

# Homework 4

DS502/MA543

Your answers will be graded both on your **demonstrated understanding** of the concepts **from the book** and **from the class**, as well as the **clarity of your explanations**.

Please bring the written portion of your answers in **hard copy** to class on Thursday, April 2. Please make sure that both team members names appear on the submission and that every submission is **stand-alone (i.e., does not make the grader read or run your code)**! In addition, for any problem on which you write code, plus submit your code **by email** to the TA Jiani Yin ([jianiyin@wpi.edu](mailto:jianiyin@wpi.edu)) **before the start of class** on the due date. You will **not be graded your programming style**, but having access to your code will allow us to more easily give **partial credit**. You are also welcome to use any of the R scripts in the book and/or those I provide in class to help you with the homework assignment. To keep things organized, please send your R files to Jiani using the following naming convention:

<Last name person 1>\_<First name person 1>\_<Last name person 2>\_<First name person 2>\_HW3\_<question number>.R

For example, if Jiani and Randy were a team, the file containing the code for problem 4 would be named:

Yin\_Jiani\_Paffenroth\_Randy\_HW4\_4.R

**Hint for all of the coding exercises:** Be sure to look at the R scripts I demo in class. They should help a lot.

## Homework questions

1. (10 points) Section 6.8, page 259, question 2
2. (20 points) Section 6.8, page 264, question 11 (Note, this question is quite open ended. You should think about questions like this as a small precursor to the final project. Be creative!)
3. (10 points) Section 7.9, Page 298, question 3
4. (10 points) Section 7.9, Page 298, question 4
5. (10 points) Section 7.9, Page 299, question 6
6. (20 points) Section 7.9, Page 299, question 7 (Note, this is another question that is quite open ended. Again, you should think about questions like this as a small precursor to the final project. Be creative!)
7. (10 points) Section 8.4, Page 332, question 1
8. (10 points) Section 8.4, Page 333-334, question 8