3%
Fall 2021+^	376	64.6%***	312	87.6%***	64	28.3%	360	53.9%	736	58.9%
Total	7,156	71.2%***	6,140	85.9%***	1,016	35.0%	6,205	52.2%	13,361	60.9%

^Beginning Fall 2017 the CS course dropped from three hours to two.

***Students enrolling in CS persisted to spring at significantly higher rates compared to Non-Academic Strategies students, p < .001.

Fall-to-Spring F	Persisted First-time,	, Part-time Stu	dents Who Did	Not Earn a C oi	r Better in CS				
Cohort	Students Who Did Not Earn a C or Better in CS	Developmen	tal Education	Tulsa A	Achieves	•	tal Education Achieves	Ne	ther
	Count	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better
Fall 2008	33	12	36.4%	6	18.2%	13	39.4%	2	6.1%
Fall 2009	43	17	39.5%	8	18.6%	17	39.5%	1	2.3%
Fall 2010	44	15	34.1%	8	18.2%	20	45.5%	1	2.3%
Fall 2011	52	16	30.8%	6	11.5%	27	51.9%	3	5.8%
Fall 2012	61	20	32.8%	11	18.0%	27	44.3%	3	4.9%
Fall 2013+	90	55	61.1%	4	4.4%	21	23.3%	10	11.1%
Fall 2014+	105	61	58.1%	10	9.5%	29	27.6%	5	4.8%
Fall 2015+	76	32	42.1%	15	19.7%	23	30.3%	6	7.9%
Fall 2016+	120	46	38.3%	17	14.2%	51	42.5%	6	5.0%
Fall 2017+^	91	38	41.8%	18	19.8%	29	31.9%	6	6.6%
Fall 2018+^	122	36	29.5%	25	20.5%	54	44.3%	7	5.7%
Fall 2019†^	50	13	26.0%	3	6.0%	32	64.0%	2	4.0%
Fall 2020+^	65	14	21.5%	17	26.2%	31	47.7%	1	1.5%
Fall 2021+^	64	20	31.3%	14	21.9%	25	39.1%	5	7.8%
Total	1,016	395	38.9%	162	15.9%	399	39.3%	58	5.7%

Cohort		ho Enrolled in CS		o Earned a C or er in CS		Did Not Earn a tter in CS		Who Did Not oll in CS	Entire F	all Cohort
	Count	% of CS Cohort	Count	% of C or Better in CS	Count	% of Not C or Better in CS	Count	% of Non-CS Cohort	Count	% of Total Cohort
Fall 2008	93	54.4%***	79	70.5%***	14	23.7%	236	37.0%	329	40.7%
Fall 2009	127	44.6%***	112	55.7%***	15	17.9%	395	28.3%	522	31.1%
Fall 2010	208	50.7%***	186	62.4%***	22	19.6%	407	29.9%	615	34.7%
Fall 2011	185	47.0%***	172	60.1%***	13	12.0%	415	37.0%	600	39.6%
Fall 2012	188	44.8%***	175	62.7%***	13	9.2%	393	33.8%	581	36.7%
Fall 2013+	382	47.4%***	364	61.0%***	18	8.6%	202	27.3%	584	37.8%
Fall 2014+	386	45.0%***	372	59.3%***	14	6.1%	226	30.1%	612	38.0%
Fall 2015+	409	52.1%***	391	65.2%***	18	9.7%	247	32.9%	656	42.7%
Fall 2016+	486	49.5%***	457	64.1%***	29	10.8%	213	29.0%	699	40.7%
Fall 2017+^	784	49.4%***	756	62.5%***	28	7.4%	243	36.7%	1,027	45.7%
Fall 2018+^	652	48.4%***	610	64.8%***	42	10.3%	260	38.4%	912	45.0%
Fall 2019+^	359	45.8%***	338	61.9%***	21	8.8%	230	37.0%	589	41.9%
Fall 2020+^	259	40.7%	232	60.9%***	27	10.5%	227	38.2%	486	39.5%
Fall 2021+^	243	41.8%*	228	64.0%***	15	6.6%	248	37.1%	491	39.3%
Total	4,761	47.4%***	4,472	62.6%***	289	10.0%	3,942	33.2%	8,703	39.7%

^Beginning Fall 2017 the CS course dropped from three hours to two.

