Syllabus
Econ 614
FALL 2022

Instructor: Hyungsik Roger Moon, email: moonr@usc.edu.

Time and Location: The class meets once per week on Thursday between 2:00 PM and 5:20 PM in KAP 165.

Office Hours: Thursday 11:00 AM – 12:00 PM and by appointment

This year we discuss statistical methods for big data analysis called statistical learning with sparsity. The topics that will be discussed include

- LASSO and its generalization
- Optimization methods
- Inferences
- Matrix decomposition, approximations, and completion
- Sparse multivariate methods
- Graphs and model selection

Requirements and Grading:

- Throughout the semester we will read the chapters of Hastie, Tibshirani, and Wainwright (2015).
- The requirements of the class are presentations of each chapter of Hastie, Tibshirani, and Wainwright (2015).

References

HASTIE, T., R. TIBSHIRANI, AND M. WAINWRIGHT (2015): "Statistical learning with sparsity," *Monographs on statistics and applied probability*, 143, 143.