THE UNIVERSITY OF TENNESSEE CHATTANOOGA
PLANNING, EVALUATION, AND INSTITUTIONAL RESEARCH

Tutor.com Usage Report and Comparison with Usage of CASA Tutoring

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This analysis was produced by OPEIR in response to a specific data request. Results are not necessarily generalizable and attempts to use results outside the scope of this project should be avoided.

Introduction

The purpose of this analysis is to examine how UTC students utilize the Tutor.com program and its efficacy as well as compare this usage to the services through the Center for Academic Support and Advisement. Tutor.com is an online tutoring program from which UTC students can receive course specific aid. It has been available since the Spring 2016 term through the Center for Academic Support and Advisement.

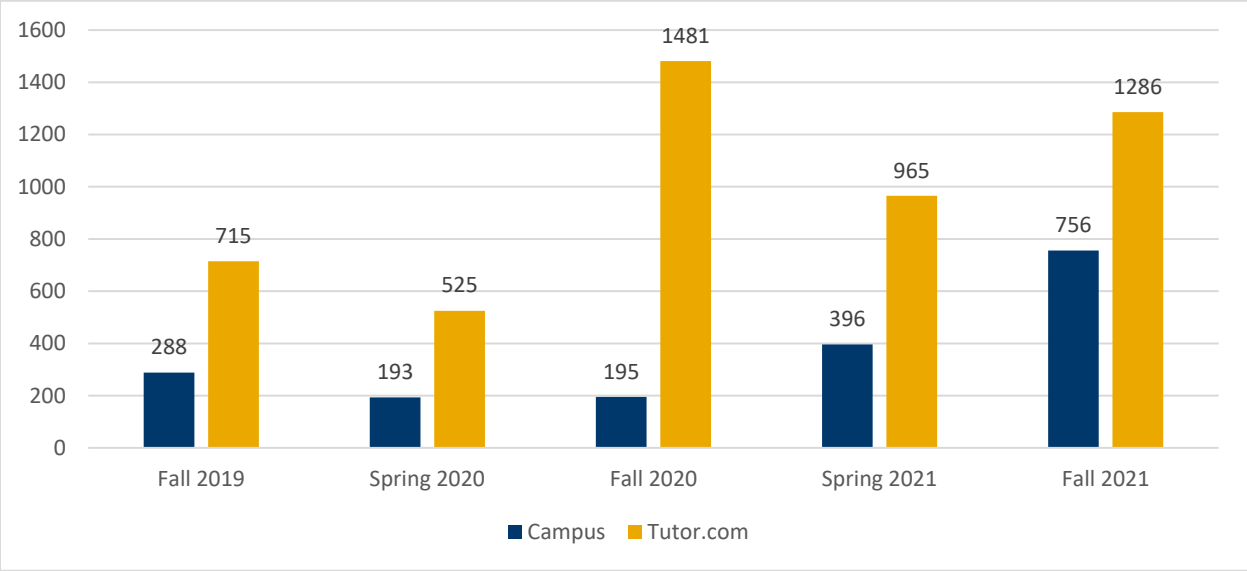
Tutor.com is a program provided by a third-party company, ST Unitas, in partnership with the Center for Academic Support and Advisement (CASA). It provides course specific assistance via live tutoring in an online environment. Students can access Tutor.com through Canvas. Courses for which Tutor.com is available will have a link to the service on the course's Canvas page. Once there, students select the course for which they need assistance and are then connected to a tutor.

During initial implementation, Tutor.com was limited to four courses: BIOL 2060, BIOL 2080, MATH 1130, and MATH 2100. Non-course specific assistance was also available for Chemistry, Psychology, and Public Administration. Since then, availability of Tutor.com has expanded to 47 courses. The courses currently offering Tutor.com are listed in Appendix A. Undergraduate students are most likely to use this service based on targeted courses, and the majority of Tutor.com's offerings were at the 1000 level. In total, 53% of the Tutor.com's courses were 1000 level, 40% 2000 level, and 7% 3000 level. Assistance via Tutor.com was not available for any 4000 level courses. This report provides an update on utilization of Tutor.com for Fall 2021 and the impact of utilization on student outcomes.