***Students enrolling in CS enrolled at significantly higher rates for second fall semester compared to Non-CS students, *p* < .001.

Fall-to-Fall Reta	ained First-time, Pa	rt-time Studer	nts Who Did No	t Earn a C or Be	etter in CS				
Cohort	Students Who Did Not Earn a C or Better in CS	Developmer	ntal Education	Tulsa A	achieves	•	tal Education Achieves	Neither	
	Count	Count	% of Total Cohort	Count	% of Total Cohort	Count	% of Total Cohort	Count	% of Total Cohort
Fall 2008	14	7	50.0%	1	7.1%	5	35.7%	1	7.1%
Fall 2009	15	9	60.0%	3	20.0%	2	13.3%	1	6.7%
Fall 2010	22	9	40.9%	2	9.1%	11	50.0%	0	0.0%
Fall 2011	13	5	38.5%	3	23.1%	5	38.5%	0	0.0%
Fall 2012	13	7	53.8%	1	7.7%	3	23.1%	2	15.4%
Fall 2013+	18	7	38.9%	2	11.1%	7	38.9%	2	11.1%
Fall 2014+	14	8	57.1%	2	14.3%	3	21.4%	1	7.1%
Fall 2015+	18	6	33.3%	4	22.2%	7	38.9%	1	5.6%
Fall 2016+	29	12	41.4%	6	20.7%	11	37.9%	0	0.0%
Fall 2017+^	28	12	42.9%	5	17.9%	9	32.1%	2	7.1%
Fall 2018 ⁺ ^	42	10	23.8%	10	23.8%	18	42.9%	4	9.5%
Fall 2019 ⁺ ^	21	2	9.5%	1	4.8%	16	76.2%	2	9.5%
Fall 2020+^	27	6	22.2%	7	25.9%	14	51.9%	0	0.0%
Fall 2021 ⁺ ^	15	8	53.3%	4	26.7%	3	20.0%	0	0.0%
Total	289	108	37.4%	51	17.6%	114	39.4%	16	5.5%

Graduation fr	om TCC withi	n Three Years	- First-time, P	art-time Studen	ts					
Cohort		ho Enrolled in CS		no Earned a C or er in CS		o Did Not Earn a etter in CS		Who Did Not Il in CS	Entire F	all Cohort
	Count	% of CS Cohort	Count	% of C or Better in CS	Count	% of Not C or Better in CS	Count	% of Non-CS Cohort	Count	% of Total Cohort
Fall 2008	13	7.6%	13	11.6%**	0	0.0%	37	5.8%	50	6.2%
Fall 2009	8	2.8%	8	4.0%	0	0.0%	53	3.8%	61	3.6%
Fall 2010	29	7.1%***	29	9.7%***	0	0.0%	57	4.2%	86	4.9%
Fall 2011	22	5.6%	22	7.7%	0	0.0%	70	6.2%	92	6.1%
Fall 2012	14	3.3%	13	4.7%	1	0.7%	49	4.2%	63	4.0%
Fall 2013+	31	3.8%	31	5.2%	0	0.0%	61	8.2%+++	92	5.9%
Fall 2014+	37	4.3%	36	5.7%	1	0.4%	59	7.8%***	96	6.0%
Fall 2015+	48	6.1%	46	7.7%	2	1.1%	53	7.1%	101	6.6%
Fall 2016+	49	5.0%	48	6.7%	1	0.4%	60	8.2%+++	109	6.4%
Fall 2017+^	158	10.0%	157	13.0%**	1	0.3%	64	9.7%	222	9.9%
Fall 2018+^	111	8.2%	111	11.8%*	0	0.0%	63	9.3%	174	8.6%
Fall 2019+^	58	7.4%***	58	10.6%**	0	0.0%	90	14.5%	148	10.5%
Fall 2020+^		•	-	Av	ailable after S	ummer 2023		•	_	
Fall 2021+^				Av	ailable after S	ummer 2024				
Total	578	5.8%	572	8.0%***	6	0.2%	716	6.0%	1,294	5.9%

^Beginning Fall 2017 the CS course dropped from three hours to two.

