

Course Scheduling and Student Outcomes

College students vary in their preferences when it comes to scheduling their classes throughout the week, and course scheduling can have important impacts on academic outcomes. For example, past research has suggested that Friday classes have lower attendance rates than Monday through Thursday classes (Choudhury, 2019). On the other hand, weekend classes provide crucial academic support for students who work or have other obligations during the traditional weekday schedule (e.g., Kolenovic et al., 2020).

The purpose of this report is to investigate how different types of courses are scheduled, how students schedule their classes, and how course scheduling influences student academic outcomes. Specifically, the goal is to evaluate student outcomes in Friday/Saturday classes compared to weekday (Monday through Thursday) classes.

Data

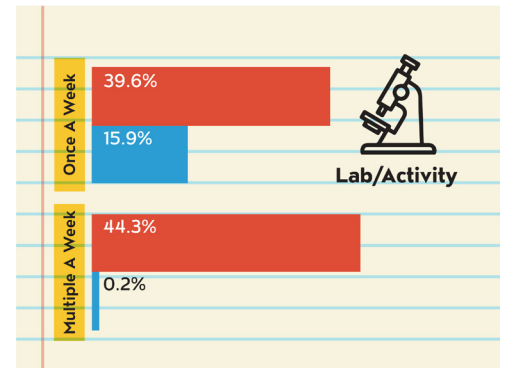
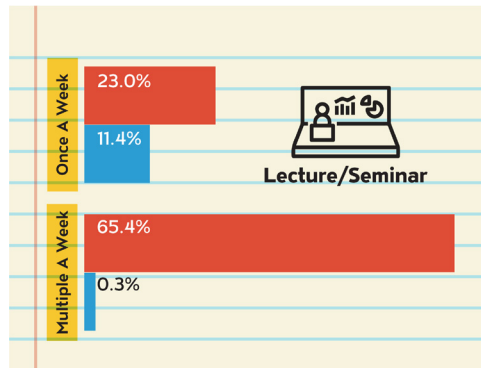
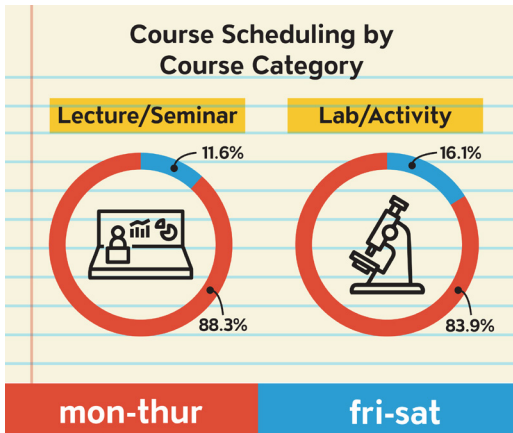
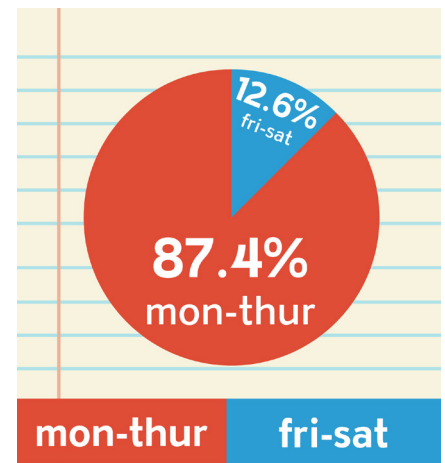
Data were compiled by CSUN’s Office of Institutional Research. The analysis includes 626,000 courses taken by 48,090 CSUN undergraduate students between Fall 2017 and Spring 2019. The outcome of interest - student performance - is measured as the average grade in the form of a letter grade (GPA) and percentage of failing grades received by students in the class (DFU/FU rates).

Meeting Frequency

Overall, Friday/Saturday classes make up only a small proportion of all classes at CSUN (12.6%).

Most undergraduate courses at CSUN fall into [two categories](#): lecture/seminar courses (CS numbers C-01 through C-06) and lab/activity courses (C-07 through C-21). While lecture/seminar courses are more common on the weekdays compared to lab/activity courses, the proportion of lab/activity courses out of all courses is slightly higher on the weekends compared to weekdays.

Within each course type, we examined how often class meetings are scheduled per week. Among lecture/seminar courses, there is a larger percentage of Friday/Saturday classes that meet only once a week (11.4% of all lecture/seminar courses) compared to Friday/Saturday classes that meet multiple times a week (0.3%). We see a similar trend among lab/activity courses, in which Friday/Saturday classes are more commonly scheduled once a week (15.9%) rather than multiple times a week (0.2%).

