<u>Assignment 1</u>

- *This is an <u>individual</u> assignment.*
- *You are not allowed to discuss the assignment with others*
- *You are not allowed to seek help with the assignment*
- *The assignment should be no longer than two pages.*
- *You should include the code you used for the assignment…you may use a third page if necessary for this.*

set.seed(111)

A novel approach to help prevent recidivism was put in place in state prisons. Certain convicts were provided with financial aid and followed for 52 weeks to see if they reoffended.

You are asked to evaluate the program and make recommendation based on the enclosed data. Upload no more than two pages consisting of clear recommendations. Then include tour final model with p-values and anything else you feel relevant. Clarity of communication is an imp0rtant part of the grade.

Use logistic regression. Use set.seed(111). Spit the data 60% and 40%. Include the confusion matrices for both validation and fitted data.

- arrest data.txt
- 432 convicts released from state prisons in the
- Followed for a year after release
- 50% chosen at random to receive financial aid

- arrest: 1=arrested; 0= not arrested
- fin: 1 if given aid; 0 if not given aid
- Other variables
    - Race
    - Work experience before incarceration
    - Marital status at time of release
    - Released on parole?
    - Number of prior convictions
    - Education (2=6th grade or less; 3=7th to 9th; 4=10th to 11th; 5=12th; 6=some college)

- Employment status after given week of release