*Students enrolling in CS graduated within 3 years at significantly higher rates compared to Non-CS Strategies students, p < .05.

**Students enrolling in CS graduated within 3 years at significantly higher rates compared to Non-CS students, p < .01.

***Students enrolling in CS graduated within 3 years at significantly higher rates compared to Non-CS students, *p* < .001.

***Students not enrolling in CS graduated within 3 years at significantly higher rates compared to CS students, *p* < .001.

Graduated from	n TCC within Three	Years – First-ti	me, Full-time S	tudents Who D	oid Not Earn a C	or Better in C	5		
Cohort	Students Who Did Not Earn a C or Better in CS	Developmen	tal Education	Tulsa A	chieves		ital Education Achieves	Ne	ither
	Count	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better	Count	% of Not C or Better
Fall 2008	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2009	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2010	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2011	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2012	1	0	0.0%	0	0.0%	0	0.0%	1	100.0%
Fall 2013+	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2014+	1	1	100.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2015+	2	0	0.0%	0	0.0%	0	0.0%	2	100.0%
Fall 2016+	1	1	100.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2017+^	1	1	100.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2018+^	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2019+^	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fall 2020+^				Available	e after Summer	2023			
Fall 2021+^				Available	e after Summer	2024			
Total	6	3	50.0%	0	0.0%	0	0.0%	3	50.0%

Student Succ	ess Rates (Grade	es of C or Bet	ter) in Developme	ntal Courses	– First-time, Par	t-time studen	ts			
Cohort	Students Who E	nrolled in CS	Students Who Ea Better in		Students Who D C or Bette		Students Who Did in CS	Not Enroll	Entire Fall Co	hort
Fall 2008	251 of 371 Grades	67.7%**	208 of 280 Grades	74.3%***	43 of 91 Grades	47.3%	568 of 919 Grades	61.8%	819 of 1,290 Grades	63.5%
Fall 2009	336 of 545 Grades	61.7%	290 of 423 Grades	68.6%***	46 of 122 Grades	37.7%	984 of 1,672 Grades	58.9%	1,320 of 2,217 Grades	59.5%
Fall 2010	501 of 740 Grades	67.7%***	428 of 579 Grades	73.9%***	73 of 161 Grades	45.3%	863 of 1,594 Grades	54.1%	1,364 of 2,334 Grades	58.4%
Fall 2011	512 of 767 Grades	66.8%**	462 of 609 Grades	75.9%***	50 of 158 Grades	31.6%	879 of 1,415 Grades	62.1%	1,391 of 2,182 Grades	63.7%
Fall 2012	435 of 709 Grades	61.4%	392 of 526 Grades	74.5%***	43 of 183 Grades	23.5%	891 of 1,485 Grades	60.0%	1,326 of 2,194 Grades	60.4%
Fall 2013†	1,040 of 1,588 Grades	65.5%***	971 of 1,306 Grades	74.3%***	69 of 282 Grades	24.5%	253 of 488 Grades	51.8%	1,293 of 2,076 Grades	62.3%
Fall 2014†	918 of 1,409 Grades	65.2%***	833 of 1,118 Grades	74.5%***	85 of 291 Grades	29.2%	284 of 496 Grades	57.3%	1,202 of 1,905 Grades	63.1%
Fall 2015†	766 of 1,180 Grades	64.9%**	697 of 956 Grades	72.9%***	69 of 224 Grades	30.8%	317 of 529 Grades	59.9%	1,083 of 1,709 Grades	63.4%
Fall 2016†	1,124 of 1,712 Grades	65.7%***	1,017 of 1,346 Grades	75.6%***	107 of 366 Grades	29.2%	310 of 569 Grades	54.5%	1,434 of 2,281 Grades	62.9%
Fall 2017†^	1,784 of 2,675 Grades	66.7%	1,693 of 2,206 Grades	76.7%***	91 of 469 Grades	19.4%	324 of 495 Grades	65.5%	2,108 of 3,170 Grades	66.5%
Fall 2018+^	1,347 of 2,004 Grades	67.2%	1,231 of 1,549 Grades	79.5%***	116 of 455 Grades	25.5%	364 of 566 Grades	64.3%	1,711 of 2,570 Grades	66.6%
Fall 2019†^	537 of 893 Grades	60.1%	500 of 654 Grades	76.5%***	37 of 239 Grades	15.5%	261 of 426 Grades	61.3%	798 of 1,319 Grades	60.5%
Fall 2020+^	213 of 379 Grades	56.2%***	190 of 254 Grades	74.8%**	23 of 125 Grades	18.4%	149 of 222 Grades	67.1%	362 of 601 Grades	60.2%
Fall 2021+^	309 of 534 Grades	57.9%***	277 of 360 Grades	76.9%***	32 of 174 Grades	18.4%	222 of 333 Grades	66.7%	531 of 867 Grades	61.2%
Total	10,073 of 15,506 Grades	65.0%***	9,189 of 12,166 Grades	75.5%***	884 of 3,340 Grades	26.5%	6,669 of 11,209 Grades	59.5%	16,742 of 26,715 Grades	62.7%

