University of Maryland College Park
School of Public Health

EPIB 663 – SAS Programming

Semester: Summer 2016
Classroom and Time: SPH 0227, T-TH 4:00pm-7:20pm
Instructor: Dr. Raul Cruz-Cano
Office: SPH Bldg. 1304
Phone: 301-405-0560
Email: raulcruz@umd.edu (ELMS Messages are final, Replies to Announcements not so much)

Office Hours: T-TH 3:00pm-4:00pm

Course Pre- and Co-requisites: Instructor Approval.

Recommended: The Little SAS Book: A Primer, Fourth Edition by Lora D. Delwiche, Susan J. Slaughter

Other Readings:

Course Description: The course is designed for students who want to learn how to analyze and summarize data using SAS. The course begins by introducing the students to basic SAS programming and data manipulation techniques. More advanced themes, such as preliminary data analysis and graphs, are explored later in the semester. Finally, the class covers the implementation of several advanced statistical concepts in SAS, including T-tests, ANOVA, non-parametric tests, regression and normality tests.

Course Learning Objectives:
Upon completing this course, the student will be able to:
1. Use the basic options provided by SAS in a graphic environment
2. Input into SAS data sets and perform basic statistical analysis of them
3. Create functions in SAS that include elements such as variables, functions, conditional statements, groups/subsets
4. Sort and Print Data in SAS
5. Summarize data using the SAS procedures for Descriptive Univariate Statistics, Frequency Tables and Correlation.
6. Implement the SAS procedures required to perform T-tests and ANOVA, Collinearity & Normality Tests
7. Use and interpret diverse types of regression in SAS.

Program Competencies Addressed in this Course:
The following competencies are addressed in this course:
2. Apply appropriate descriptive statistical methods for summarizing public health data.
3. Conduct descriptive and inferential statistical methods that are appropriate to the different study designs used in public health research.
5. Draw appropriate inferences based on statistical analyses used in public health research.