

**University of West Georgia
School of Nursing
Master of Science in Nursing Program
Fall 2012**

NUR6500-N01 - Data Analysis in Nursing

Course Description: This course provides a survey of descriptive and inferential statistics commonly used in nursing research. The course is designed to provide a working knowledge of descriptive and inferential statistical methods and their applications. This course is intended for graduate students in the School of Nursing. Topics include a review of measures of central tendency and variation, frequency distributions, confidence interval estimation, comparison of means and proportions, correlation, and simple linear regression. Students are expected to be able to identify and carry out appropriate statistical analyses and to interpret results through statements of both statistical and clinical conclusions.

Pre-requisites: Admission to graduate nursing program

Co-requisite: None

Credit: (2-0-2)

Faculty: Jack Yensen, BSc(Hons), PhD, MN
Visiting Professor
School of Nursing
250 537-5053 (long distance, email me first and I can call you)
jyensen@westga.edu

Meeting Times: This is a Distance Education Course

It will consist of:

- Some synchronous meetings using Wimba
- Asynchronous discussion sessions

See the course schedule for specific dates and times.

Office Hours: To be determined as mutually convenient
Email in Course Den (preferred) or jyensen@westga.edu
Virtual office hours by appointment

Learning Goals

1. Organize, summarize, and formally report results of research data with descriptive summary statistics, and graphical presentations using Excel.
2. Proficiently discuss and report in written form the impacts of type I and type II error, sample size, power, and multiple testing controls relating to the hypothesis testing required in research reports.
3. Analyze research data using Excel with the appropriate statistical methods (estimation, comparison, or prediction) and report in written and oral form the results of analyses.

Content

1. Organizing and displaying data
2. Univariate descriptive statistics
3. Inferential statistics and hypothesis testing
4. Selected non-parametric techniques
5. Measuring differences
6. Multifactorial analysis of variance
7. Analysis of covariance
8. Repeated measures analysis of variance
9. Correlation/reliability analysis
10. Linear regression
11. Logistic regression

Textbooks

Required

Salkind, J. J. (2011). *Statistics for people who (think they) hate statistics* (4th ed.). Thousand Oaks,

CA: Sage.

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, D.C.: Author. {ISBN – 13: 978-1-4338-0561-5}

Learning Activities

This course will be delivered 100% online. This requires the online equivalent of 1425 minutes of instruction (seat-time) and an additional 2850 minutes of supporting activities.

As such, you will be required to complete the following online activities during this course:

<u>Activity</u>	<u>Instructional Equivalent</u>
Class Participation (Online assignments)	1425 minutes
Final Examination	150 minutes

Additionally, it is anticipated that students will need to work independently for twice the number minutes listed above to complete the online activities.

Methods of Evaluation

<u>Activity</u>	<u>Percent of Grade</u>
Class Participation (Online assignments)	80%
Final Examination	20%

Grading System

A = 90-100%

B = 80-89%

C = 75-79%

D = 60-74%

F = Less than 60%

School of Nursing Policies and Communication

1. Students are expected to access the School of Nursing MSN Handbook on the SON website and are responsible for the information and policies in it.
2. The School of Nursing *Grapevine* is located in the course list on Course Den after logging in. This site is used for general student information and messages from the SON administrative staff. It should be checked frequently since it provides timely announcements for all nursing students. **The *Grapevine* is not to be used for course related communication with faculty.**
3. It is University policy that all electronic communication between the faculty and students must take place through the campus e-mail network only, utilizing MyUWG or CourseDen).

Technical Requirements and Online Learning Expectations

1. This course will be conducted primarily within CourseDen. Students should seek assistance from university resources listed below as needed to facilitate the use of CourseDen.
 - Where and how to receive help with CourseDen or any other technical Problems:
<http://www.westga.edu/~distance/webct1/help/>
 - The GeorgiaVIEW/CourseDen server goes down for mandatory maintenance each week; see dates here: <http://www.usg.edu/gaview/support/maint-schedule.phtml> Typically, the servers are down from 10 pm on Friday nights until 7am on Saturday mornings.
 - Link to UWG Online Connection website (includes link to Orientation, basic software/hardware requirements, Online Student Guide, and all student services) -
<http://www.westga.edu/~online/>
2. The software and settings for use of CourseDen may be found at <http://www.westga.edu/~distance/webct1/help/techrequirements.html>. Students are expected to complete the browser check and download the necessary software on their computers in order to use CourseDen most effectively.
3. Efficient internet connectivity will be essential for working in the online course and is the student's responsibility. For this course "*dial-up is not recommended.*" The following site describes various options: http://www.westga.edu/its/index_5243.php.
4. At a minimum, students should be familiar with the use of Microsoft Word, and Excel products. A 2003 or higher version of the Microsoft software is recommended. All documents and assignments must be submitted as Microsoft Word documents (.doc or .docx) or submitted in rich text format (.rtf).
5. Students are expected to actively participate in the course using email, synchronous and asynchronous discussions, and assignment submission including the ability to attach files to each of these.
6. Synchronous online classes will be held during regularly assigned class times unless otherwise arranged with full agreement by all class members. *Participation in synchronous class sessions will require a computer with a headset and microphone and webcam (preferred) or a telephone connection with a speaker phone.*
7. All assignments are to be submitted in the "Assignment" section within the CourseDen site. Assignments will be returned in the same manner. See grading rubric for each assignment.
8. Threaded discussions are to be conducted in the designated discussion site, identified by topic. Students are expected to actively engage in these discussions. See the grading rubric for online discussions.
9. Students are expected to check and use CourseDen for course related communications, and to submit all assignments. It is advisable to check the site daily. Access to CourseDen, as well

as the fax number and e-mail address on this syllabus should eliminate the likelihood of late assignments.

10. The UWG Library Distance Learning services are located at <http://www.westga.edu/~library/>. A link is provided on the CourseDen home page.

Americans with Disabilities Act Statement

- If you are a student who is disabled as defined under the Americans with Disabilities Act and requires assistance or support services, please seek assistance through the Center for Disability Services.
- A CDWS counselor will coordinate those services.
- See http://www.westga.edu/studentDev/index_8884.php for more information.

Academic Integrity

- The School of Nursing is committed to promoting a learning environment that recognizes the importance of honesty, integrity, and high ethical standards in education and the professional practice of nursing.
- The academic dishonesty policies of this course are the same as those found in the *University of West Georgia Connection* and *MSN Student Handbook, 2012-2013*.

Evidence of student cheating, fabrication, or plagiarism, as defined in these policies will result in failure of the course. This evidence includes copying of reference materials including material from web sites directly into class projects or papers without proper sourcing.