

# SUPPORTING STUDENTS DURING COVID-19

## How the revised pass-fail grading policy helped students

COVID-19 abruptly upended students' academic and personal lives in March, 2020 causing a rapid shift to remote learning. In response, The University of Arizona offered new academic policies to help support student success including a revised pass/fail policy that allowed students to opt to take any Spring 2020 courses on a pass/fail basis. This brief summarizes the adoption and impact of this policy among degree-seeking undergraduates enrolled on main campus or through Arizona Online.

### MODERATE ADOPTION AMONG STUDENTS

Nearly 12,000 students – representing 36% of students – took advantage of the revised pass/fail grading policy with the majority of this group taking just one (41%) or two (27%) courses on a pass/fail basis.

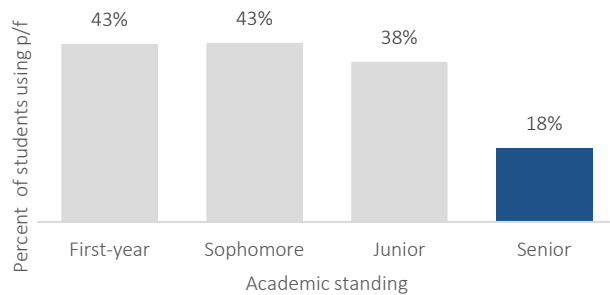
The revised pass/fail policy was used by more main campus students (38%) than students enrolled in Arizona Online (9%).

No large differences were observed by FTFT status or residency and within each campus, students of color, first-generation students, and Pell Grant recipients were similarly likely to use the policy as their peers.

Students with senior standing were far less likely to take advantage of the policy. This possibly reflects seniors' confidence in meeting graduation criteria as well as students' strategic patterns of policy adoption at the course-level that we discuss next.

# 36%

of students used the revised pass/fail policy in Spring 2020



*"I think the Pass/Fail option also released stress because passing was the last thing on my mind when the pandemic hit. Family and maintaining financial stability overthrew the importance of school."*

*-- Sophomore, COVID-19 Student Needs Survey*

### STUDENTS LEVERAGED PASS/FAIL STRATEGICALLY

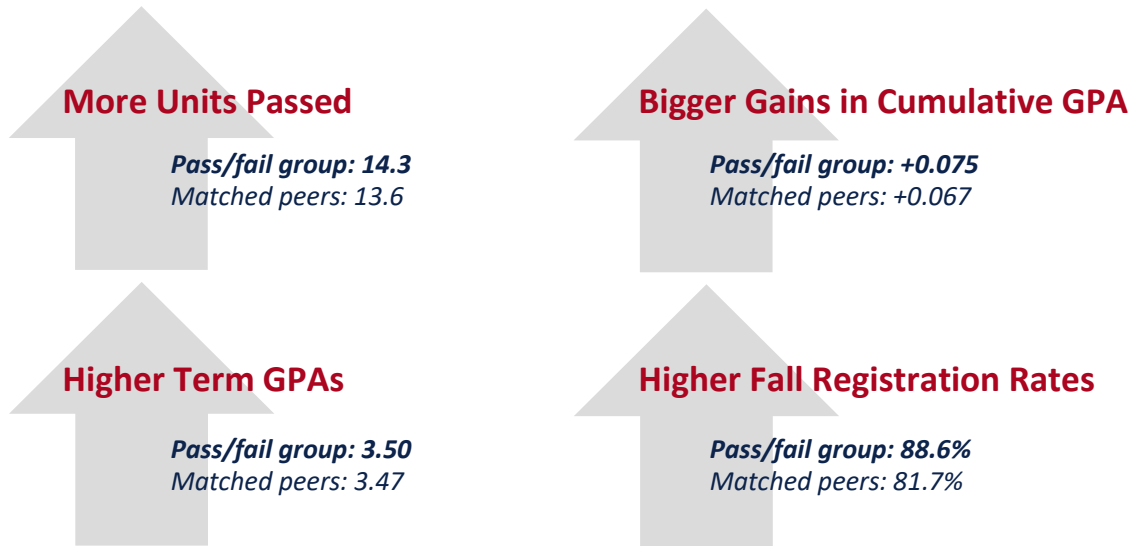
Students elected to use the pass/fail policy in nearly 26,000 courses in Spring 2020 and they appear to have done so strategically. Most of the courses students chose to complete on a pass/fail basis were lower division courses (63%) and many of them were high DEW courses (25%). By comparison, only about 25% of all courses offered the previous spring were lower division and 1% were high DEW courses, defined as courses with at least 150 students where 1 in 5 students earned a D, E, or W grade.