Student Usage

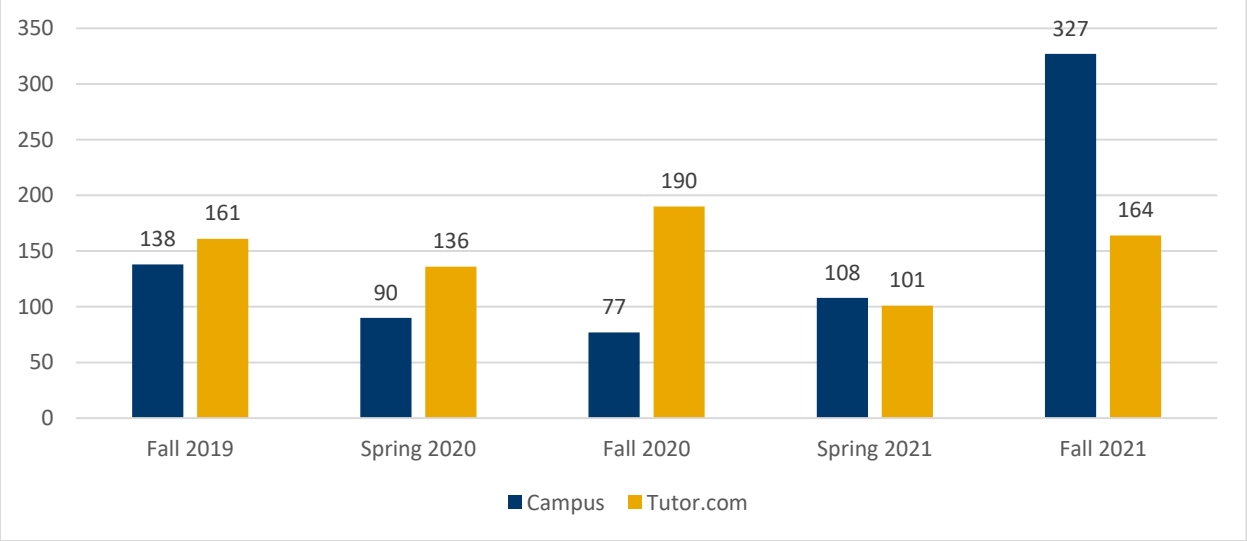
During five terms (Fall 2019-Fall 2021), several students attended tutoring appointments on campus and via Tutor.com. As shown in Figure 1, a large spike of students attended tutoring appointments via Tutor.com in the Fall 2020 term. This could be a side effect of the pandemic with students seeking online tutoring services rather than campus tutoring services. In addition, there is a trend for students to utilize more appointments through Tutor.com than on campus.

