

## Salisbury University Department of Mathematical Sciences

MATH 413/513 : Mathematical Statistics I  
Syllabus (Tentative)

**Description:** Axioms and algebra of probability, discrete and continuous random variables, multivariate distributions, limit theorems. 4 Hours Credit: Meets four hours per week.

**Prerequisites:** C or better in MATH 213 or MATH 216, and MATH 310.

**Intended Audience:** Students in Mathematics or Physical Sciences.

**Objective:** To learn how to construct and use probability models with an emphasis on proofs, formal reasoning and communicating mathematics in writing. In particular, introduce how probability models support the theory of statistical inference.

**Textbooks:** *Mathematical Statistics with Applications*, 7th edition by: Wackerly, Mendenhall & Schaefer

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- Writing Across the Curriculum: