

**MONTANA STATE UNIVERSITY  
COLLEGE OF NURSING  
Master Resource Outline  
NRS 606 Statistical Applications for Graduate Nursing**

**Credits:** 2

**Semesters offered:** Fall

**Prerequisite:** Undergraduate statistics covering descriptive and inferential data analysis methods

**Degree:** DNP

**Course description:** This graduate nursing course builds on basic understanding of quantitative methods and resulting statistical analyses, with particular application to critique of health sciences research. Students reach a graduate level of sophistication in their understanding of the statistical strength of published research. Students will gain facility in statistical techniques of correlation, regression, Chi square, t-test, analysis of variance, logistic regression, and confidence limit estimation.

**Course objectives:**

1. Identify the level of measurement for quantitative data variables.
2. Summarize data in terms of central tendency and dispersion.
3. Translate quantitative information between graphic and narrative formats.
4. Choose appropriate statistical tests for the analysis of relationships between variables.
5. Conduct inferential statistical tests of group mean differences and for relationships between variables.
6. Interpret statistical analyses in terms of hypothesis testing and potential for type I and type II error.
7. Interpret and critique statistical analyses in published research reports.
8. Differentiate between the statistical significance and the clinical significance of findings.
9. Apply statistical theory to develop a plan for analysis of data.

**Approved by GAAC:** 3/5/12; amended 11/19/12; amended 8/16/13; 2/3/17

**Approved by Faculty:** 4/9/2012; modified 1/7/2013; approved amended 8/19/13; 2/13/17