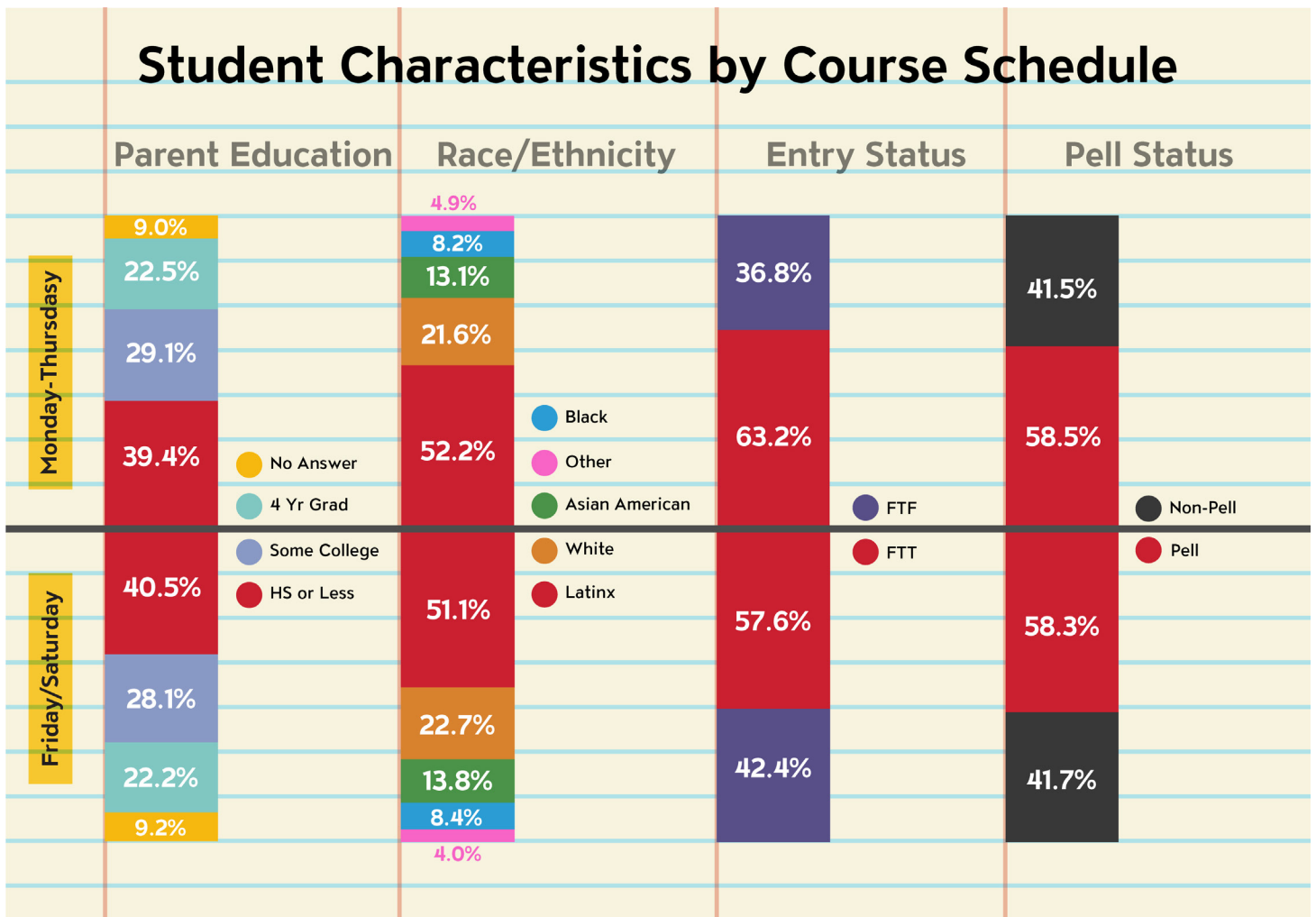


It is important to note that Friday/Saturday classes occurring multiple times a week only represent a very small list of courses that are mostly in STEM disciplines. In fact, there are only 14 such courses (*11 lecture/seminar, 3 lab/activity*) and relatively few students enrolled in each course; incidentally, these courses tend to have high overall DFU rates, as outlined here:

DFU RATES OF CLASSES TAUGHT BOTH ON FRIDAY & SATURDAY					
CHEM 100	37.4%	CIT 210	15.9%	COMP 182L	26.9%
CHEM 101	26.3%	CIT 210L	26.3%	MATH 103	27.5%
CHEM 102	33.8%	COMP 110	26.3%	MATH 131	12.0%
CHEM 333	32.9%	COMP 110L	26.3%	MATH 140	31.1%
CHEM 334	31.5%	COMP 182	27.0%		

Which Students are Taking Friday/Saturday Classes?