^Beginning Fall 2017 the CS course dropped from three hours to two.

**Students enrolled in CS performed significantly better compared to Non-CS students, p < .01.

***Students enrolled in CS performed significantly better compared to Non-CS students, *p* < .001.

Student Succes	ss Rates (Grades of	C or Better) in [Developmental	Courses – First-tin	ne, Full-time	e Students Who	Did Not Earn a	a C or Better in	CS
Cohort	Students Who Did Not Earn a C or Better in CS	Development	al Education	Tulsa Achie	eves	Developmen ⁻ and Tulsa		Neit	ther
Fall 2008	43 of 91 Grades	21 of 46 Grades	45.7%			22 of 45 Grades	48.9%		
Fall 2009	46 of 122 Grades	26 of 52 Grades	50.0%			20 of 70 Grades	28.6%		
Fall 2010	73 of 161 Grades	31 of 63 Grades	49.2%			42 of 98 Grades	42.9%		
Fall 2011	50 of 158 Grades	15 of 62 Grades	24.2%			35 of 95 Grades	36.8%		
Fall 2012	43 of 183 Grades	17 of 73 Grades	23.3%			26 of 110 Grades	23.6%		
Fall 2013+	69 of 282 Grades	48 of 180 Grades	26.7%			21 of 102 Grades	20.6%		
Fall 2014+	85 of 291 Grades	62 of 184 Grades	33.7%			23 of 106 Grades	21.7%		
Fall 2015+	69 of 224 Grades	36 of 113 Grades	31.9%			32 of 110 Grades	29.1%		
Fall 2016+	107 of 366 Grades	42 of 161 Grades	26.1%			59 of 198 Grades	29.8%		
Fall 2017+^	91 of 469 Grades	53 of 243 Grades	21.8%			32 of 218 Grades	14.7%		
Fall 2018 ⁺ ^	116 of 455 Grades	41 of 164 Grades	25.0%			70 of 283 Grades	24.7%		
Fall 2019†^	37 of 239 Grades	8 of 69 Grades	11.6%			27 of 167 Grades	16.2%		
Fall 2020+^	23 of 125 Grades	9 of 46 Grades	19.6%			12 of 73 Grades	16.4%		
Fall 2021+^	32 of 174 Grades	14 of 66 Grades	21.2%			15 of 100 Grades	15.0%		
Total	884 of 3,340 Grades	423 of 1,522 Grades	27.8%			436 of 1,775 Grades	24.6%		

