

HUDM 6026 - Computational Statistics

HW 02 – Simulation

Instructions.

- You may use whatever software you like to write up your answers to the hw. For example, you might choose to use Rmarkdown for assignments that are primarily code-based; whereas, you might choose to use Word or LaTeX for more writing-heavy assignments. It's up to you.
- No matter which program you use, you should turn in a pdf or html version.
- Consult the syllabus for the rules about collaboration.

HW 02

1. SCR 3.3
2. SCR 3.9
3. SCR 3.11
4. SCR 3.14
5. (Optional Bonus). First show that the sample mean estimator is unbiased for the true population mean. Next, show that the mle estimator for the variance, $\hat{\sigma}^2$ is a biased estimator with bias equal to $-\sigma^2/n$.