Figure 1: Number of Attended Tutoring Appointments Fall 2019 – Fall 2021



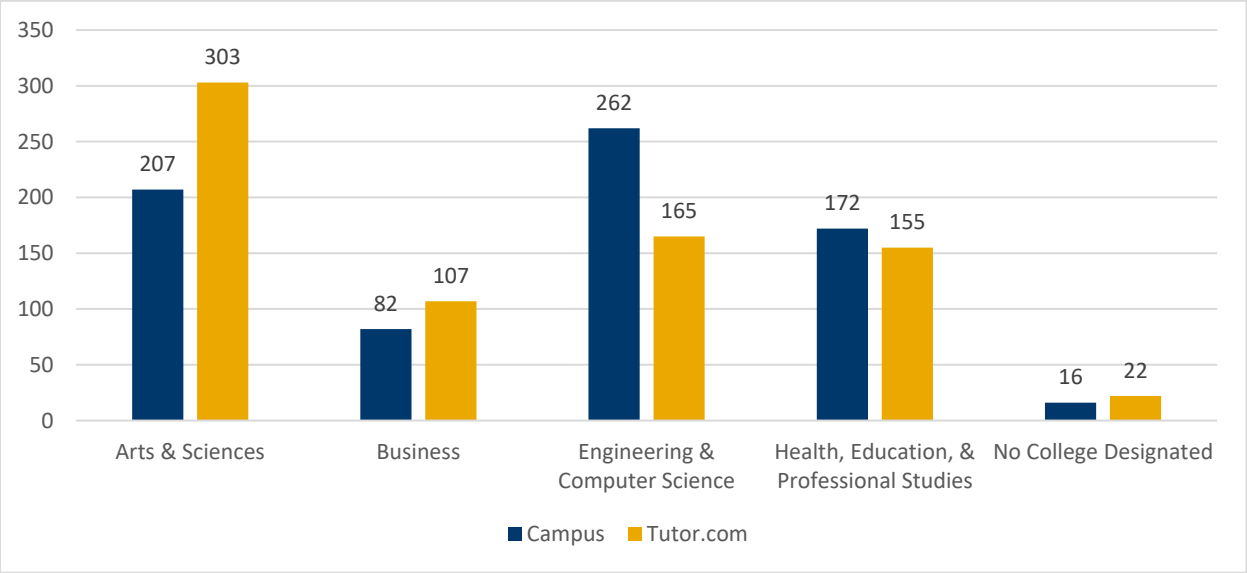
During the same five terms (Fall 2019-Fall 2021), the number of unique students to attend tutoring services has changed. As shown in Figure 2, the number of students to utilize campus tutoring decreased significantly during the Spring 2020 to Spring 2021 terms, with Fall 2020 having the least number of students. Again, this could be a side effect of the pandemic. There has been a large spike in the number of students utilizing campus tutoring in the Fall 2021 term.

Figure 2: Number of Unique Tutoring Participants Fall 2019 – Fall 2021



Considering the total number of students that utilized tutoring services from Fall 2019 through Fall 2021, campus tutoring was most used by students with majors in the College of Engineering and Computer Science. Tutor.com was most used by students with majors in the College of Arts and Sciences.

Figure 3: Number of Tutoring Participants by College



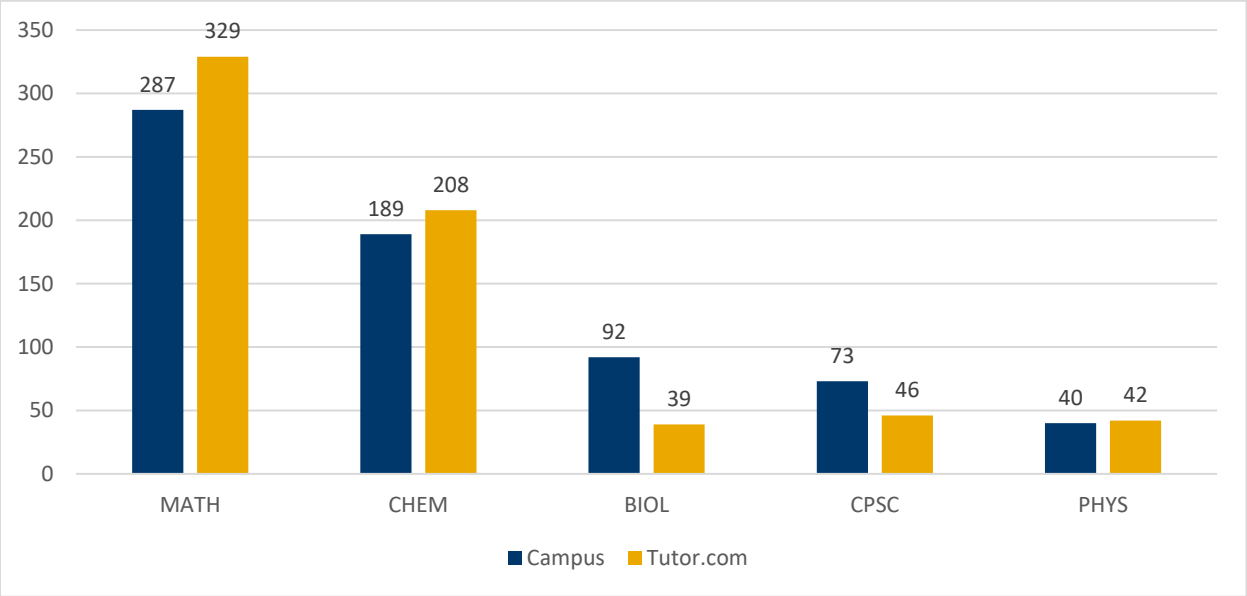
Presented in Table 1 is a comparison of students that used campus tutoring or Tutor.com to the overall demographics of undergraduates. Students self-identifying as female were a higher proportion of Tutor.com users compared to the population of all undergraduate students by 11.1%. In addition, students self-identifying as Asian, and students self-identifying as Black or African American used either of the two tutoring services at a higher percentage compared to their proportion of the overall student body, whereas, students self-identifying as white, used both tutoring services at a lower proportion to their percentage of the student population.

