ST 790, Longitudinal Data Analysis
Course Notes Errata

This document is a running list of errata found in the course notes and was last updated on April 13, 2018. The pdfs of the course notes available on the course website are also updated to correct these errata.

p.83 $\boldsymbol{C}$ is a $(c \times g)$ matrix (replace q by g)

p.89 Last bullet should read "premultipling by $\boldsymbol{C} = (1/g, 1/g, \dots, 1/g)$"

p.109 The first line of the second paragraph should read "We can use the result (4.6) to deduce an ***approximate sampling distribution*** for $\widehat{\boldsymbol{\eta}}$" (replace $\boldsymbol{\eta}$ by $\widehat{\boldsymbol{\eta}}$)

p.118 The last displayed equation on the page should read

$$\text{var}(\boldsymbol{\epsilon}|\tilde{\boldsymbol{x}}) = \text{var}(\boldsymbol{Y}|\tilde{\boldsymbol{x}}) = \boldsymbol{V}(\boldsymbol{\xi}, \tilde{\boldsymbol{x}}) = \boldsymbol{V} = \boldsymbol{T}^{1/2}\boldsymbol{\Gamma}\boldsymbol{T}^{1/2},$$

p.219 Equation (7.24) shoud read

$$\boldsymbol{\beta}_{(a+1)} = \boldsymbol{\beta}_{(a)} + \{\boldsymbol{X}_{(a)}^T \boldsymbol{W}_{(a)} \boldsymbol{X}_{(a)}\}^{-1} \boldsymbol{X}_{(a)}^T \boldsymbol{W}_{(a)} (\boldsymbol{Y} - \boldsymbol{f}_{(a)}), \quad \boldsymbol{W}_{(a)} = \boldsymbol{W}(\boldsymbol{\beta}_{(a)}), \quad \boldsymbol{X}_{(a)} = \boldsymbol{X}(\boldsymbol{\beta}_{(a)}).$$

p.310 Equation (9.59) should read

$$\sum_{i=1}^{m} \sum_{j=1}^{n_i} \left[\frac{\{Y_{ij} - f(\boldsymbol{z}_{ij}, \boldsymbol{\beta}_i)\}^2}{\sigma^2 g^2(\boldsymbol{\beta}_i, \boldsymbol{\delta}, \boldsymbol{z}_{ij})} - 1 \right] \begin{pmatrix} 1 \\ \nu_\delta(\boldsymbol{\beta}_i, \boldsymbol{\delta}, \boldsymbol{z}_{ij}) \end{pmatrix} = \boldsymbol{0},$$

p.312 Equation (9.66) should read

$$\widehat{\boldsymbol{\beta}} = \left\{ \sum_{i=1}^{m} \boldsymbol{A}_i^T (\boldsymbol{D} + \widehat{\boldsymbol{\Sigma}}_i)^{-1} \boldsymbol{A}_i \right\}^{-1} \sum_{i=1}^{m} \boldsymbol{A}_i^T (\boldsymbol{D} + \widehat{\boldsymbol{\Sigma}}_i)^{-1} \widehat{\boldsymbol{\beta}}_i,$$

p.321 Equation (9.81) should read

$$\int \exp\{n\ell(\boldsymbol{\tau})\}\, d\boldsymbol{\tau} \approx \left(\frac{2\pi}{n}\right)^{q/2} |\ell''(\widehat{\boldsymbol{\tau}})|^{-1/2} \exp\{n\ell(\widehat{\boldsymbol{\tau}})\}.$$