## The Joy of Data: *The Upper Division View of Data and Distributions* wayne.smith@csun.edu

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## **Introduction:**

Other than BUS 312, there are five other upper-division required core courses that all Nazarian business students take: FIN 303, MKT 304, SOM 306, MGT 360, and BUS 497a. (Note: BUS 497a is the capstone course in business strategy and we'll ignore that for the purposes of this document.) Each course comes from an important business discipline. Further, each discipline has a different *perspective*, or posture towards data, methods, and analytics. Naturally, all of this is true for the lower-division core required courses too (and you have already passed those courses).

The following are examples of differing perspectives on data by each course.

| UDC Course | Typical Data<br>Source(s)  | Unique Methods  | <b>Analytical Perspective</b>  |
|------------|--|---|--|
| FIN 303    | Transactions, Financial Statements, Historical Budgets, External Estimates | Maximum Absolute<br>Deviation,<br>Geometric<br>Distribution                         | Separate Risk from<br>Uncertainty, Actuarial<br>analysis, Quantify Game<br>Theory                          |
| MKT 304    | Surveys, Web page<br>Cookies, Web page<br>links, Customers                 | Focus groups, Oral<br>Interviews,<br>Estimates from<br>sales professionals          | Often add qualitative research methods to complement quantitative research                                 |
| SOM 306    | Keyboards, Sensors, Instruments, Equipment, Networks, Suppliers            | Nnn-parametric<br>distributions,<br>Poission<br>Distribution, Linear<br>Programming | Can be computationally-intensive; Always want to automate in practice any results derived from an analysis |
| MGT 360    | Governments,<br>Industry,<br>Psychology<br>Research,<br>Employees          | Personality Inventories, Case study, Narrative analysis, Estimates from Managers    | Always add qualitative research methods to complement quantitative research                                |

<sup>&</sup>quot;One should have a devotion to abstraction and a passion for details."

<sup>--</sup>Alfred North Whitehead (1861-1947)