Table 1: Demographic Breakdown of Undergraduate Tutoring Participants

Demographics of Students Using Tutoring Services Fall 2019 - Fall 2021									
	Campus			Tutor.com			Undergraduate		
Race	Female	Male	Total	Female	Male	Total	Female	Male	Total
American Indian	1	3	4	4	0	4	17	15	32
% American Indian	*0.1%*	*0.4%*	*0.5%*	*0.6%*	*0.0%*	*0.6%*	*0.2%*	*0.2%*	*0.3%*
Asian	23	14	37	49	19	68	202	131	333
% Asian	*3.1%*	*1.9%*	*5.0%*	*7.1%*	*2.7%*	*9.8%*	*2.0%*	*1.3%*	*3.4%*
Black or African American	91	30	121	94	25	119	641	423	1,064
% Black	*12.3%*	*4.1%*	*16.4%*	*13.5%*	*3.6%*	*17.1%*	*6.5%*	*4.3%*	*10.8%*
Native Hawaiian	1	1	2	1	0	1	5	7	12
% Native Hawaiian	*0.1%*	*0.1%*	*0.3%*	*0.1%*	*0.0%*	*0.1%*	*0.1%*	*0.1%*	*0.1%*
White	281	225	506	322	166	488	4,733	3,375	8,108
% White	*38.0%*	*30.4%*	*68.4%*	*46.3%*	*23.9%*	*70.2%*	*48.0%*	*34.2%*	*82.2%*
Hispanic	25	20	45	41	11	52	384	271	655
% Hispanic	*3.4%*	*2.7%*	*6.1%*	*5.6%*	*1.5%*	*7.1%*	*3.8%*	*2.7%*	*6.4%*
Multiracial	15	10	25	10	5	15	191	127	318
% Multiracial	*2.0%*	*1.4%*	*3.4%*	*1.4%*	*0.7%*	*2.2%*	*1.9%*	*1.3%*	*3.2%*
Grand Total	437	303	740	521	226	747	6,173	4,349	10,522

