

What's Wrong with the Learning Process in Stats?

Claims by members of the AACSB Team (e.g., George Carter) that the CoB's undergraduates are deficient in statistics knowledge have been the subject of other reports posted to USMPRIDE.COM in the past. Our investigators have collected some grade history data from



that yield valuable insights into that perceived problem. With regard to the accuracy of the grade data, the pickaprof website offers the following statement:

All of our grade histories are (painstakingly) obtained directly from university records, we do NOT rely on individual students telling us their grades.

The table below illustrates the variation in the course grading histories of the CoB faculty who are engaged in statistics education.

Professor	Course	#students	CumGPA	A	B	C	D	F
Nissan, E.	BA 301	31	3.00	39%	26%	32%	3%	0%
Carter, G.	BA 301	25	2.88	36%	32%	16%	16%	0%
Malik, F.	BA 301	30	2.73	33%	20%	33%	13%	0%
Sharp, D.	BA 301	70	2.57	11%	34%	54%	0%	0%
Wong, M.	BA 301	166	2.48	12%	37%	42%	7%	3%
STAFF	BA 301	179	2.20	21%	19%	29%	21%	10%
Monchuk, D.	BA 301	125	2.14	11%	29%	32%	19%	9%
Malik, F.	BA 303	42	3.23	43%	38%	19%	0%	0%
Nissan, E.	BA 303	181	2.86	26%	39%	32%	1%	2%
Wong, M.	BA 303	122	2.24	17%	25%	34%	13%	11%
STAFF	BA 303	32	2.09	13%	22%	28%	38%	0%

The data above are all cumulative. Because of that, USMPRIDE.COM investigators calculated the average class size for each professor across the two statistics courses, BA 301 and BA 303, using the information available on the website. In BA 301, the average section sizes per instructor are: 31 for Nissan, 12.5 for Carter, 15 for Malik, 35 for Sharp, 55.3 for Wong, 29.8 for STAFF, and 41.7 for Monchuk. In BA 303, the average section sizes per instructor are: 10.5 for Malik, 30.2 for Nissan, 30.5 for Wong, and 32 for STAFF.

A number of interesting findings appear. For each course, there appears to be two distinct sets of graders: those in the highlighted section and those outside of the highlighted section. For BA 301, sections taught by the highlighted faculty have higher GPAs than the others. A GPA separation is exhibited for the BA 303 sections as well. The BA 301 grade distributions for Nissan, Carter, and Malik indicate that 65%, 68%, and 53%, respectively, of the students enrolled are awarded grades of B or higher. For Sharp, Wong, STAFF, and Monchuk, the B and above percentages are generally much lower, at 45%, 49%, 40% and 40%, respectively. The BA 303 grade distributions for Malik and Nissan show that 81% and 65%, respectively, of the students enrolled are awarded grades of B or higher. For Wong and STAFF, the B and above percentages are dramatically lower, at 42% and

35%, respectively. When section size is accounted for, a comparison between Nissan and Sharp/STAFF is appropriate for BA 301. For BA 303, Nissan and Wong/STAFF make for a good comparison.

The data indicate that while some BA faculty are “holding the line” on academic rigor, others may not be. This disparity could very well be at the root of any learning problems in statistics courses. As reported at USMPRIDE.COM, Carter believes that use of Minitab is the solution to learning problems in statistics.

Do Carter and Nissan Have a Choice?

Sources tell USMPRIDE.COM investigators that Carter and Nissan may have little choice in *not* “holding the line” on grading standards in their BA 301 and BA 301/303 classes, respectively. This belief comes from the fact that Carter and Nissan miss a number of class meetings each semester. In doing so, especially with a course such as statistics, these two might face a student mutiny should they act as “hard graders.” This could be the case. In any event, it’s difficult to complain about student learning in statistics when the records show that about two-thirds of the CoB’s students earn grades of B or better in their statistics classes – at least those taught by the highlighted faculty in the table above.