Errata:

An Introduction to Generalized Linear Models, 2nd Ed., Dobson

1. On p.29, the text states that "the random variables Y_{jk}, $\bar{Y}_j$, and b_j are all independent". This is clearly untrue; the average of a set of values obviously depends on the individual observations which contribute to this average. Likewise, the estimated parameters b_j depend on the data, Y_{jk}.

   The subsequent result is true, i.e. $\hat{S}_1/\sigma^2$ does have the $\chi^2(JK - 2J)$ distribution; it's just the proof that's wrong. The correct proof is beyond the scope of this course.

2. On p.74, l.8, it should read $\partial\mu_i/\partial\eta_i = 1$, not 0.

3. On p.159, the last factor in the two distributions ($y_{jk}!$) should be in the denominator. Likewise, on p.161, the factor $y_{jkl}!$ should be in the denominator in the first distribution, and the factor $y_i!$ should be in the denominator in the second and third distributions. Finally, on p. 162, the factor $y_{jkl}!$ should be in the denominator of both distributions.

4. On p.148, the estimates of β_{01} and β_{02} should be positive, not negative.

5. Clarification: On p.139, the description of the study states that the group sizes are fixed at 50 people, but this is for gender and car size, not gender and age group (the categories that appear in Table 8.1).

6. On p.177, the model is actually
   $$\log\theta = \mathbf{x}^T\beta.$$
   The hazard rate is therefore
   $$h(y; \lambda, \phi) = \lambda\phi y^{\lambda-1} = \lambda e^{-\lambda\mathbf{x}^T\beta} y^{\lambda-1}.$$

7. On p.185, Table 10.3, the estimates of the intercepts appear to be incorrect.

8. In Exercise 10.3, the author writes that the exponential distribution does not have the accelerated failure time property, but that the Weibull does. However, since the exponential is a special case of the Weibull, it does share this property.

9. On p.145, Figure 8.3 should not have a line corresponding to $j = 3$. The log-odds of being in category 3 or below is not defined, since $J = 3$ implies that the probability of being in category 3 or below is 1.