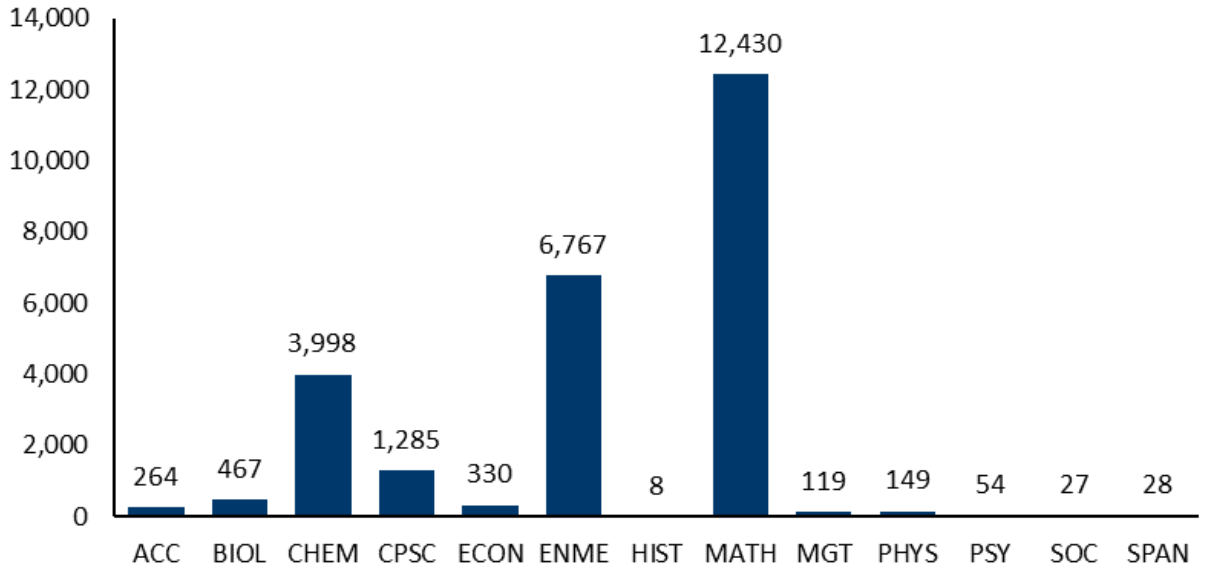
Figure 4 shows majority tutoring appointments provided through either campus tutoring or Tutor.com have been for MATH or CHEM courses. Within tutoring session for MATH and CHEM, more appointments were made through Tutor.com than on campus. Conversely, for more appointments were made through campus tutoring for BIOL, CPSC, and PHYS courses. Approximately 200 students that were recorded as using Tutor.com appointments were removed from the data set due to identification of the tutoring session not correlating with course or student data at UTC.

Figure 4: Top Five Subjects for Tutoring Appointments Fall 2019 – Fall 2021



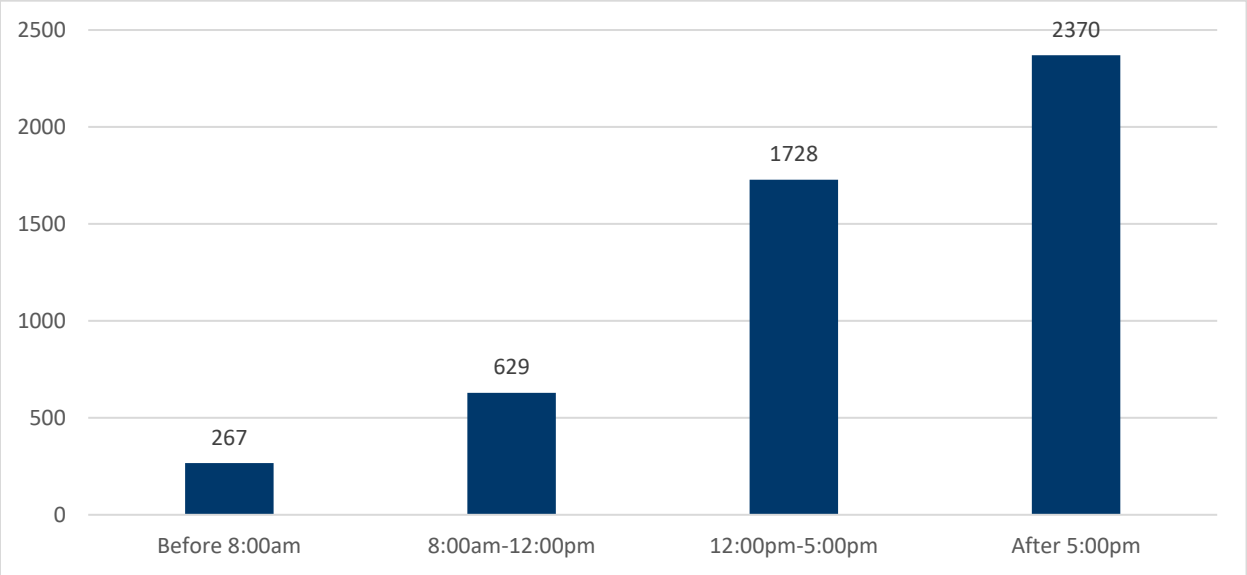
One unique aspect of the services provided by Tutor.com is appointments are not pre-scheduled or required to happen at a set time for a set duration. During Fall 2021, students used Tutor.com for 28 different courses, combining for a total of 1,023 distinct sessions and 25,927 minutes. Among the subjects for which there were at least 10 sessions, students averaged the most time per session in Mechanical Engineering at 34 minutes and the least for Economics at 17 minutes.