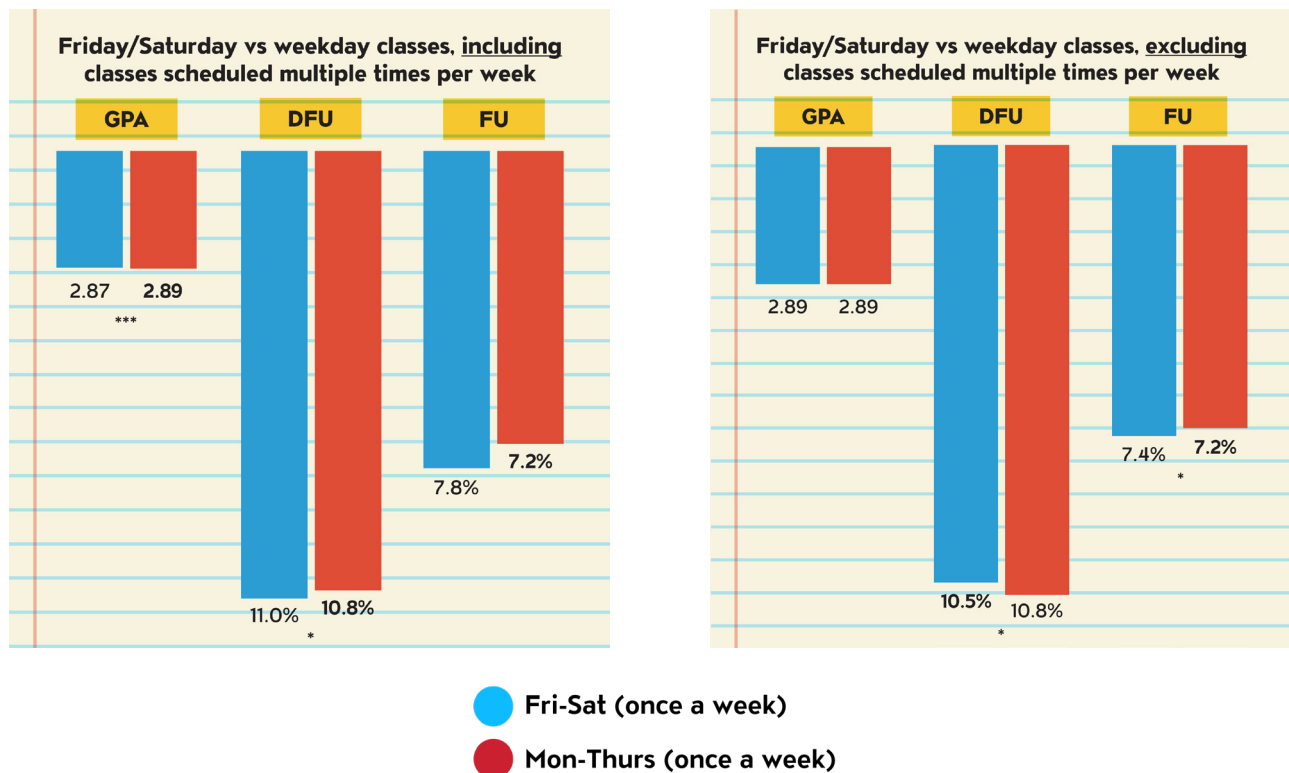
The demographic makeup of students taking Friday/Saturday vs. weekday classes looks very similar, by race, generational status, and Pell status. Transfer students are more likely to enroll in Friday/Saturday classes than first-time freshmen.



Meeting Frequency

We compared student outcomes in classes scheduled on Friday/Saturday vs. weekdays. First, we compared the average course outcomes (GPA, DFU/FU rates) in Friday/Saturday classes directly with average outcomes in weekday classes. We then looked at outcomes separately for lecture/seminar and lab/activity courses, as well as separately for courses scheduled once a week vs multiple times per week.

A direct comparison between all undergraduate weekday and Friday/Saturday classes suggests that weekday classes tend to have statistically reliable better outcomes (higher GPA and lower DFU/FU rates), though the differences are small. However, as we noted above, there is a small cluster of classes scheduled multiple times per week on Friday/Saturday (0.2% of all classes) that are likely anomalies in this dataset, since they represent only several STEM courses that tend to have high overall DFU rates. Once we removed these classes from this dataset, there was no statistically reliable difference in average GPA between Friday/Saturday and weekday classes. Such a shift in patterns suggests that the Friday/Saturday multiple times per week classes may have skewed the results with regards to Friday/Saturday classes as a whole; therefore, we have excluded them from our subsequent analyses.