Student Suc	cess Rates (Grad	des of C or Be	etter) in Gatewa	y Courses –	First-time, Part	-time student	s			
Cohort	Students Who E	nrolled in CS	Students Who Ea Better ir		Students Who I C or Bett		Students Who Enroll in (Entire Fall Co	ohort
Fall 2008	405 of 543 Grades	74.6%	330 of 427 Grades	77.3%	75 of 116 Grades	64.7%	1,191 of 1,582 Grades	75.3%	1,596 of 2,125 Grades	75.1%
Fall 2009	636 of 864 Grades	73.6%	554 of 727 Grades	76.2%**	82 of 137 Grades	59.9%	1,856 of 2,555 Grades	72.6%	2,492 of 3,419 Grades	72.9%
Fall 2010	917 of 1,254 Grades	73.1%	827 of 1,070 Grades	77.3%***	90 of 184 Grades	48.9%	1,925 of 2,669 Grades	72.1%	2,842 of 3,923 Grades	72.4%
Fall 2011	842 of 1,160 Grades	72.6%	781 of 1,027 Grades	76.0%	61 of 133 Grades	45.9%	1,853 of 2,488 Grades	74.5%	2,695 of 3,648 Grades	73.9%
Fall 2012	770 of 1,097 Grades	70.2%**	707 of 942 Grades	75.1%	63 of 155 Grades	40.6%	1,816 of 2,458 Grades	73.9%	2,586 of 3,555 Grades	72.7%
Fall 2013†	1,628 of 2,165 Grades	75.2%***	1,566 of 1,964 Grades	79.7%***	62 of 201 Grades	30.8%	923 of 1,300 Grades	71.0%	2,551 of 3,465 Grades	73.6%
Fall 2014†	1,691 of 2,262 Grades	74.8%	1,598 of 2,021 Grades	79.1%**	93 of 241 Grades	38.6%	1,106 of 1,451 Grades	76.2%	2,797 of 3,713 Grades	75.3%
Fall 2015†	1,812 of 2,360 Grades	76.8%*	1,723 of 2,148 Grades	80.2%***	89 of 212 Grades	42.0%	1,290 of 1,733 Grades	74.4%	3,102 of 4,093 Grades	75.8%
Fall 2016†	1,988 of 2,713 Grades	73.3%	1,848 of 2,375 Grades	77.8%***	140 of 338 Grades	41.4%	1,099 of 1,506 Grades	73.0%	3,087 of 4,219 Grades	73.2%
Fall 2017+^	3,612 of 4,872 Grades	74.1%*	3,484 of 4,393 Grades	79.3%***	128 of 479 Grades	26.7%	1,187 of 1,652 Grades	71.9%	4,799 of 6,524 Grades	73.6%
Fall 2018+^	2,904 of 3,880 Grades	74.8%	2,740 of 3,389 Grades	80.8%***	164 of 491 Grades	33.4%	1,200 of 1,630 Grades	73.6%	4,104 of 5,510 Grades	74.5%
Fall 2019†^	1,336 of 1,843 Grades	72.5%	1,288 of 1,646 Grades	78.3%***	48 of 197 Grades	24.4%	1,089 of 1,493 Grades	72.9%	2,425 of 3,336 Grades	72.7%
Fall 2020†^	799 of 1,136 Grades	70.3%**	757 of 954 Grades	79.4%***	42 of 182 Grades	23.1%	937 of 1,267 Grades	74.0%	1,736 of 2,403 Grades	72.2%
Fall 2021+^	646 of 893 Grades	72.3%	598 of 733 Grades	81.6%***	48 of 160 Grades	30.0%	856 of 1,194 Grades	71.7%	1,502 of 2,087 Grades	72.0%
Total	19,986 of 27,042 Grades	73.9%	18,801 of 23,816 Grades	78.9%***	1,185 of 3,226 Grades	36.7%	18,328 of 24,978 Grades	73.4%	38,314 of 52,020 Grades	73.7%

^Beginning Fall 2017 the CS course dropped from three hours to two.