Figure 5: Total Minutes by Subject



Another unique aspect of Tutor.com is providing tutoring services 24 hours a day. Therefore, Figure 6 presents the time ranges in which students attended sessions on Tutor.com. As the figure shows, a vast majority of sessions were attended after 5:00pm with over 40% of those appointments occurring after 9:00pm.

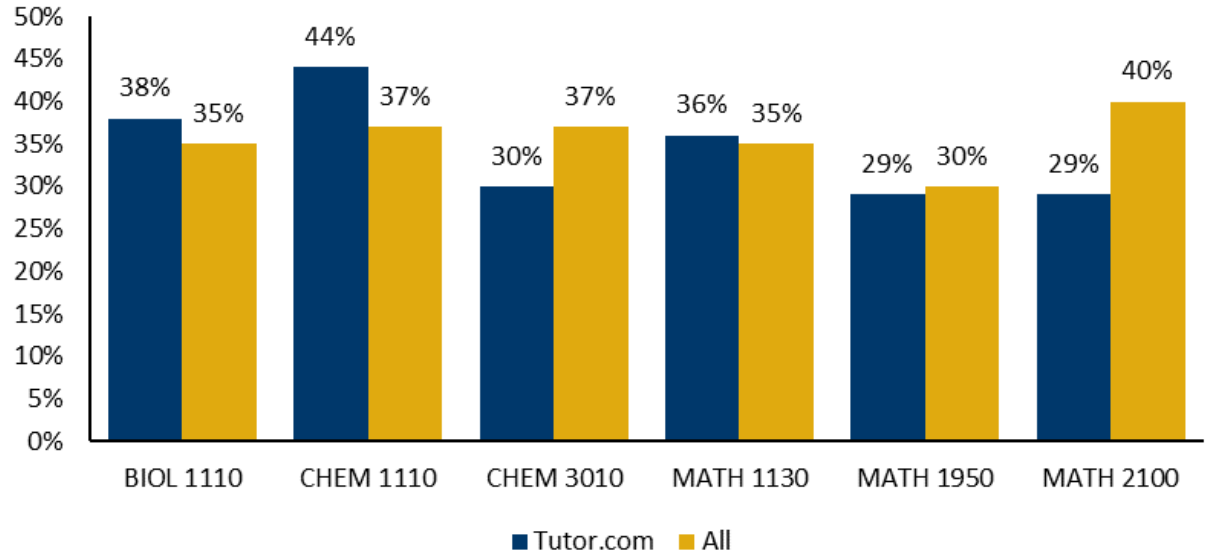
Figure 6: Time Ranges of Tutor.com Appointments Fall 2019 – Fall 2021



