

April 1, 2026

Department of Mathematics and Statistics
University of Massachusetts Amherst

STATISTC 516 → 416 Transition Information

- STATISTC (STAT) 516 has been renumbered to STATISTC (STAT) 416.
- Starting Summer 2026, only STAT 416 will be offered.
- STAT 416 lectures cover the same material as STAT 516: properties of point estimators, methods of estimation, confidence intervals, and hypothesis testing.
- In addition to the renumbering, STAT 416 differs from STAT 516 in two ways:
 - STAT 416 has a mandatory one-credit, TA-led recitation section that covers computing in the statistical programming language R. STAT 416 is four credits total, with 150 minutes of lecture and 50 minutes of recitation section per week.
 - The course title has changed from “Statistics II” to “Mathematical Foundations of Statistics and Data Science”.
- STAT 490S was a temporary, experimental course offered in 2025-2026 to implement and test these two changes. STAT 490S will no longer be offered; it has been replaced by 416.
- STAT 516, 490S, and 416 are equivalent as prerequisites for subsequent courses, including STAT 525, STAT 535, STAT 540, STAT 590D, and STAT 625.
- The Math & Stats Department is working to update the prerequisites of these classes in SPIRE to include STAT 416. If you find a class where STAT 516 is a prerequisite and STAT 416 is not listed as an alternative, please let us know.
- Course Repeat policies apply to STAT 516, STAT 490S, and STAT 416 as a unit:
 - Students who have completed STAT 516 or STAT 490S with a grade of C or better cannot take STAT 416.
 - Students who have taken STAT 516 or STAT 490S once and received C-, D+, D, or F can take STAT 416 once without permission.
 - Students who have taken STAT 516 or STAT 490S twice and received C-, D+, D, or F both times need to submit a Course Repeat Petition to take STAT 416.
 - Students who have taken STAT 516 or STAT 490S three times and received C-, D+, D, or F each time cannot take STAT 416.