

**BIOSTAT 651**  
**Homework #5**  
**due: Wed, April 12**

- turn in at the start of class
- each sub-question=2 points; total 20 points

1. Solve exercise 9.1 (a)-(c) on page 183 of Textbook.
2. Solve exercise 9.2 (a)-(c) on page 183 of Textbook and the following. Please provide the SAS code (or R code).
  - (d) For (c), interpret all the main effect terms.
  - (e) For (c), is there an overdispersion problem? (Yes/No) Please justify your answer.
3. Solve exercise 9.7 (a) on page 186 of Textbook and the following. Please provide the SAS code (or R code).
  - (b) For all three models, carry out the Wald test for the smoke effect ( $\beta_2 = \beta_5 = 0$ ).