Statistics 435

Categorical Data Analysis (3)
(Effective Spring 2019)

Prerequisite: Math 251, and Stat 325 or Engr 311.

Catalog Description: Analysis of categorical data. Contingency tables, exact tests, loglinear models, analyses involving ordinal variables, binary response models, and multinomial response models.

Goal: Prepare the students majoring in the mathematical sciences for careers involving Statistics.

Learning Outcomes for Major: This course addresses one or more of the student learning outcomes for the major.

Upon completion of his/her degree from the University of Tennessee at Martin with a major in mathematics, the graduate will be able to:

i. apply mathematical concepts and principles to perform numerical and symbolic computations.

ii. use technology appropriately to investigate and solve mathematical and statistical problems.

iii. write clear and precise proofs.

iv. communicate effectively in both written and oral form.

v. demonstrate the ability to read and learn mathematics and/or statistics independently.

Teaching Objectives: The student will:

1. Study distributions for categorical data.

2. Describe and make statistical inferences for Contingency tables.

3. Learn Different Models for Categorical Data such as Generalized Linear, logit, logistic, loglinear and matched pairs models.


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