THE CATHOLIC UNIVERSITY OF AMERICA

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SSS 956
Advanced Quantitative Research Methods
Spring, 2013

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I. COURSE DESCRIPTION

This course builds on the research foundation and multivariate statistics courses by extending the focus to various quantitative methods that are increasingly being used by Social Work researchers. The topics include advanced multiple regression and path analysis, logistic regression, multiple analysis of variance and analysis of covariance.

II. COURSE OBJECTIVES

1. Students will evidence proficiency in using a data set for secondary analysis.
2. Students will demonstrate proficiency in appropriately applying the following quantitative methods;
   a. Describing quantitative data;
   b. Advanced multiple regression analysis with interaction effects;
3. Students will demonstrate the ability to produce a scholarly research paper using one or more of the above quantitative methods.

III. COURSE ASSIGNMENTS

1. Students will complete 4 exercises utilizing the quantitative methods listed above.
2. Students will produce a scholarly paper suitable for journal publication.

IV. REQUIRED TEXTBOOKS


V. RECOMMENDED READINGS


VI. GRADING POLICY

The University grading system will be followed (see policy in the CUA Announcements). The grades will be based on the extent to which the student meets the course objectives as demonstrated by performance on the assignments and the final paper.

Assignments 10 points each  40%
Final Paper 50%
Class Presentation 10%

VII. ASSIGNMENT DUE DATES

1. Descriptive Analysis Class 4  2/7/13
2. Multiple Regression Analysis Class 6  2/21/13
3. Logistic Regression Class 10  3/21/13
4. MANOVA or ANCOVA Class 13  4/25/13
5. Scholarly Paper  5/7/13
VII. COURSE AND INSTRUCTOR EVALUATION

NCSSS requires written evaluation of all course and instructors. Forms for this purpose will be distributed at the last meeting of the class. Students are required to complete the form and submit it to the Office of the Dean.

VIII. CLASS EXPECTATIONS

1. Scholastic Expectations

Please refer to NCSSS Announcements or the PhD Program Handbook for Academic Requirements, including scholastic and behavioral requirements. All written work should reflect the original thinking of the writer, cite references where material is quoted or adapted from existing sources, adhere to APA format, and should be carefully proofread by the student before submission to the instructor for grading.

2. Academic Honesty

Joining the community of scholars at CUA entails accepting the standards, living by those standards, and upholding them. Please refer to University Policy and appropriate Program Handbooks.

3. Accommodations

Students with physical, learning, psychological or other disabilities wishing to request accommodations must identify with the Disability Support Services (DSS) http://disabilityservices.cua.edu/ and submit documentation of a disability. If you have documented such a disability to DSS that requires accommodations or an academic adjustment, please arrange a meeting with the instructor as soon as possible to discuss these accommodations.

IX. COURSE SCHEDULE

Class 1  Introduction to the Course
Overview of the Alcohol and Drug Services Study (ADS)

Class 2  Review of Statistical Concepts and Data Screening
Meyers, Gamst and Guarino pp. 1-106
Spicer pp 1-88.

Class 3  Describing Quantitative Data

Class 4  Advanced Multiple Regression Analysis
Class 5  Applying Multiple Regression Analysis
Meyers, Gamst and Guarino pp. 197-220

Class 6  Path Analysis
Meyers, Gamst and Guarino pp. 585-602

Class 7  Logistic Regression
Meyers, Gamst and Guarino pp. 221-242
Spicer pp. 123-139

Class 8  Applying Logistic Regression
Meyers, Gamst and Guarino pp. 243-25

Class 9  Multiple Analysis of Variance
Meyers, Gamst and Guarino pp. 279-412

Class 10  Applying Multiple Analyses of Variance
Meyers, Gamst and Guarino pp 415-463

Class 11  Analysis of Covariance
Class Handout

Class 12  Applying Analysis of Covariance

Class 13  Student Presentations

Class 14  Student Presentations