Consistent with this, students opted to use the pass/fail policy most often in math, engineering, science, and business courses. Detailed subject- and college-level information among those using the policy are included at the end of this report.

Students passed 85% of the courses they took on a pass/fail basis. Though this is a lower pass rate than that of Spring 2020 courses using regular grading (95%), this likely reflects students' tendency to use the pass/fail option in courses that have historically passed fewer students.

## IMPACT: STRONG EVIDENCE FOR A BENEFIT TO STUDENT SUCCESS

By matching students who used the revised pass/fail policy in Spring 2020 to similar peers who did not, we can observe how the policy impacted Arizona students. Across each of the four outcomes considered, students who used the policy fared better than their peers.



Students who elected to take some courses on a pass-fail basis earned more units toward their degree, improved their cumulative GPA more, earned a higher term GPA in Spring 2020, and were more likely to be registered for Fall 2020 as of July 21, 2020. All differences are statistically significant ( $p < 0.01$ ).

## DETAILED ADOPTION PATTERNS BY COLLEGE AND COURSE SUBJECT

Primary college	students using P/F (%)
Engineering	51.3
Eller	49.5
Optical Sciences	46.3
CAPLA	38.4
Science	35.0
SBS	33.4
CALS	32.0
Fine Arts	30.7
Pharmacy	28.7
Public Health	27.5
Education	27.3
Medicine	26.1
CLAS	24.6
Humanities	21.9
Nursing	17.0
Letters, Arts, and Science Division	10.3
Applied Science and Technology	6.8

Subject*	% of P/F courses
Math	9.9
Accounting	4.3
Chemistry	4.2
Economics	3.8
English	3.5
Aerospace & Mechanical Engineering	3.4
Computer Science	3.1
Management Information Systems	3.0
Spanish	3.0
Physics	2.5
Psychology	2.3
Business Administration	2.3
Ecology & Evolutionary Biology	2.0

\* Table restricted to subjects with 2% or more of all p/f changes

**Data and methods:** This analysis used data from the Fall 2019 and Spring 2020 census files prepared by Assessment & Research, pass-fail usage data from the Registrar's office, and data on Spring 2020 student outcomes, Fall registration, and historical course outcomes from UAccess Analytics as well as a qualitative data point from the COVID-19 Health and Wellness and Online Classroom Experiences Student Needs Survey.

Analytical population restricted to degree-seeking undergraduates enrolled on main campus or Arizona online with attempted units in Spring 2020 (N=33,679) with additional filters applied where appropriate. For example, Fall registration rates reported for students below senior standing in Spring 2020. Statistically significant comparisons noted in the text.

Impact analysis uses Propensity Score Matching (PSM) that matches students according to their predicted likelihood of using the revised pass/fail policy in Spring 2020 based on a range of student attributes including enrollment characteristics (campus, pre-major, selective college), residency, gender, race/ethnicity, high school GPA and test score, Fall 2019 GPA, academic standing, and status as first-generation, a Pell recipient, honors student, on-campus resident, 2019 FTFT cohort member, and/or merit aid recipient. Missing data for PSM and other multivariate analyses imputed using mean/mode imputation with imputation flags included in analyses. PSM results shown here are consistent with alternate approaches to comparison across groups including unadjusted descriptive statistics, simple and college-level random effects regression, and alternative specifications of caliper and replacement in the PSM approach.

Contact Sarah Kyte, Ph.D. ([skyte@arizona.edu](mailto:skyte@arizona.edu)) with any questions about the data or analysis.