*Students enrolled in CS performed significantly better compared to Non-CS students, p < .05.

**Students enrolled in CS performed significantly better compared to Non-CS students, p < .01.

***Students enrolled in CS performed significantly better compared to Non-CS students, *p* < .001.

⁺⁺Students not enrolling in CS performed significantly better compared to CS students, p < .01.

Student Succes	ss Rates (Grades of	C or Better) in (Gateway Cours	es – First-time,	Full-time Stud	ents Who Did N	ot Earn a C or E	Better in CS	
Cohort	Students Who Did Not Earn a C or Better in CS	Developmen	tal Education	Tulsa A	chieves	Developmen and Tulsa		Neither	
Fall 2008	75 of 116 Grades	33 of 44 Grades	75.0%	13 of 31 Grades	41.9%	24 of 35 Grades	68.6%	5 of 6 Grades	83.3%
Fall 2009	82 of 137 Grades	45 of 54 Grades	83.3%	13 of 35 Grades	37.1%	19 of 42 Grades	45.2%	5 of 6 Grades	83.3%
Fall 2010	90 of 184 Grades	27 of 48 Grades	56.3%	15 of 41 Grades	36.6%	48 of 86 Grades	55.8%	0 of 9 Grades	0.0%
Fall 2011	61 of 133 Grades	13 of 27 Grades	48.1%	18 of 43 Grades	41.9%	26 of 52 Grades	50.0%	4 of 11 Grades	36.4%
Fall 2012	63 of 155 Grades	17 of 36 Grades	47.2%	13 of 45 Grades	28.9%	23 of 54 Grades	42.6%	10 of 20 Grades	50.0%
Fall 2013+	62 of 201 Grades	32 of 79 Grades	40.5%	3 of 44 Grades	6.8%	16 of 51 Grades	31.4%	11 of 27 Grades	40.7%
Fall 2014+	93 of 241 Grades	37 of 87 Grades	42.5%	31 of 79 Grades	39.2%	14 of 50 Grades	28.0%	11 of 25 Grades	44.0%
Fall 2015+	89 of 212 Grades	21 of 45 Grades	46.7%	30 of 73 Grades	41.1%	37 of 86 Grades	43.0%	1 of 8 Grades	12.5%
Fall 2016+	140 of 338 Grades	40 of 88 Grades	45.5%	29 of 95 Grades	30.5%	56 of 123 Grades	45.5%	15 of 32 Grades	46.9%
Fall 2017+^	128 of 479 Grades	44 of 147 Grades	29.9%	53 of 172 Grades	30.8%	26 of 122 Grades	21.3%	5 of 38 Grades	13.2%
Fall 2018+^	164 of 491 Grades	22 of 97 Grades	22.7%	74 of 169 Grades	43.8%	54 of 163 Grades	33.1%	14 of 62 Grades	22.6%
Fall 2019+^	48 of 197 Grades	9 of 32 Grades	28.1%	8 of 30 Grades	26.7%	29 of 121 Grades	24.0%	2 of 14 Grades	14.3%
Fall 2020+^	42 of 182 Grades	4 of 28 Grades	14.3%	22 of 88 Grades	25.0%	14 of 59 Grades	23.7%	0 of 4 Grades	0.0%
Fall 2021+^	48 of 160 Grades	9 of 24 Grades	37.5%	26 of 79 Grades	32.9%	9 of 36 Grades	25.0%	4 of 21 Grades	19.0%
Total	1,185 of 3,226 Grades	353 of 836 Grades	42.2%	348 of 1,024 Grades	34.0%	395 of 1,080 Grades	36.6%	87 of 283 Grades	30.7%