**Transition Guide: Annotated Table of Contents**

**Essentials of Biostatistics for Public Health, 2nd Edition**

**Lisa M. Sullivan, PhD**

Chapter 1 – Introduction

* Added learning objectives

Chapter 2 – Study Designs

* Added learning objectives
* Added section on nested case-control studies which are becoming increasingly popular to evaluate new biomarkers for disease prediction
* Added more practice problems for students

Chapter 3 – Quantifying the Extent of Disease

* Added learning objectives
* Expanded discussions of relative risk, cumulative incidence, incidence rates
* Added more practice problems for students

Chapter 4 – Summarizing Data Collected in a Sample

* Added learning objectives
* Added more practice problems for students

Chapter 5 – The Role of Probability

* Added learning objectives
* Included more examples of conditional probability and examples of the application of the Central Limit Theorem
* Added more practice problems for students

Chapter 6 – Confidence Interval Estimates

* Added learning objectives
* Added more practice problems for students

Chapter 7 – Hypothesis Testing Procedures

* Added learning objectives
* Included description of McNemar’s test for dependent proportions
* Included discussion of two-factor ANOVA along with detailed examples
* Added more practice problems for students

Chapter 8 – Power and Sample Size Determination

* Added learning objectives
* Added more practice problems for students

Chapter 9 – Multivariable Methods

* Added learning objectives
* Included a section on correlation analysis with detailed examples illustrating the computation of the sample correlation coefficient
* Expanded discussion of simple linear regression analysis and added examples to illustrate the estimation of regression coefficients
* Expanded discussion of multiple linear regression analysis with more detailed examples to focus on interpretation
* Added section on the use of dummy variables in multiple regression applications
* Expanded discussion of simple and multiple logistic regression analysis with more detailed examples to focus on interpretation
* Added more practice problems for students

Chapter 10 – Nonparametric Tests – NEW!

* Learning objectives
* Introduction to nonparametric testing
* Tests with two independent samples
* Tests with matched samples
* Tests with more than two independent samples
* Summary
* Practice Problems

Chapter 11 - Survival Analysis – NEW!

* Learning objectives
* Introduction to survival data
* Estimating the survival function
* Comparing survival curves
* Cox proportional hazards regression analysis
* Extensions
* Summary
* Practice problems

Glossary – NEW!

 A comprehensive glossary is now included with definitions of key terms and concepts.

**Statistical Computing in Excel Workbooks**

*Three workbooks accompany the textbook to illustrate statistical computing procedures using Excel. The workbooks detail procedures in Excel 2003 for the PC, Excel 2007 for the PC and Excel 2008 for the Mac. Customized Excel programs are also available to perform many of the analyses described in the textbook and these programs can be imported into any version of Excel on the PC or on the Mac. Short video clips are also available to illustrate the use of these customized programs. Instructors can make the video clips available to students so that students can work through statistical computing outside of class time and at their own pace.*

Excel 2003 – UPDATED!

* New chapter on nonparametric procedures (including the Mann Whitney U test, the Sign and Wilcoxon Rank Sum test, and the Kruskal Wallis test).
* New chapter on survival analysis (including estimating survival curves using the actuarial and Kaplan-Meier approaches, conducting the log rank test and producing graphical displays of survival curves).

Excel 2007 – NEW WOKBOOK!

 Chapter 1 – Basics

 Chapter 2 – Formulas, Functions and the Data Analysis Toolpak

Chapter 3 – Creating Tables and Graphs

Chapter 4 – Summarizing Continuous Variables in a Sample

Chapter 5 – Working with Probability Functions

Chapter 6 – Confidence Interval Estimates

Chapter 7 – Hypothesis Testing Procedures

Chapter 8 – Power and Sample Size Determination

Chapter 9 – Regression Analysis

Chapter 10 – Nonparametric Procedures

Chapter 11 – Survival Analysis

Mac 2008 – NEW WORKBOOK!

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