Salisbury University Department of Mathematical Sciences
MATH 414/514 :   Mathematical Statistics II
Syllabus (Tentative)

Description: Methods of estimating, properties of estimator, hypothesis testing, linear models, least squares, analysis of variance, enumerative data, nonparametric statistics. 4 Hours Credit: Meets four hours per week.

Prerequisites: C or better in MATH 413.

Intended Audience: Students in Mathematics or Physical Sciences.

Objective: To learn how to construct and compare statistical estimators with an emphasis on proofs, formal reasoning and communicating mathematics in writing. In particular, introduce how statistics supports the theory of inference.

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

Topic	Weeks
Limiting distributions	1.5
Sequences of random variables, further study of the central limit theorem, asymptotic normal distributions	1.5

- **Writing Across the Curriculum:** Students will be expected to communicate mathematics and mathematical ideas e ectively in speech and writing. At the University Writing Center, trained consultants are ready to help you at any stage of the writing process. In addition to the important writing instruction that occurs in the classroom and during professors' o ce hours, the Center o ers another site for learning about writing. **All students are encouraged to make use of these important services.**

- **NOTE:** Once a student has received credit, including transfer credit, for a course, credit may not be received for any course with material that is equivalent to it or is a prerequisite for it.