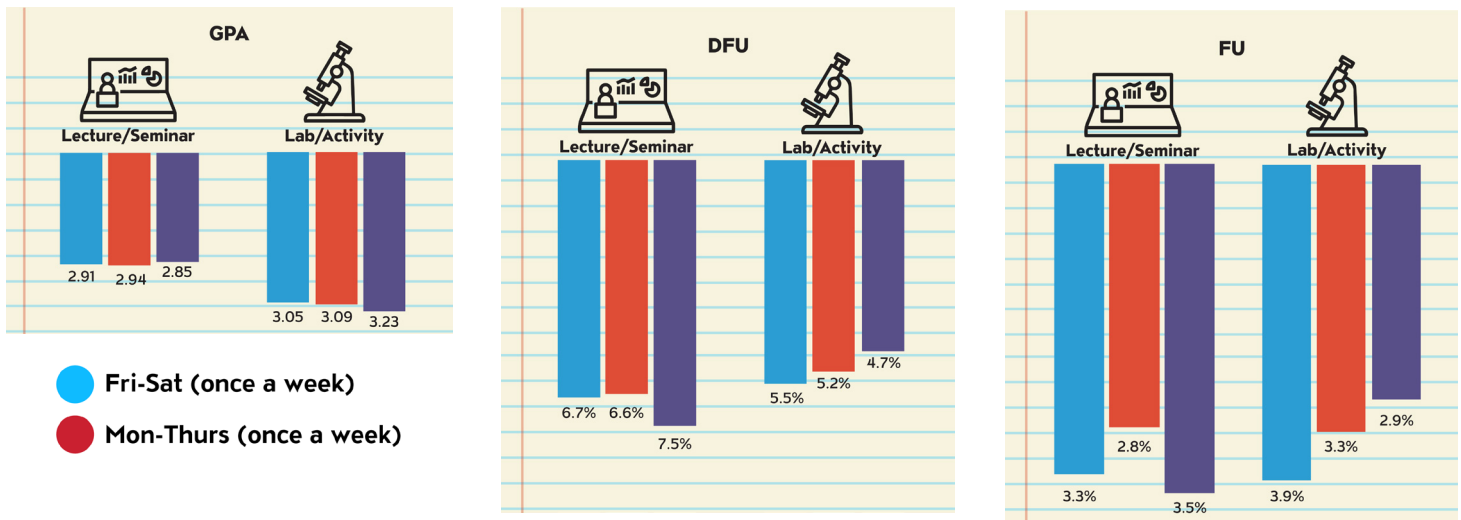


Among courses that are scheduled only once per week, weekday classes tend to have significantly better outcomes (higher final grades, lower DFU and FU rates) than Friday/Saturday classes. These trends are consistent among lecture/seminar and lab/activity courses, respectively. Weekday lecture/seminar courses that are scheduled multiple times a week tend to have lower outcomes than the other lecture/seminar courses, while weekday lab/activity courses seem to have benefit from a multiple times per week schedule (all ps < .0001).

*: p < .05

***: p < .0001

We re-ran these analyses controlling for student background (race, sex, Pell status, first-generation college status) and academic characteristics (student major, number of courses student was enrolled in, lower vs. upper division course). The results of these additional analyses suggest that there are no statistically reliable differences between Friday/Saturday classes and regular weekday classes after controlling for student characteristics (see charts below).



Takeaway

While **weekday classes overall seem to have better academic outcomes than classes scheduled on Friday/Saturday, this was in large part due to only a very small proportion of classes** – those that are scheduled on both Friday and Saturday – which tend to have much lower student outcomes that drive down the group average for other Friday/Saturday classes. Because those courses are small in number and represent a limited range of disciplines, we cannot make strong inferences about weekend schedules in particular. The data suggest that, **among classes meeting only once a week, weekday classes show an advantage, and that weekday lecture/seminar classes meeting more than once a week have the lowest outcomes while Friday/Saturday lab/activity classes meeting more than once a week have the highest outcomes.** However, it is important to note that these differences are relatively small, and are **not statistically reliable after controlling for student characteristics.** Nonetheless, these results warrant future investigations into how course scheduling may influence outcomes in specific subject areas, and whether some courses can expand/adjust their scheduling to facilitate student success.