Student Outcomes

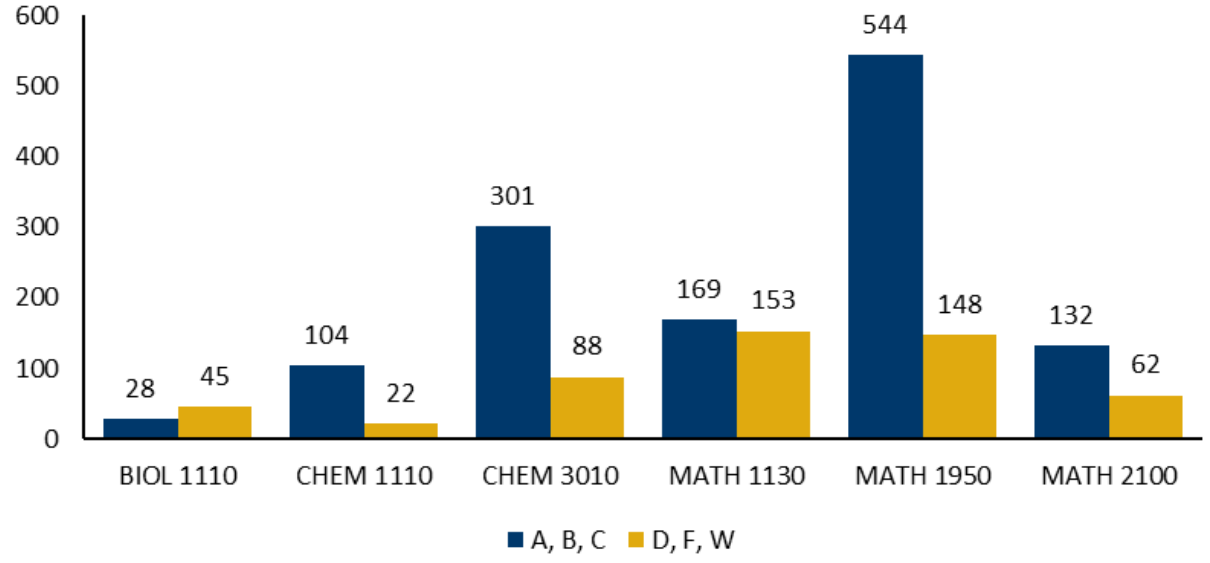
In Fall 2021, there were six courses for which there were at least 10 Tutor.com participants: BIOL 1110, CHEM 1110, CHEM 3010, MATH 1130, MATH 1950, and MATH 2100. When comparing the DFW rates between the participants and the entire course enrollment, the results are inconclusive. For three of the courses (CHEM 3010, MATH 1950, MATH 2100), Tutor.com users had lower DFW rates than the overall population, but for the others (BIOL 1110, CHEM 1110, MATH 1130), the Tutor.com rates were higher.

Figure 7: Fall 2021 DFW Rate Comparison



The DFW rates do not tell the full story. For all but BIOL 1110, the students who received an A, B, or C spent more time using Tutor.com than those who received a D, F, or W. CHEM 3010 and MATH 1950 were the most extreme examples of this phenomenon with the Tutor.com users who received A's, B's, or C's averaging more than 200 minutes more in usage than those who received D's, F's, or W's.

Figure 8: Comparison of Number of Minutes Used and Resulting Grade



As shown in Figure 9, students' final course grades did not reflect any significant difference between those who utilized campus tutoring compared to those that utilized Tutor.com for all subjects except courses within CPSC. For courses within this subject, students that utilized campus tutoring received 23.8% more passing grades than those that utilized Tutor.com; however, the usage numbers are so small, that measuring the effectiveness of this comparison is difficult.

Figure 9: Grade Distribution of Top Five Subjects by Tutoring Service